

Our Reference: 9081#839

Portfolio Committee No. 7
Email to: PortfolioCommittee7@parliament.nsw.gov.au

25 November 2019

Dear Portfolio Committee No. 7,

Thank you for allowing Wollondilly Shire Council (Council) to appear before the Portfolio Committee No. 7 on 25 October 2019 for the inquiry into koala populations and habitat in New South Wales.

I refer to your email dated 4 November 2019 re post-hearing responses. Council would like to take the opportunity to provide the requested items. Please find in the appendices the following attachments as requested:

- Appendix A) Reviewed transcript from Alexandra Stengl and Ibrahim Muharrem
- Appendix B) Question one on notice -

The CHAIR: I have a question in relation to Wollondilly Shire Council. Mr Muharrem, in your opening statement I think you mentioned writing to the State Government—I cannot recall what it related to—and that it had not responded to your concerns. Was that you, Ms Stengl?

Ms STENGL: It might have been me or it might have been—

Mr MUHARREM: So I did put that in my statement, yes. We have had multiple letters provided to the State Government in relation to koala management. Would you like to see examples of that? Would you like us to provide those?

The CHAIR: Exactly. Thank you very much. That is what I was going to ask you; if the Committee could have those letters and any responses from State Government.

Mr MUHARREM: We will take that on notice and provide you with it.

- Appendix C) Question two on notice -

Ms STENGL: Yes. This is the current rezoning zone for the planning proposals that we are talking about—failure to provide a koala plan of management. We have not developed one for our council but we are in the process of doing so now for that area. The proponents of the original South East Wilton development—and this is the court case for council—failed to acknowledge koalas on site. Through the Save our Species program—when we had collared koalas—we tracked breeding females through that site with Global Positioning System [GPS] tracking.

The Hon. MARK BUTTIGIEG: Sorry, who refused to acknowledge?

Ms STENGL: The developer at the South East Wilton precinct. It was one of the greatest concerns for council. Not only was this already a State-identified priority corridor—and we thought that would already have been preserved—but we then had a program identifying breeding females through that corridor.

The CHAIR: When was that?

Ms STENGL: It was 2017. We can provide that data to you?

The CHAIR: Yes please.

- Appendix D) Additional information provided to the committee

Should you have any further questions relating to Council's input into the inquiry into koala populations and habitat in New South Wales, please contact Alexandra Stengl on
or

Yours faithfully, 

Alexandra Stengl
Manager Environmental Outcomes
ENIRONMENTAL OUTCOMES
WOLLONDILLY SHIRE COUNCIL

APPENDIX B

QUESTION ONE ON NOTICE

Our Reference: 9081#779

The Hon. Andrew Constance
Minister for Transport and Roads
NSW Parliament
52 Martin Place
Sydney NSW 2000

office@constance.minister.nsw.gov.au

12 August 2019

Dear Mr Constance

UNDERPASSES OR OVERPASSES ON APPIN ROAD

The protection of the area's koala population is very important to the local community and Council. Council has taken a strong proactive position in advocating for appropriate measures to protect our koala population, which recent research has determined to be larger than previously known and is the only chlamydia disease free population in NSW.

At its Ordinary Meeting of **15 July 2019**, the Wollondilly Shire Council moved the following resolution:

That Council write to the RMS and the Roads Minister requesting that underpasses or overpasses be installed along Appin Road, similar to Picton Road, when the Koala fencing is erected.

The purpose of this letter is to bring this resolution to your attention for action.

Koala road strike is a significant contributor to population decline in the region. The traffic volume in the Appin area is growing rapidly and will increase significantly as a consequence of substantial planned urban growth. The installation of appropriate underpasses or overpasses supported by the erection of fencing will help minimise the road strike threat and make Appin Road safer for the community to use. Council requests that underpasses or overpasses be installed at suitable intervals along Appin Road.

If you have any questions regarding this matter please contact me on

Yours faithfully

Michael Malone
ACTING GENERAL MANAGER



Ms Eleni Petinos MP
Parliamentary Secretary for Transport and Roads

Our Ref: 00883768
Your Ref: 9081#779

Mr Michael Malone
Acting Chief Executive Officer
Wollondilly Shire Council
PO Box 21
PICTON NSW 2571

Dear Mr Malone

Thank you for your correspondence to the Minister for Transport and Roads about koala protection along Appin Road, Appin. The Minister has asked me to respond on his behalf.

The NSW Government takes environmental conservation and protection seriously and where possible seeks to avoid, minimise or mitigate the impact on sensitive ecology. Transport for NSW is working closely with the Department of Planning, Industry and Environment and the Office of Environment and Heritage to ensure protections for koala populations are included in design work.

As part of the proposed upgrade of Appin Road between Rosemeadow and Appin, Transport for NSW is investigating koala protection measures including the installation of barrier fences to guide koalas away from Appin Road, aiming to reduce the number of koalas and other fauna being struck by vehicles.

Other measures being investigated include avoiding vegetation clearing where possible, particularly koala habitat along Appin Road, and engaging an ecologist to carry out targeted inspections of work areas, including any vegetation to be removed, before and during construction.

These measures will be developed in consultation with the community and relevant stakeholders. As you are aware, the Macarthur area is one of the fastest-growing areas in Greater Sydney. These improvements and upgrades will help to support the region for future decades, while ensuring the protection of koalas and their habitat.

I trust this information is of assistance.

Yours sincerely

17/10/2019

Eleni Petinos MP
Parliamentary Secretary for Transport and Roads

Our Reference: BD 9081#659

The Hon. Gladys Berejiklian
NSW Premier

Email: admin@premier.nsw.gov.au

3 December 2018

Dear Mrs Berejiklian,

COMPREHENSIVE KOALA PLAN OF MANAGEMENT

Council believes there is a need for better protection for koalas and their habitat across South Western Sydney. The recently held and well attended Koala Summit at Wilton confirmed the high level of concern in and around Wollondilly for koala habitat protection.

Council and the community's concerns about Koala and Koala habitat protection was discussed at its Ordinary Meeting of **15 October 2018, Resolution No. 58/2018**, and as a result Council resolved:

1. *That Council welcomes the announcement from the NSW Opposition of their policy pledge to establish a "Koala National Park" in South Western Sydney in recognition of the importance of the chlamydia free koala population found in the area;*
2. *That Council strongly advocate that any such park needs to also include key koala habitat and movement corridors in the Appin and Wilton areas, including the Allens Creek Corridor at Wilton; and*
3. *That we write again to the State Government calling for a comprehensive Koala Plan of Management.*

Further to the resolution, Council requests that State Government focuses on the following:

- Priority be given to the acquisition of lands containing koala habitat within the Appin / Broughton Pass / Douglas Park / Wilton and Allens Creek corridors.
- Priority be given to protecting koala corridors within the Wilton and Greater Macarthur Growth areas, particularly along creeks and rivers with minimum corridor widths of:
 - Nepean River – 450m from top of bank, both sides of river.
 - 3rd order streams - 250m from top of bank, both sides of river.
 - 1st and 2nd order streams - 150m from top of bank, both sides of river.
- Improved diversity of food species and location - the critical factor in ensuring effective protection of this nationally significant koala population is that food trees and habitat areas on the clay soils are retained and enhanced. Generally, the creeks and rivers are sandstone and are important for koalas in moving through the region; however, their primary food trees occur on the clay soils that border the rivers and creeks. Any

development that occurs within the growth areas need to ensure that appropriate buffer zones, as per the recommendations above, be established and that habitat protection and enhancement be prioritised to ensure effective koala conservation throughout the region. In summary, that not just creek lines are retained and there should be food trees on better clay soils adjoining these corridors preserved in various locations to assist the koala population.

- A commitment made towards a koala corridor protection connecting the Upper Georges, Nepean, Lower Cataract and Bargo Rivers, and as such Council resolved the following resolution.

On behalf of Wollondilly Council, I request your favourable consideration of this resolution and the detailed requests as these would be very much appreciated by the residents of Wollondilly and the broader South West Sydney.

If you have any questions regarding this matter, please contact Council's Chief Executive Officer,

Yours faithfully

Cr Judith Hannan
MAYOR



Scott Farlow MLC

Parliamentary Secretary to the Premier
Leader of the House in the Legislative Council

Ref: A2798721

Cr Judith Hannan
Mayor
Wollondilly Shire Council
PO Box 21
PICTON NSW 2571

12 DEC 2018

WOLLONDILLY SHIRE COUNCIL	
TRIM NO.	9081
PROP No.	
14 DEC 2018	
AUTH. No	
ASSIGNED TO:	D. Stirling.

Dear Mayor,

Thank you for your correspondence of 3 December 2018, regarding koalas. I am replying on behalf of the Premier and your comments have been noted.

I can assure you the NSW Government recognises the koala as an iconic species and is committed to stabilising and increasing the koala population across NSW.

On 6 May 2018 the NSW Government released the NSW Koala Strategy committing \$44.7 million towards securing the future of koalas in the wild. This is the biggest commitment by any state government to koalas and will support a range of conservation actions over three years. It also sets the foundation for the government's longer-term vision to stabilise and increase koala populations across NSW.

The NSW Koala Strategy will deliver:

- \$20 million from the NSW Environmental Trust to purchase and permanently conserve land that contains priority koala habitat in the national park estate
- \$3 million to build a new koala hospital at Port Stephens
- \$3.3 million to fix priority road-kill hotspots across NSW
- \$4.5 million to improve the care of sick or injured koalas
- \$6.9 million to improve our knowledge of koalas starting with the development of a state-wide koala habitat information base
- \$5 million to deliver local actions to protect koala populations, including through the *Saving Our Species* program
- \$2 million to research impacts of natural hazards and weather events on koalas

The Strategy also conserves over 24,000 hectares of land as koala parks and reserves. This land will be actively managed to ensure prime habitat is conserved, key habitat corridors are linked and to provide safe homes for koalas being returned to the wild.

The Strategy responds to the NSW Chief Scientist and Engineer's 2016 *Independent Review into the Decline of Koala Populations in Key Areas of NSW*, which recommended a whole-of-government koala strategy for NSW. An expert advisory committee chaired by the NSW Chief Scientist and Engineer guided the strategy's development along with extensive community and stakeholder consultation.

In December 2017, we purchased the first property using funds from the NSW Environmental Trust. The property is 402 hectares of high quality koala habitat in the Southern Highlands that connects the Blue Mountains to wilderness areas of Morton National Park.

In three years, we will evaluate our progress and reassess our priorities for further actions. We will consider the lessons learned and how they could apply to the management of other threatened species. Further information about the NSW Koala Strategy can be found at www.environment.nsw.gov.au/animals/nsw-koala-strategy.htm.

Please be assured the NSW Koala Strategy is just one part of our commitment to ensure our threatened species continue to survive in the wild.

I have arranged for Ms Trish Harrup, A/Director Public Lands and Aquatic Ecosystems Policy, Office of Environment and Heritage to be available to speak with you should you have any further questions. Ms Harrup can be contacted on

As the Minister for Environment, The Hon Gabrielle Upton MP has primary responsibility for this matter, I have forwarded your correspondence for her consideration.

Thank you again for taking the time to bring your views to the Government's attention.

Yours sincerely

HON SCOTT FARLOW MLC

Parliamentary Secretary to the Premier
Leader of the House in the Legislative Council

CC: The Hon Gabrielle Upton MP, Minister for Environment
Mr Jai Rowell MP, Member for Wollondilly



Office of the Hon Gabrielle Upton MP

Minister for the Environment
Minister for Local Government
Minister for Heritage

MD18/5836
BD 9081#659

Councillor Judith Hannan
Mayor
Wollondilly Shire Council
62-64 Menangle Street
PICTON NSW 2571

By email: council@wollondilly.nsw.gov.au

Dear Cr Hannan

I refer to your letter to the Premier, the Hon Gladys Berejiklian MP, about koala protection in south west Sydney. Your letter was referred to the Minister for the Environment, the Hon Gabrielle Upton MP, and I am replying on her behalf.

I can assure you the NSW Government is committed to protecting koalas and their habitat and is implementing a number of actions in south west Sydney. As you may know, the NSW Koala Strategy commits \$20 million to purchase priority koala habitat so we can permanently conserve it in the national park estate.

I am happy to advise that we have already purchased three properties that contain priority koala habitat to add to the national park estate. Two of these are in the Southern Highlands and total 2566 hectares. These two properties are nestled between the existing Bangadilly National Park and the Wollondilly Nature Reserve and provide a critical link to help preserve koala movement across the landscape.

These new purchases will combine with the existing reserves to form a new 3680 hectare national park, which Premier Berejiklian and Minister Upton announced on 4 February 2019. This new park will provide another significant boost for the state's koala population and provide lasting protection for 20 threatened fauna species.

The Office of Environment and Heritage (OEH) also recently ran a six-week expression of interest (EOI) seeking to purchase land with high value koala habitat, including in Wollondilly. The EOI closed on 6 December 2018. I am advised there was a very strong response. OEH is currently assessing the proposals received.

You may be interested to know that several koala conservation actions have been implemented in the Wollondilly area. Over the last two years, \$270,000 has been allocated under the Savings our Species program to the Campbelltown and Wollondilly regions for koala conservation and research. This includes a koala habitat study in the Campbelltown local government area and a koala presence survey, which examines movements and tree use in Wollondilly.

The Koala Strategy includes actions to address vehicle strike hotspots. Picton Road is the first hotspot to be addressed. New fencing, to complement existing structures, will help to prevent koalas getting onto the road. The new fencing will direct koalas and other wildlife to existing culverts, so the animals can pass under the road safely. Until the fencing is in place, variable message signage has been installed to encourage drivers to look out for koalas and drive with care.

Under the Koala Strategy more broadly, the NSW Government is identifying priority local koala conservation actions to be delivered in partnership with local communities. I understand Wollondilly Shire Council representatives were involved in the design of community workshop and I encourage this good work to continue.

The NSW Government continues to identify and invest in koala conservation actions in addition to those in the Koala Strategy. In 2018, Roads and Maritime Services (RMS) installed koala fencing on a section of Picton Road. RMS is also constructing a fauna underpass to improve fauna connectivity. The Australian and NSW governments are funding two individual projects to improve Appin Road.

The NSW Government also secured some of the best remaining bushland in Western Sydney for current and future generations with the Growth Centres Biodiversity Offset Program. In the 10 years that the program has been operating, 661 hectares of native vegetation at 19 locations across western Sydney have been protected. The protected areas are some of the largest areas of high conservation value bushland left in the region, and koalas have been recorded on these lands.

As you may be aware, the *Greater Macarthur 2040: An Interim Plan for the Greater Macarthur Growth Area* was on exhibition until 8 February 2019. The plan includes a proposal to set aside a corridor on government lands east of Appin Road as a koala reserve. It also proposes installing protective fencing to ensure koalas can move safely through the local area and a \$1 million grant program to support koala friendly planning in the area. You can find out more by visiting www.planning.nsw.gov.au.

I hope this demonstrates our strong commitment to the protection of koalas in south west Sydney. If you have any further questions about this issue, you can contact Trish Harrup, Director Land and Water Policy, OEH, on [redacted] or at [redacted]

Yours sincerely

Kevin Wilde
Chief of Staff
Office of the Hon Gabrielle Upton MP

14 FEB 2019

MEDIA RELEASE

3 October 2018

Media Contacts

Belinda Fleming, *Senior Communications Officer*
(02) 4677 9715

Julie Shipard, *Assistant Communications Officer*
(02) 4677 9578

Council considers Next Steps after Koala Petition Debate

Last Thursday Wollondilly Council's 13,158 signature koala petition was debated in State Parliament, with the significance of the largest chlamydia free koala population in NSW highlighted by both sides of politics.

The extensive work that has been carried out surveying and mapping the Macarthur koala population was acknowledged during the debate and the various speakers, including Wollondilly MP Jai Rowell, Campbelltown MP Greg Warren and Macquarie Fields MP Anoulack Chanthivong, all stated their commitment to looking after the local koalas.

Council's Sustainability Projects Officer Damion Stirling attended the debate along with Wollondilly Councillors Matthew Deeth, Matt Gould and Michael Banasik.

Mr Stirling noted, "Disappointingly, the debate in Parliament did not address the terms of the petition, specifically the impact of the Wilton South East rezoning on the Allen's Creek koala corridor and the need for a Comprehensive Koala Plan of Management across the Greater Macarthur and Wilton Growth Areas."

"Some big questions still remain, such as what actions will be put in place to protect the koala corridors connecting the Upper Georges River to the Nepean, Cataract and Bargo River," he said.

"We are waiting on the review of the finalised SEPP 44 for koala habitat protection and for the updated koala food tree and habitat species list to be adopted and used in the strategic conservation planning of growth areas."

"We would also like to know when biocertification of the growth areas will be completed and what conservation measures will be put in place to protect the extent of koala habitat corridors, as mapped by the Office of Environment & Heritage."

In the meantime, NSW Opposition Leader Luke Foley announced a plan on Sunday to establish Sydney's first koala national park at Smiths Creek Reserve, a section of bushland located between homes in Campbelltown.

Mr Stirling welcomed the idea of a koala park as a big step forward in the protection of the region's nationally significant koala

MEDIA RELEASE

3 October 2018

population, however the plan does not include substantial protection of habitat within the Wollondilly.

Important milestones including a Deed of Agreement between Walker Corporation and Council have recently been reached and the issue is now on the State election agenda, however the campaign to ensure the protection of the Wollondilly koalas is far from over.

Council has been informed that a formal response to the petition will be sent to Council, however no time frame has been given for that to occur. Council will await the formal response and then consider its next steps towards saving our valuable koala habitat.

Media Contacts

Belinda Fleming, *Senior
Communications Officer*
(02) 4677 9715

Julie Shipard, *Assistant
Communications Officer*
(02) 4677 9578



Anthony Roberts MP

Minister for Planning, Minister for Housing, Special Minister of State

MDPE18/2760

Ms Helen Minnican
Clerk of the Legislative Assembly
Parliament of NSW
Parliament House
Macquarie Street
SYDNEY NSW 2000



Dear Ms Minnican,

Thank you for forwarding a petition of more than 10,000 signatures seeking protection of koalas in south western Sydney, particularly in the Macarthur and Wilton priority growth areas.

I note the petitioners request me to change the zoning of the Allens Creek corridor and surrounding koala habitat areas in the Wilton South East precinct, and not to rezone any more land in the Wilton and Greater Macarthur growth areas until a comprehensive koala conservation strategy has been finalised.

Protecting and restoring koala corridors that ensure connectivity at a landscape scale is vital for the health and survival of south western Sydney's important koala population and in May 2018, the NSW Government released the NSW Koala Strategy, which sets out actions to increase koala populations across NSW in its first three years.

The Department of Planning and Environment, the Office of Environment and Heritage (OEH) and Roads and Maritime Services (RMS) are working on a regional approach to conserve koalas in the Campbelltown and Wollondilly local government areas. OEH has identified a priority corridor running from north to south along the eastern side of Appin Road and has recommended that this be protected from further development. In addition, OEH is exploring the feasibility of east-west corridors in the Greater Macarthur growth area.

Discussions between OEH and the Department led to changes being made to the rezoning plan for South East Wilton to protect the koala corridor along Allens Creek and all existing koala habitat. OEH raised its concerns about the need to protect the north-south koala corridor along Allens Creek, so the Department worked to find an appropriate solution.

Expert advice from OEH, the proponent's koala specialist and an independent specialist who conducted a peer review for the Department examined the issue on the extent to which revegetation was needed. It was agreed that the rezoning proposal complied with State Environmental Planning Policy No 44 – Koala Habitat Protection. The final rezoning plan has seen vegetated koala habitat included in an environmental conservation zone, as well as protection and improved functionality of the koala corridor along Allens Creek via a fauna underpass under Picton Road.

Various protective measures (including koala fencing and development controls) will be incorporated in any development next to the Allens Creek corridor. These measures will minimise impacts at the interface between the conservation and urban development areas and will be included in the Wilton Growth Area Development Control Plan. The land may also be subject to further environmental assessment under the federal *Environment Protection and Biodiversity Act 1999* and the NSW *Biodiversity Conservation Act 2016* and any proposed subdivision developments will need to receive further approvals under both those Acts.

The Department is now preparing a draft Cumberland Plain Conservation Plan, which will include a range of measures to protect koalas and other species and will support a regional, coordinated approach to doing so. The plan will be exhibited for feedback next year. Work on this plan will also inform the strategic land use and infrastructure implementation plans for the Wilton and Macarthur growth areas and the more detailed precinct plans within them.

The government values NSW's biodiversity and recognises the importance of South West Sydney's koala colonies. I assure you all agencies and councils are working to ensure the koala population is protected into the future.

If the petitioners have more questions, they may contact _____, Director,
South West Land Release, at the Department on _____.

Yours sincerely,

Anthony Roberts MP
Minister for Planning
Minister for Housing
Special Minister of State

SAVE OUR KOALAS PETITION – WE NEED YOUR HELP!

Wollondilly Shire Council is currently running a petition to Save Our Koalas. This is in response to the NSW Government's rezoning of the South East Precinct at Wilton New Town. The Allen's Creek corridor that runs through the South East Precinct is critical koala habitat for breeding koalas that form part of the last remaining disease-free population in NSW.

Council is calling for the rezoning to be urgently repealed or that the Minister for Planning rezone the land to an appropriate land use zone to protect the koala habitat, and that no further rezoning of land in Wilton and the Macarthur Priority Growth Areas takes place until a comprehensive South Western Sydney Koala Conservation Strategy is finalized and approved.

We need to gather 10,000 signatures for this issue to be discussed in the NSW House of Representatives.

We are asking for your support to gather signatures and help Save Our Koalas. A copy of the petition has been included with this letter, and we would be very appreciative if you could sign the petition along with your family and friends. Once you have finished gathering signatures just fold and send the petition back to Council. No need for a stamp or envelope!

We thank you in advance for any assistance you can provide to help Save Our Koalas.

**To the Honourable the Speaker and Members of the
Legislative Assembly of New South Wales.**

Brings to the attention of the House the NSW Governments decision to prematurely rezone the South East Precinct of Wilton New Town. The details on delivery of critical infrastructure such as health care, public transport and schools remains unclear. In addition, the Department of Planning and Environment has not yet demonstrated how adequate local employment opportunities for our future residents will be secured or how our koala habitat will be protected.

[illegible]

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WOLLONDILLY ELECTORATE KOALA HABITAT

Discussion

Mr JAI ROWELL (Wollondilly) (16:32): Today I lead the discussion on the petition, and at the outset I thank the 13,000 people who signed this petition that was organised by the Wollondilly Shire Council. I thank the council for recently presenting me with the petition for tabling, led by the mayor and the councillors. I acknowledge the presence in the House of the Deputy Mayor, Councillor Deeth, and councillors Michael Banasik and Matthew Gould, and I thank them for their attendance today. The petition has been supported by many members of the community. The day I was presented with the petition was a great day and I thank everyone responsible for it. I also thank everyone who played a part in bringing this very important issue to the attention of the House.

I highlight the good work in which the Government and I have been involved over a long period of time to protect the only disease-free koala colonies within the Wollondilly electorate and within the Macarthur region. The New South Wales Government has partnered with the Wollondilly Shire Council and other organisations, including the Koala Health Hub and Conservation Volunteers Australia, on a vital project that is helping to protect this valuable population of koalas and their habitat and to inform future development planning and conservation management decisions. The project aims to deliver vital information about where koalas live in the Wollondilly, to help to identify how they move about, and to map the Wollondilly's high-quality koala habitat.

The Wollondilly Koala Conservation Project has significantly raised awareness about the important koala population in the Wollondilly shire. There has been a significant increase as a result of reporting from the community. More than 400 systematic spotlighting surveys for koalas have been completed to inform our understanding of the Wollondilly koala population's distribution and density. Koala habitat mapping is currently being developed using the survey data, 100 fine-scale vegetation plots and new aerial photo interpretation. The Wollondilly community has been highly involved in this project, volunteering with the Office of Environment and Heritage and Conservation Volunteers Australia to collect data by radio tracking koalas and restoring koala habitat. The data and information collected by this project is already helping to identify risks to koalas by analysing injury and fatality data. It is also identifying approaches that the community and Government can take to ensure a viable breeding population of koalas into the future.

The information collected so far has been used to inform advice to Roads and Maritime Services [RMS], the Wollondilly Shire Council, and the Department of Planning and Environment on measures to help to reduce koala road deaths. The New South Wales Government has supported the Wollondilly Koala Conservation Project, with \$90,000 in funding 2016-2017 and a further \$101,000 in funding 2017-2018 provided through our Saving our Species program, which aims to secure threatened plants and animals in the wild in New South Wales. The Government has pledged \$100 million over five years to the Saving our Species program to protect the State's threatened species. The support for the Wollondilly Koala Conservation Project is just part of the action that the New South Wales Government is taking to protect our iconic koalas.

On 6 May this year the Government released the NSW Koala Strategy, committing \$44.7 million towards securing the future of koalas in the wild. This is the biggest commitment by any State Government to koala protection. It also sets out the foundation for the Government's longer term vision to stabilise and increase koala populations across New South Wales. In addition to this, I have been working closely with RMS and the Government to see what we could do to put wildlife barriers on Picton Road. Further discussions have been had in relation to Appin and other major roads. I acknowledge that logistically, practically and effectively this is a major challenge that must be resolved to protect our koalas.

On the development side of the equation, urban growth in Western Sydney requires careful and strategic planning to balance the need to deliver housing and infrastructure, and maintain and protect important koala population. I have been advised that the circumstances that led council to proceed with

the petition have been resolved in part by council and the applicant regarding the Wilton South East precinct. But the work does not stop there. Strategic conservation planning will avoid important koala habitat, including primary habitat corridors, when determining the development footprint within Wollondilly and beyond. In the Southern Highlands, I was pleased to announce a three-year \$450,000 collaborative project with the Wingecarribee Shire Council to address koala conservation in the highlands. Statewide spatial analysis has highlighted that the Wingecarribee area has highly significant for koalas, just like Wollondilly.

The funding will be over three years and will support a koala project officer, who will be employed and co-funded by the council and operating in the region. The Wingecarribee Shire Council will contribute significant resources to the project, including staff time. Partnerships with other conservation groups in the region will be developed now that the funding agreement is finalised with the council. The work with both Wingecarribee and Wollondilly councils delivers against the NSW Koala Strategy commitment to local actions for key koala populations across the State. While I still have six months in this role, I will continue to fight for our koalas. I thank the visitors of the Wollondilly Shire Council for being here today, leading the charge for our community.

Mr GREG WARREN (Campbelltown) (16:37): I thank the 13,000 residents who signed the Wollondilly Council's petition, as well as the proactive community that supports this serious and important issue. I acknowledge deputy mayor Councillor Deeth, Councillor Banasik, Councillor Gould and Damo from the Wollondilly Shire Council and their passion on this issue. I also note Councillor George Greiss from the Campbelltown City Council in the public gallery. In 1933, Benjamin was trapped in the Florentine Valley and was later moved to the Hobart Zoo. Benjamin was the last surviving Tasmanian tiger; he died on 7 September 1936. That date is synonymous in the minds of many preservationists, but indeed many Australians because it is known to be the extinction of that tiger. We do not want that to be the case with koalas. A report by Patrick Wood said:

Koalas are on track to be extinct by 2050 in New South Wales if current land clearing rates continue. We do not want to be in that situation and that is why this petition is so very important. Koalas are listed as vulnerable in the New South Wales Threatened Species Conservation Act 1995 and the Commonwealth Environment Protection and Biodiversity Conservation Act 1999. Development has placed Campbelltown's koalas in an extremely vulnerable position. Yes, we want to live in a home, but koalas and our habitat need a home too. The preservation of habitat and the preservation of our koalas must be at the forefront of any planning framework and have as much priority as the profits of developers or the needs in those particular areas. I was talking to my colleague in Wollongong. In 1803 the first two koalas were captured in Port Kembla.

Mr Paul Scully: Just up the road from my house.

Mr GREG WARREN: Yes. Campbelltown, as we know, has the largest disease free colony in New South Wales, that is, no chlamydia. The first European reported of sighting of the koala was at Bargo in the Wollondilly electorate. The 2016 report of the chief scientist estimated the population between 100 and 150. The biggest threats were wildfire, vehicle collisions, habitat loss and domestic dog attacks, with vehicle collisions and habitat loss highlighted as the biggest concerns. We must find the balance and we must maintain the preservation of our koalas as a priority. The Federal Government's Department of Environment and Energy stated that from 1990 to 2010 New South Wales' koala population had declined from 31,400 to 21,000, which is 33 per cent. The Queensland population decreased from 295,000 to 167,000, a reduction of 43 per cent. The life expectancy varies, depending on which agency or organisation you listen to, but it is around 12 years.

On 6 May this year Premier Gladys Berejiklian and environment Minister Gabrielle Upton launched the \$44.7 million New South Wales koala strategy—\$20 million for new reserves—but not one of those reserves was in Macarthur or Campbelltown; 24,000 hectares was set aside for koala parks and reserves on the Central Coast, Southern Highlands, North Coast, Hawkesbury and Hunter, but none in Campbelltown or Macarthur; and \$10.8 million to improve safety and health, which included fixing vehicle strike hot spots, but they are not aware of any in Campbelltown or Macarthur at all. The planning guidelines have not been adequate for Campbelltown, and I refer to Gilead and other areas of development around the Appin Road. There must be a balance. Preservation must be the priority. There

is an allocation of \$8.9 million to increase our knowledge of koalas and of their habitats, but knowledge is no good if koalas and their homes are wiped out.

[Interruption]

I note the interjection by the member for Wollondilly. He can be certain, along with the people of New South Wales, the people of Wollondilly and everyone who signed this petition, that Labor will make the preservation of our habitat a priority. Labor will not sit back and see our koalas become extinct. We will lead the charge in this area under a Labor Government. *[Time expired.]*

Mr Jai Rowell: The Liberal Party has already done that, fixing up your mess.

Mr KEVIN CONOLLY (Riverstone) (16:43): We all agree that koalas are an iconic part of both Campbelltown's and Wollondilly's natural history. As we have heard, the first recorded sighting by Europeans of a koala was near Bargo in 1798. We have also heard that the south-west of Sydney is home to Sydney's largest disease free koala population. These are significant facts that we need to take into account. Clearly, this Government wants to incorporate in its planning a strategic approach that assesses where koala habitat is and where koalas are likely to be found so that it is possible to develop in a balanced way while protecting the koala populations. That is why the Government is committed to protecting the habitat of those threatened species, especially iconic species like the koala, as we roll out strategic planning. The Government has acted to protect koalas and their habitat using legislation and policies, such as the Biodiversity Conservation Act 2016 and the Local Land Services Act 2013.

A significant number of koala sightings were reported by the community, which triggered the Wollondilly Shire Council and the New South Wales Government undertaking the Wollondilly Koala Conservation Project. As members have heard, the project has grown over the last two years, with recent surveys proving that there is a healthy colony of breeding koalas in the region. The Government has acted by providing a \$90,000 grant from the Saving our Species program to the Wollondilly Shire Council for expanded survey work. Furthermore, in May last year the New South Wales Government released the NSW Koala Strategy which sets an objective to stabilise and then increase koala numbers over the longer term, ensuring genetically diverse and vital populations across New South Wales. That is key to ensuring the viability of the population and the genetic diversity. There have to be koalas protected in a variety of regions in a number of different parts of the State. We cannot concentrate all our eggs in one basket. Clearly we have to look after a lot of baskets, if that is a term one can use.

Planning well in the Macarthur region is as important as planning well on the Central Coast, on the North Coast, in the Hawkesbury, or wherever else, to ensure that where koala habitat is identified, where feed trees are found, that we take the appropriate measures to protect the populations in those areas. Those on this side of the House understand and appreciate that balancing urban growth in Western Sydney requires a calm and strategic approach in order to deliver more houses and infrastructure while protecting these important koala populations. Our strategic conservation planning approach is critical to achieving this result. The Government's work will help identify and avoid important koala habit, including primary koala habitat corridors, when determining the development footprint in the growth areas in Wollondilly and Campbelltown. The strategic conservation plan for Western Sydney will set specific requirements for protecting species, such as koalas. The Government is committed to ensuring koalas survive in New South Wales.

Mr ANOULACK CHANTHIVONG (Macquarie Fields) (16:46): I acknowledge our special guests in the gallery, whom have been noted by my colleagues. I lend my full support to the intention behind this petition, that is, to conserve and preserve the healthy koala population in south-west Sydney. I thank all the residents who have signed this petition as a way of showing their commitment to our environment and our koala population. The petition with 13,000 signatures is undoubtedly a significant response to what is a very important issue in our local area. My electorate of Macquarie Fields is bounded by the lungs of Campbelltown in the Scenic Hills to the west and the lush bushland

along the Georges River to the east. As I have said many times in this Parliament, I am a passionate defender of these green spaces, which are increasingly under threat by overdevelopment.

In my recent Stop the Squeeze survey, thousands of people provided feedback on how they feel about development in their area, what they fear about overdevelopment, and how important it is to save our green, open space and maintain our local community's environmental heritage. My survey is providing valuable insight into how deeply my constituents care about our green, open spaces and our precious wildlife, with specific mention of the local, healthy koalas. People lament the fact that koala habitat is being destroyed. They fear that koalas will no longer exist in the wild and zoos will be the only place to see these incredible animals.

It is no secret that the Campbelltown local government area [LGA], where more than half of my electorate sits, is home to the only disease-free koala population in the Sydney Basin. Long-time koala expert Dr Robert Close told ABC Radio last year that the combination of vegetation, Sydney's sandstone and the Cumberland Plain Woodland soils as well as the close proximity to the Georges River have allowed the koala population to survive longer than have other colonies. But urban splatter has a negative impact on their habitat. Koalas are increasingly being spotted in urban environments, getting caught in fences whilst avoiding domestic pets, or tragically lying on the side of the road after being hit by a vehicle.

Just yesterday Help Save the Wildlife and Bushlands in Campbelltown posted on its Facebook page a story about two koalas being rescued from a fence in Macquarie Fields. Thankfully the mother and its joey were given the all clear by Sydney Wildlife and WIRES before being released into nearby bushland. Unfortunately, many others are not so lucky. The green, open spaces in the Scenic Hills and at Hurlstone are under threat from overdevelopment, which will result in irreparable destruction of natural habitat for our koalas. The best way to protect our koala population is to develop a clear conservation plan for south-west Sydney. I stand with the residents who signed this petition along with the Wollondilly Shire Council to send a strong message that our green spaces and our koala population need protection and it is a worthy cause to be protected for future generations.

Ms Tamara Smith: I seek leave to make a contribution on behalf of The Greens.

Leave not granted.



RURAL LIVING

Our Reference: TRIM 9081#238 MN

The Hon. Melinda Pavey MP
Minister for Roads, Maritime and Freight
GPO Box 5341
SYDNEY NSW 2001

21 May 2018

Dear Ms Pavey

Melinda

WILDLIFE CROSSINGS FOR APPIN ROAD, PICTON ROAD AND HUME HIGHWAY

I write to urge the State Government to install wildlife crossings on Appin and Picton Roads and the Hume Highway. Vehicle trauma is considered to be the highest known cause of koala mortality in the Wollondilly LGA.

At its Ordinary Meeting of 19 March 2018, Council discussed its concerns and resolved:

**ORD NOM 4 submitted by Cr Banasik regarding funding for Koala Crossings
Resolution No. 55/2018**

- 1. That Council write to the State Government calling for urgent funding for Koala Crossings on Appin Road, Picton Road and the Hume Highway. Further copies of this motion be sent to neighbouring Councils seeking their support.**

Council is working with the Office of Environment & Heritage (OEH) on the Wollondilly Koala Conservation Project and has identified road strike hotspots on Appin Road, Picton Road and the Hume Highway.

These locations have been logged into the OEH's Bionet and provided to Roads & Maritime Services (RMS) and site meetings have been undertaken between Council and RMS staff. The next step would be to define and implement a management plan including pursuing under or over passes and fencing.

Acknowledging recent announcements regarding the planned installation of wildlife fencing on Picton Road, I request that further funding and resources be applied to the development and delivery of wildlife crossings for koalas at the document corridor areas on Appin Road, Picton Road and the Hume Highway.

If you have any questions regarding this request, please contact our Manager Infrastructure Strategy & Planning,

Yours faithfully,

Cr Judith Hannan
Mayor



Kevin Anderson MP

Parliamentary Secretary for Regional Roads, Maritime and Transport
Member for Tamworth

Councillor Judith Hannan
Mayor
Wollondilly Shire Council
PO Box 21
PICTON NSW 2571

WOLLONDILLY SHIRE COUNCIL	
TRIM NO.	9081
PROP. No.	
- 2 OCT 2018	
AUTH. No.	
ASSIGNED TO:	A. Steng

Our Ref: 00589749
Your Ref: TRIM 9081#238 MN

Dear Cr Hannan,

Thank you for your correspondence to the Minister for Roads, Maritime and Freight about wildlife protection on Appin and Picton roads, and the Hume Highway. The Minister has asked me to respond on her behalf.

I appreciate your concerns for wildlife safety and thank you for taking the time to raise this matter. Roads and Maritime Services takes wildlife conservation seriously and endeavours to mitigate impacts to sensitive ecologies.

Roads and Maritime advises it does not have a program that provides funding for wildlife crossing infrastructure. However, as part of the proposed Appin Road upgrade between Rosemeadow and Appin, Roads and Maritime, the NSW Department of Planning and Environment and the NSW Office of Environment and Heritage (OEH) are investigating options to protect Campbelltown's and Wollondilly Shire's koala populations. One of these includes introducing barrier fences to guide koalas away from the road.

Works to provide heavy-vehicle acceleration lanes on Picton Road are also under way, and will include fencing to protect wildlife. Additionally, I understand Roads and Maritime and Wingecarribee Shire Council met in December 2017 to discuss options for wildlife crossings on the Hume Highway. These discussions and investigations are ongoing.

You will also be pleased to know, the NSW Government will allocate \$3.3 million towards providing mitigation measures at locations where koala strikes are frequent, as part of its *NSW Koala Strategy*. For more information about the strategy, you may wish to visit the OEH website at www.environment.nsw.gov.au.

I hope this has been of assistance.

Yours sincerely,

Kevin Anderson MP
Parliamentary Secretary

25.9.2018



RURAL LIVING

Our Reference: TRIM 1891#13 MN

3 July 2017

Mr Jai Rowell MP
Member for Wollondilly
PO Box 1005
TAHMOOR NSW 2573

Dear Mr Rowell,

A handwritten signature in black ink, appearing to read 'Jai', is written over the name 'Mr Rowell'.

PROTECTION OF KOALA HABITAT IN APPIN

The protection and management of koala populations and their associated habitat within the Wollondilly Local Government Area is of high importance to Council and the local community it represents.

Appin has been identified as a significant area for koala activity, with recent sightings reported by staff as well as residents who have called Council's Koala Hotline.

At its Ordinary Meeting of 19 June 2017, Wollondilly Shire Council passed the following resolution in relation to this matter:

That Council write to both the Federal and State Governments and Local Members requesting that protection of the koala habitat be a top priority with upgrades to Appin Road.

Further, that Council write to both Campbelltown and Wollongong Councils requesting their support on this issue.

In accordance with the above resolution, Council is seeking your support in making sure the protecting the koala habitat during future upgrades to Appin Road.

If you have any questions regarding this letter please contact Council's Manager Infrastructure, or via email

Yours faithfully

Luke Johnson
GENERAL MANAGER



RURAL LIVING

Our Reference: TRIM 1891#14 MN

The Hon Melinda Pavey
Minister for Roads, Maritime and Freight
Transport for NSW
PO Box K659
Haymarket NSW 1240

3 July 2017

Dear Ms Pavey,

PROTECTION OF KOALA HABITAT IN APPIN

The protection and management of koala populations and their associated habitat within the Wollondilly Local Government Area is of high importance to Council and the local community it represents.

Appin has been identified as a significant area for koala activity, with recent sightings reported by staff as well as residents who have called Council's Koala Hotline.

At its Ordinary Meeting of 19 June 2017, Wollondilly Shire Council passed the following resolution in relation to this matter:

That Council write to both the Federal and State Governments and Local Members requesting that protection of the koala habitat be a top priority with upgrades to Appin Road.

Further, that Council write to both Campbelltown and Wollongong Councils requesting their support on this issue.

In accordance with the above resolution, Council is seeking your support in making sure the protecting the koala habitat during future upgrades to Appin Road.

If you have any questions regarding this letter please contact Council's Manager Infrastructure. or via email


Yours faithfully,

Luke Johnson
GENERAL MANAGER

Our Reference: TRIM 1891#15 MN

The Hon Angus Taylor, MP
191 Auburn St
Goulburn NSW 2580

3 July 2017

Dear Mr Taylor, 

PROTECTION OF KOALA HABITAT IN APPIN

The protection and management of koala populations and their associated habitat within the Wollondilly Local Government Area is of high importance to Council and the local community it represents.

Appin has been identified as a significant area for koala activity, with recent sightings reported by staff as well as residents who have called Council's Koala Hotline.

At its Ordinary Meeting of 19 June 2017, Wollondilly Shire Council passed the following resolution in relation to this matter:

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Further, that Council write to both Campbelltown and Wollongong Councils requesting their support on this issue.

In accordance with the above resolution, Council is seeking your support in making sure the protecting the koala habitat during future upgrades to Appin Road.

If you have any questions regarding this letter please contact Council's Manager Infrastructure,
or via email

Yours faithfully,

Luke Johnson
GENERAL MANAGER



RECEIVED
5-12-17

The Hon. Melinda Pavey MP
Minister for Roads, Maritime and Freight

Our Ref: 00368356

Mr Jai Rowell MP
Member for Wollondilly
PO Box 1005
TAHMOOR NSW 2573


Dear Mr Rowell,

Thank you for your correspondence on behalf of Mr Luke Johnson, General Manager Wollondilly Shire Council, about the protection of the koala habitat in Appin.

Mr Johnson also wrote to me directly about this matter and I trust he will accept this as a response to both approaches.

The environmental impacts on flora and fauna are considered for all infrastructure projects. Roads and Maritime Services is a member of the NSW Koala Advisory Committee, chaired by NSW Chief Scientist and Engineer, Professor Mary O'Kane. Roads and Maritime ensures any measures taken to minimise environmental impacts are based on scientific evidence.

Mr Johnson may be interested to know, in 2017, more than 90,000 koala food trees were planted as part of revegetating at least 130 hectares of new koala habitat, for the Pacific Highway upgrade from Woolgoolga to Ballina.

Further, a Statewide koala strategy is being developed and will support the recovery of koala populations.

If Mr Johnson has any further questions, Roads and Maritime, would be pleased to take his call on

Environment Manager at

I hope this has been of assistance.

Yours sincerely,


28 NOV 2017

The Hon. Melinda Pavey MP
Minister for Roads, Maritime and Freight

DH:DH:9081#61

Julie Ravallion
Roads and Maritime Services
Level 3,
27-31 Argyle St,
Parramatta, NSW, 2124.

26th April, 2017

Dear Ms Ravallion

ROAD SIGNAGE AND CROSSINGS FOR THE PROTECTION OF KOALAS

The protection and management of koala populations and their associated habitat within the Wollondilly Local Government Area (LGA) is of high importance to Council and the local community it represents. The recently completed report by the NSW Chief Scientist and Engineers Report was noted to identify that the provision of road signage and crossings can be a key issue for the protection of koalas.

At its Ordinary Meeting of **20th February 2017**, Wollondilly Shire Council moved the following resolution in relation to this matter:

That Council write to RMS (Roads and Maritime Service) regarding recent Koala activity along the State Roads within the Shire with the view of reviewing and supplementing advisory signage as required and the placement of concrete barriers and crossings.

That Council write to the Minister for the Environment requesting support in Council's request to the RMS for supplementing advisory signage as required and the placement of concrete barriers and crossings for the koalas in Wollondilly.

In accordance with the above resolution, your support in achieving a review of the existing advisory signage as well as the funding and installation of koala signs and crossings at appropriate locations on State roads within the Wollondilly LGA is requested.

If you have any questions regarding this letter please contact Council's Manager Environmental Services,
or via email

Yours faithfully

Luke Johnson
GENERAL MANAGER

DH:DH:9081#61

The Hon G Upton MP
NSW Minister for Environment
GPO Box 5341
SYDNEY NSW 2001

9th March 2017

Dear Ms Upton

ROAD SIGNAGE AND CROSSINGS FOR THE PROTECTION OF KOALAS

The protection and management of koala populations and their associated habitat within the Wollondilly Local Government Area (LGA) is of high importance to Council and the local community it represents. The recently completed report by the NSW Chief Scientist and Engineers Report was noted to identify that the provision of road signage and crossings can be a key issue for the protection of koalas.

At its Ordinary Meeting of **20th February 2017**, Wollondilly Shire Council moved the following resolution in relation to this matter:

That Council write to RMS (Roads and Maritime Service) regarding recent Koala activity along the State Roads within the Shire with the view of reviewing and supplementing advisory signage as required and the placement of concrete barriers and crossings.

That Council write to the Minister for the Environment requesting support in Council's request to the RMS for supplementing advisory signage as required and the placement of concrete barriers and crossings for the koalas in Wollondilly.

In accordance with the above resolution, your support in achieving a review of the existing advisory signage as well as the funding and installation of koala signs and crossings at appropriate locations on State roads within the Wollondilly LGA is requested.

If you have any questions regarding this letter please contact Council's Manager Environmental Services, or via email

Yours faithfully

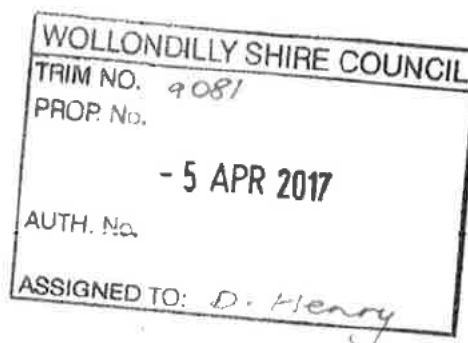
Luke Johnson
GENERAL MANAGER



Office of Environment & Heritage

MD17/842
DH:DH:9081#61

Mr Luke Johnson
General Manager
Wollondilly Shire Council
PO Box 21
PICTON NSW 2571



Dear Mr Johnson

Protection of Koalas

Thank you for your letter to the Minister for the Environment, the Hon Gabrielle Upton MP, about the protection of koalas. Your letter was referred to the Office of Environment and Heritage (OEH) and I have been asked to reply.

OEH supports Wollondilly Shire Council's request to the Roads and Maritime Services (RMS) to review existing road signage, and consider installing new road signage and road crossings on State roads in the shire. OEH understands that Appin Road will soon be upgraded, so consideration of koala protection measures along this road by the RMS is timely. The OEH is aware of a number of recent road-killed koalas on Appin Road, Picton Road, and the Hume Highway in the Wollondilly shire.

In examining the locations of signage or crossing structures along State roads, I recommend that the RMS consider known or potential koala habitat and connectivity routes, koala movements in relation to state roads, and the currently available information on local koala population density. This will ensure the correct areas are targeted to maintain a healthy, connected, and breeding population of koalas in Wollondilly in the long-term. The results of previous monitoring programs which have investigated the effectiveness of road signage and crossing structures should also be considered. More effective mitigation measures may be available to reduce the incidence of koala-vehicle collisions.

Local data currently being collected under the NSW *Saving our Species* (SoS) Koala project by Wollondilly Council and OEH will inform the RMS's assessment of options and OEH endorses the use of this local data in any planning decisions. The SoS project will identify koala habitat and movement corridors in the whole of Wollondilly shire, with a focus on growth areas of Appin-Wilton. It will estimate the size, distribution, and health of the local koala population. Preliminary results are expected by June 2017.

If you have any further questions about this issue, please contact _____, Senior Team Leader
Ecosystems & Threatened Species on _____

Yours sincerely

 31/3/2017
DAYLAN CAMERON
Acting Director, Greater Sydney
Regional Operations

The Hon A Roberts
NSW Minister for Planning
GPO Box 5341
SYDNEY NSW 2001

3rd March 2017

Dear Mr Roberts

REVIEW OF STATE ENVIRONMENTAL PLANNING POLICY NO 44- KOALA HABITAT PROTECTION

The protection and management of koala populations and their associated habitat within the Wollondilly Local Government Area (LGA) is of high importance to Council and the local community it represents.

The public exhibition of the Explanation of Intended Effects for the review of State Environmental Planning Policy 44-Koala Habitat Protection (SEPP 44) has therefore been appreciated. Additionally, in endorsing its submission on this document at its Ordinary Meeting of **20th February 2017**, Wollondilly Shire Council moved the following resolution:

That Council send correspondence to the NSW Minister for Planning which:

- *Supports in principle proposed amendments to SEPP 44 in addressing shortcomings of the current SEPP experienced by Council Staff in providing adequate protection to koala habitat within the Wollondilly Local Government Area.*
- *Requests that the completed draft revised SEPP 44 be publicly exhibited as well as being subject to a comprehensive consultation program.*

In accordance with the above resolution, it is requested that a completed revised SEPP 44 be publically exhibited prior to its gazettal. A copy of Council's submission on the EIE is enclosed for your information.

If you have any questions regarding this letter please contact Council's Manager
Environmental Services on phone or via email

Yours faithfully

Luke Johnson
GENERAL MANAGER

DH:DH: 9081#26

Director Planning Frameworks
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

1st March 2017

Dear Sir/Madam

SUBMISSION REGARDING THE REVIEW OF STATE ENVIRONMENTAL PLANNING POLICY NO 44

Thank you for the opportunity of providing on the Explanation of Intended Effects (EIE) for the Review of State Environmental Planning Policy No 44 – Koala Habitat Protection (SEPP 44).

The protection and management of koala populations and their associated habitat within the Wollondilly Local Government Area (LGA) is of high importance to Council and the local community it represents. The extension of the public exhibition process to allow for the consideration of this matter by Council at its meeting of 20th February 2017 is therefore welcomed.

Council is supportive of SEPP 44 and recognises its values in providing a statutory framework at the State Government level. However, it is requested to be noted that Council resolved at its meeting of 20th February 2017 to *"Send correspondence to the NSW Minister for Planning which:*

- Supports in principle proposed amendments to SEPP 44 in addressing shortcomings of the current SEPP experienced by Council Staff in providing adequate protection to koala habitat within the Wollondilly Local Government Area.*
- Requests that the completed draft revised SEPP 44 be publicly exhibited as well as being subject to a comprehensive consultation program.*

The proposed amendments to SEPP 44 outlined in the EIE are recognised as having potential benefit in enhancing the protection of koala habitat within the Wollondilly LGA. However, amendments to the proposed process have been identified based on the experiences of Officers that includes participation in a recent Baseline Survey Pilot Project with the NSW Office of Environment and Heritage. A submission has consequently been prepared which is attached for consideration and response by the DP&E. This submission includes as an attachment the location of koala sightings in relation to planning proposals currently lodged with Council.

It is understood in relation to this matter that the DP&E is seeking input into the development of guidelines to replace the former standardised requirements for specific Koala Plans of Management. The holding of discussions (potentially with the adjoining

Campbelltown and Wingecarribee Councils) regarding this matter would be appreciated. Please contact Council's Environmental Assessment Planner, or via e-mail _____ to arrange details for such a meeting.

Should you have any enquiries regarding aspects of Council's submission please contact _____

Yours faithfully

Brad Staggs
Manager Environmental Services
ENVIRONMENTAL SERVICES

Submission on the Review of the State Environmental Planning Policy No 44 – Koala Habitat Protection

This submission provides comments on the Explanation of Intended Effects (EIE document) for the review of *State Environmental Planning Policy No 44 – Koala Habitat Protection* (SEPP 44). The submission is based on the experience of Council Officers in the implementation of the current SEPP 44 during the assessment and approval of planning and development proposals. The submission is also based on the experiences of Council's Environmental Staff in relation to the mapping of koala habitat and the collection of baseline data

1) Background Information

(i) Relevance of SEPP 44 to the Wollondilly Local Government Area

The Wollondilly Local Government Area (LGA) is a peri-urban type LGA on the perimeter of the Greater Metropolitan Sydney Area. Increased numbers of this species have been recorded at a range of different localities within the Wollondilly Local Government Area (LGA) over recent years.

Council participated in a Baseline Survey Pilot Study with the NSW Office of Environment and Heritage during April and May 2016 which involved koala surveys at 58 strategic locations. The location of the pilot surveys and koalas recorded as part of these surveys is presented in Map 1 (attached).

The Report on this Baseline Study prepared by Dr Nicholas J. Colman MSc, B.Env.Sc (Hons) broadly concluded that::

A greater study effort into the koala population, their habitat-use (i.e. possible home ranges) as well as the flora (food/shelter trees) of Wollondilly is warranted. A major priority is the identification/protection and enhancement of koala habitat and vegetated corridors that koalas utilise for movement across the landscape or for home ranges. In addition, this study detected other threatened fauna that would also benefit from increased koala protection strategies.

The Study enhanced previous expressed propositions that the Wollondilly LGA provides a potential meeting point between the Chlamydia positive Southern Highlands koalas and the Chlamydia free Campbelltown population. It also highlighted significant deficiencies in the current knowledge of movements of koalas and the priority for additional and detailed surveys and mapping. The DP&E is requested to note in this regard that land use planning is to ensure the long-term survival of koalas in the LGA is considered to be operating without strategic direction as a consequence of these significant shortcomings in baseline data and research..

There are significant increasing pressures on local biodiversity including known potential koala habitat areas, particularly as a result of urban development. In this regard, Map 2 (attached) shows the location of koala recordings in relation to planning proposals currently being assessed by Council and gazetted.

The adequate protection of the koala population within the Wollondilly LGA has been noted to be of very high concern to the broad section of the community. This concern is illustrated by the reporting of thirty sightings of koalas to Council's Koala Hotline since its establishment in mid-2015 as well as a number of articles in local newspapers.

(ii) Overview of Council experience with SEPP 44

The SEPP 44 has been viewed by Council Staff as an important statutory document in the review of development both at the planning stage and sub-division stage. However, the following shortcomings have been experienced in the current SEPP 44 document based on the experience of these Officers:

- The list of koala tree species does not reflect up-to-date knowledge regarding the habitat and movement of koalas.
- The current definition of 'Core Habitat' for Koalas does not adequately capture the significance of a site proposed for development in terms of a site specific and landscape context.
- Reports accompanying development applications have almost unanimously observed to state that SEPP 44 does not have any implications to the proposed development largely based on the absence of koala recordings on a site proposed for development.
- The preparation of specific Koala Plans of Management has occurred on an extremely rare basis due to a combination of factors including the non-identification of 'core koala' habitat on site and expenses incurred and timeframe involved in the preparation of such Plans.

2) General comments on the review of SEPP 44 and adopted process

Council is supportive of SEPP 44 and recognises its value and importance in providing a statutory framework at the State Government level for the protection and management of koalas and their associated habitat at a localised level. Council consequently welcomes the retention of the SEPP and views its review as a means of addressing the experiences of Officers and shortcomings in the current document outlined above.

The consultation being undertaken in relation to the intended effects of proposed amendments to SEPP 44 is welcomed. However, the review process within the exhibited Frequent Question document is considered to infer an intention of the DP&E not to subject the following items to a subsequent public exhibition process.

- The definition of 'koala habitat' to replace the definitions of 'core koala habitat' and 'potential koala habitat' contained in the current SEPP 44.
- Updated Guidelines setting out criteria for applicants to follow and consent authorities to put into effect when applying the SEPP to standardise the development assessment process.
- Updated Guidelines to support the preparation of Comprehensive Koala Plan of Managements

The above items are viewed as integral components of the SEPP and their absence from the exhibited material is viewed with concern. The DP&E is requested to note in this regard that in endorsing this submission, Council resolved at its meeting on 20th February 2017 to send correspondence to the NSW Minister for Planning requesting their public exhibition. The DP&E is further requested to note that the provision of any form of Council support to the updated SEPP is withheld pending the review of this information.

3) Relationship of the revised SEPP to the applicable legislative and policy framework

(i) Relationship of the revised SEPP 44 to the Biodiversity Conservation Act 2016

The Explanation of Intended Effect is noted to state on page 12 "... updated requirements for development applications and considerations for consent authorities will reflect contemporary koala management practices and include, for example, avoiding habitat fragmentation". The apparent intention for the updated SEPP to include requirements for consent authorities to consider the impacts of development on koala habitat fragmentation is welcomed

However, there are concerns that the effectiveness of the revised SEPP in protecting koala habitat will be constrained by the *Biodiversity Conservation Act 2016* following its formal introduction in the later part of 2017. These concerns are based on considered inconsistencies between the proposed broad approach of the revised SEPP 44 (protecting koala habitat based on the vegetation characteristics of a for this development site) and the provisions of the BCA. While acknowledging the Regulation Act is yet to be publicly released, Council Staff view the Gazetted Act as allowing for removal of habitat subject to offsetting measures). **The urgent provision of a response by the DP&E and/or OEH to these concerns prior to the finalisation of the revised SEPP 44 is being sought.**

(ii) Relationship of the revised SEPP to proposed reform of the Environmental Planning and Assessment Act 1979

A series of reforms to aspects of the Environmental Planning and Assessment Act 1979 are noted to have been placed on public exhibition for the similar revised period for SEPP 44. The details of these proposed reforms outlined in the exhibited Summary Document are noted to include the preparation of Local Strategic Planning Statements (which amongst other matters), would "incorporate and summarise land use objectives and priorities identified through council's Community Strategic Plan process" and "provide the strategic context and rationale for local planning controls".

Council Environmental Staff have identified potential inconsistencies between these reforms and the approach of the BC Act described above. These Officers also consider there is a need for clarification between the alignment of revised SEPP 44, reforms to the EP &A Act and the BC Act to ensure the adequate protection of koala habitat occurs within a landscape context in accordance with latest research. **The DP&E and/or OEH is requested provide Council with clarification over this matter as a priority and prior to finalisation of the revised SEPP 44.**

(iii) Consistency of the revised SEPP with the State and Commonwealth Policy framework

The EIE is noted to state the proposed species list is consistent with the NSW Recovery Plan for Koalas. However, there is an absence of any discussion on proposed procedures to ensure the consistency of the definition of 'koala habitat' and Guidelines for Development' within the revised SEPP to this Recovery Plan. There is also noted to be an absence of reference to the NSW Koala Strategy which Staff understands has a purpose of providing an overarching framework at the State level of the protection and management of koala habitat.

It is considered important that the revised SEPP 44 be consistent with and complements the policy framework. to ensure the implementation of measures to protect koala habitat from development within a strategic context occurs at the local, State and International level. **The viewpoint of the DP&E and inclusion of measures in the updated SEPP demonstrating consistency with the applicable policy framework is requested prior to the finalisation of the document.**

3) Comments on specific aspects of the Explanation of Intended Effect

The following provides comments on individual aspects of the EIE document including aspects of the revised SEPP to be prepared subsequent to the public exhibition of this document

(i) Proposed aims of the updated SEPP

The statement in the EIE that the *"aim of the SEPP is appropriate and will continue to be to protect koala habitat to ensure a permanent free-living population over the present range and reverse the current trend of koala population"* is supported and welcomed. There is however a noted absence of reference over whether the objectives of the current SEPP will be retained. **It is requested in this regard that the Objectives of the current SEPP 44 be retained with reference to 'core koala habitat' amended to 'koala habitat'.**

(ii) Definition of koala habitat by the revised SEPP

The definitions of Core and Support Core habitat in the current version of SEPP 44 have been observed to be largely ineffective in protecting the impacts of development on koalas and their habitat. The EIE is noted to state in relation to this matter *"the updated definitions will be replaced with definitions that identify the characteristics of plant communities which make up koala habitat and if there is evidence that koala are present"*.

This proposed approach is recognised as having potential benefit in terms of improving the effectiveness of the definitions in the current SEPP 44 and by extension, informing the adequacy of the revised SEPP in protecting and managing koala habitat. However, the following provides comments and recommendations for the definition of 'koala habitat' within a revised SEPP based on the experiences of Officers with the current SEPP and outcomes of the recent Pilot Project with OEH.

(a) Consideration of habitat within a landscape context

It is considered important that the finalised definition of koala habitat allow for the inclusion of areas utilised or have the potential to be utilised as habitat and/or as a habitat corridor within a broader landscape context. In relation to this matter, the Report prepared for Council on the Baseline Study with OEH identified that koalas were utilising sandstone based vegetation communities adjacent to watercourses (particularly in the vicinity of disturbed areas) when moving between larger areas of habitat. The Study also identified that a number of koalas were recorded in feed tree species not listed in Schedule 2 of the current SEPP 44.

The EIE is noted to state in relation to this matter *"the guideline will also clearly articulate how the definitions in the proposed amended SEPP differ from the definitions used in environmental management at the landscape scale- such as preferred koala habitat, primary habitat or secondary habitat"*. This statement is considered to infer that the application of the

revised SEPP 44 will be restricted to the site scale and the protection at a landscape scale will occur as part of a separate process. The DP&E is requested to note that Council Officers would have strong concerns over this approach as the protection of koala habitat at a landscape is viewed as being imperative based on received specialist advice including the Report on the Pilot Study undertaken with the NSW OEH. **The provision of urgent clarification over the application of the revised SEPP in relation to this matter from both the DP&E and OEH is requested.**

(b) Consideration of koala habitat species

The EIE is noted to state that the definition of koala habitat, will be *"supported by an updated list of tree species that reflects current scientific knowledge"* (presented in the Appendix of the EIE). This species list is broadly supported in terms of providing broad guidance to development proponents and consent authorities. However, Officers consider that the updated definition of koala habitat should not be dependent or partially dependent on the presence of certain species on a particular development site (as discussed below).

Requested components of definition of 'koala habitat' within a revised SEPP

The adequate definition of koala habitat by the updated SEPP 44 is viewed as being highly important given its role in informing the development control process. The above comments in this submission highlight the viewpoint of Council Officers (and recent research) that the definition within an updated SEPP needs to capture the usage of a particular site by koalas in both a local and broader landscape context. It is therefore requested that the revised SEPP require the proponent of applicable development applications carry out the following activities in identifying whether a site contains 'koala habitat':

- The analysis of historical records to determine the previous presence of koalas and behavioural patterns of koalas on the site
- The undertaking of comprehensive surveys to identify the presence of koalas consistent with best practice across all vegetation communities present on a site proposed for development
- An analysis of the observed and identified potential behavioural usage of the site by koalas across all vegetation types within the site based on a detailed assessment, (which is not restricted to habitat species listed in the revised SEPP 44).
- The role of the site in a landscape context in allowing for the movement of koalas based on a detailed assessment and analysis of existing records.

The DP&E is requested to incorporate the above activities for development proponents into a definition of 'koala habitat' within a revised SEPP which is subject to a subsequent public exhibition process that includes consultation with Council Officers.

(iii) *Development control provisions in a revised SEPP 44 (Plans of Management)*

Council's experiences with development control provisions with the current SEPP 44 have been restricted to site-specific individual Plans of Management due to the absence of a Comprehensive Koala Plan of Management (CKPoM). In relation to this matter, the

preparation of a CKPoM for the Wollondilly LGA has been identified as a high priority by the OEH given the significant shortcomings of baseline data and wide distribution of koala sightings. The DP&E is requested to note that Council requires sufficient support and funding at the State Government level to prepare such a Plan.

The proposed replacement of the requirements for individual Plans of Management within the revised SEPP 44 with standardised requirements outlined in updated Guidelines is not opposed. However, the provision of any Council support is subject to:

- The Guidelines requiring a level of surveys and assessment of potential impacts of an applicable development proposal on koalas which has been required for individual Plans of Management under the current SEPP 44.
- The Guidelines addressing all issues raised in the draft submission on the Review of SEPP 44 presented in Attachment 1 of this Report.

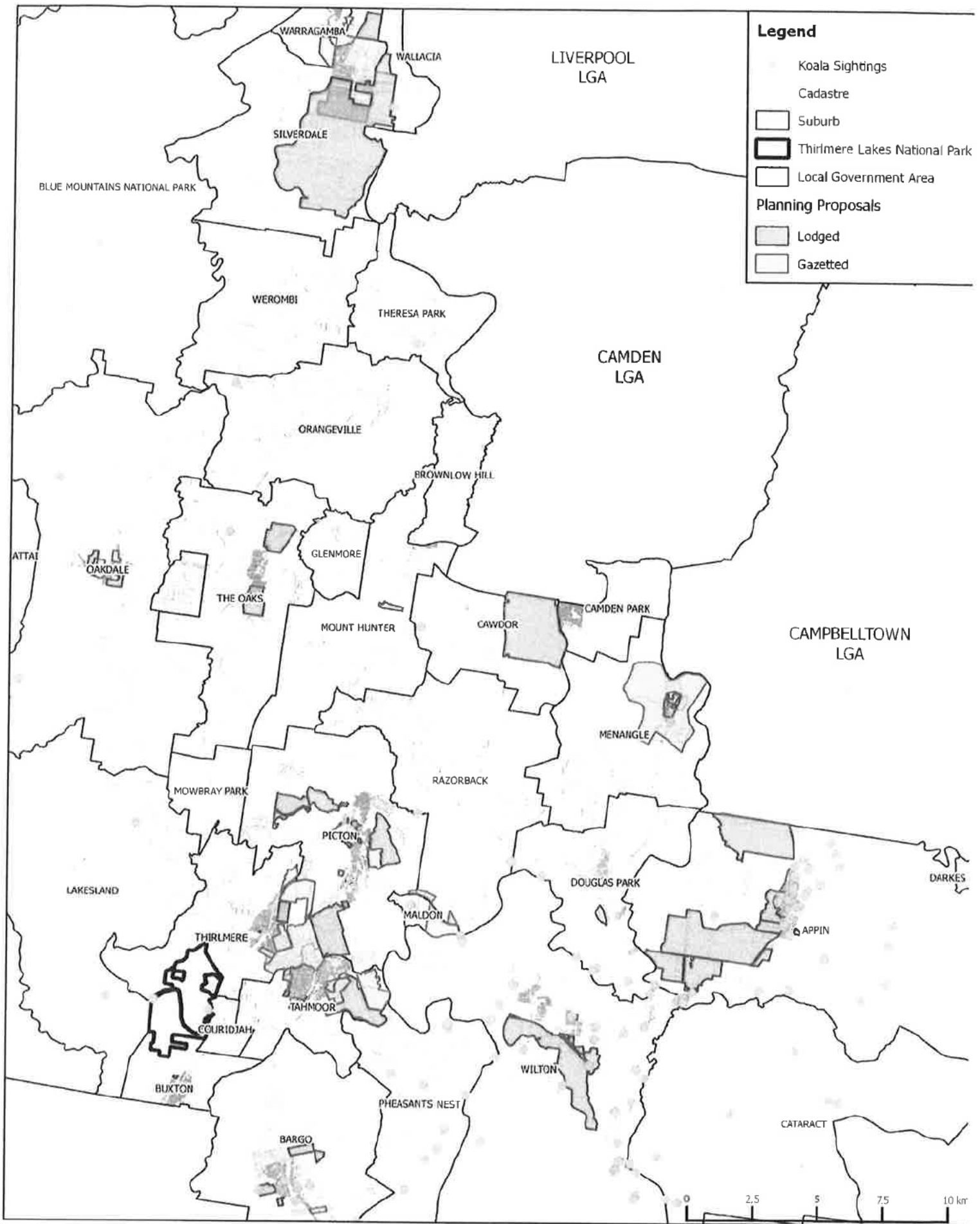
The DP&E is requested to exhibit the completed Guidelines with the completed draft SEPP 44. The provision of the completed draft Guidelines to Council prior to the finalisation of the SEPP by the DP&E is requested should this exhibition process not eventuate.

4) Concluding statement

The review of the State Environmental Planning Policy No 44 – Koala Habitat Protection is supported by Council Officers. The proposed broad amendments to the current document are recognised as having potential benefit in addressing experienced shortcomings of the current document in adequately protecting koala habitat within the Wollondilly Local Government Area. However, this submission strongly requests the public exhibition of the completed revised SEPP given that key components in regard to definitions of koala habitat and Guidelines for Comprehensive and Individual Plans of Management are yet to be prepared.



Map 1: Location of Pilot Surveys and Koala Recordings



Map 2: Koala Sightings in regards to Planning Proposals



**Planning &
Environment**

Office of the Secretary

Your ref: DH:DH:9081#56
Our ref: 17/04263

Mr Luke Johnson
General Manager
Wollondilly Shire Council
PO Box 21
PICTON NSW 2571

WOLLONDILLY SHIRE COUNCIL	
TRIM NO.	9081
PROP. No.	
18 APR 2017	
AUTH. No.	
ASSIGNED TO:	D. Hunt

Dear Mr Johnson

Thank you for writing to the Hon Anthony Roberts MP, Minister for Planning, Minister for Housing and Special Minister of State, regarding the review of State Environmental Planning Policy 44 – Koala Habitat Protection. The Minister has asked me to respond on his behalf.

I am advised that the Wollondilly Shire Council has a well-deserved reputation for its proactive and community focused approach to koala conservation and habitat protection.

I commend Council for initiatives such as the Wollondilly Koala Conservation Project, which helps raise awareness and provides important survey data.

I welcome Council's submission to the review and I have noted the terms of the resolution Council made at its meeting of 20 February 2017.

The Department of Planning and Environment is reviewing stakeholder feedback and will make any necessary changes based on the issues that were raised. We will consider the need for further stakeholder consultation as a consequence of any changes. I understand the team responsible for the review is in contact with Council to organise further discussions on the issues it has raised.

I look forward to continuing our partnership and providing Council and Wollondilly residents with a modernised policy framework to secure our mutual objectives for koala conservation and habitat protection.

Should you wish to discuss the proposal, please contact
Director, Planning Frameworks, at the Department on

, Acting

Yours sincerely

Carolyn McNally
Secretary

11.4.17

Our Reference: TRIM 178#88 MN

Ms Renae Elrington
Regional Manager, Southern
Roads & Maritime Services
P O Box 477
WOLLONGONG EAST NSW 2520

14 December 2016

RECENT SIGHTINGS OF KOALAS ON STATE ROADS

At its Ordinary Meeting of 21 November 2016, Council discussed its concerns with recent sightings of Koala's particularly around Appin, and resolved:

- **ORD NOM5 - Notice of Motion No. 5 submitted by Cr Banasik on 4 November 2016 regarding Koala Advisory Signage. That Council write to RMS regarding recent Koala activity along the State Roads within the Shire with the view of reviewing and supplementing advisory signage as required and the placement of concrete barriers and crossings for the Koalas.**

As the Roads Authority for State Roads, can the Roads & Maritime Service assist with providing a feedback on measures it can undertake to help address the situation.

If you have any questions regarding this request, please contact me on _____ or _____

Yours faithfully

Mike Nelson
Manager Infrastructure Planning



6 February 2017

TRIM 178#88 MN

Mr Mike Nelson
Manager Infrastructure Planning
Wollondilly Shire Council
PO Box 21
PICTON NSW 2571



Dear Mr Nelson

RECENT SIGHTINGS OF KOALAS ON STATE ROADS

Roads and Maritime Road Designers work closely with environmental specialists to provide safe passage for wildlife under or over the road. Recent examples can be seen on the Foxground and Berry Bypass and Termeil Creek Bridge Replacement. Measures include dedicated fauna underpasses, rope bridges, glider poles and land bridges. They are designed for a range of species including threatened species such as koalas.

Unfortunately, it is not feasible to retrofit all existing NSW roads with these measures. RMS is working with the Office of Environment and Heritage (OEH) to improved identification of road kill hotspots. This information will be used to better target the most appropriate mitigation measured for existing roads. Your information on priority area for action is appreciated.

RMS also provides financial support to the NSW Wildlife Council, the peak body coordinating the work of wildlife carer groups in NSW, to help develop effective policies for managing injured wildlife found on roads. The NSW greatly values the work of Council members in the rescue and rehabilitation of wildlife injured and orphaned by road related incidents.

Yours sincerely

Renae Elrington
Regional Manager, Southern

Our Reference: TRIM 6930-4 AG:PH

Executive Director
Housing & Employment Delivery
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Attention: David Fitzgibbon

2nd October, 2014

Dear David,

WILTON JUNCTION PRECINCT & REVIEW OF PROPONENT STUDY SUBMISSION

Thank you for providing the CD containing the updated study package and inviting Council's comments. I am writing to provide Council's comments in reply.

Please find attached for consideration:

- Table 1, which provides Council's summary response to the updated Ecological Assessment & Environmental Offsets Strategy. As can be seen from Table 1 Council still has a number of concerns regarding the adequacy of the Assessment/Strategy – concerns which directly relate to the study requirements. Accordingly should a decision be made to proceed to public exhibition Council requests it be noted that its concerns remain unresolved.
- Table 2, which Council's summary response to the remaining studies other than the Planning Report. This will be provided under separate cover.

If you have any questions please contact either _____ or myself.

Yours faithfully

Paul Hume
Acting Deputy General Manager

Table 1: Summary response to updated Ecological Assessment & Environmental Offsets Strategy (KSR 8)

Wollondilly

Issue	Comment in previous Adequacy Test	Considered adequacy of Response	Additional Comments
Policy framework for the Ecological Strategy	<p>The Director General requirements are based on definitions of Threatened Species and a methodology required satisfying the Biodiversity Certification Assessment Methodology (BCAM). This methodology has not been undertaken as part of the assessment and therefore does not meet the Director Generals requirements.</p>	<p><u>Not adequate</u></p> <p>The Report has not adequately responded to comments previously raised by Council regarding inconsistencies with the BCAM. Further clarification regarding the Policy framework is required.</p>	<p>The proponent be requested to carry out discussions with the OEH to clarify the appropriate overall policy framework to be adopted by the rezoning proposal.</p> <p>The proponent be requested to take into consideration the draft Approval Bilateral Agreement and to amend the Ecological Report as necessary. Nb: This Agreement was exhibited subsequent to the issuing of the previous comments.</p>
Mapping and classification of vegetation communities	<p>The report does not recognise the scientific and legally accepted definitions or classifications of EECs (Tozer model) as used by the TSCA and EPBCA.</p> <p>Council's mapping based on Tozers modelling suggests that the site could support both Shale Sandstone Transition Forest and Cumberland Plain Woodland. Following Inspections, Council Officers agree with the mapping and believe that the sites vegetation reflects those classifications.</p>	<p><u>Not adequate</u></p> <p>The Ecological Report has not adequately responded to requests from Council that the Ecological Report recognises the site contains EEC's based on legally accepted definitions.</p>	<p>The proponent be advised that Council maintains its view that the site contains areas that satisfy the legal definitions of Endangered Ecological Communities.</p> <p>That consideration be given to obtaining a Peer Review of the report by a consultant accredited with the Ecological Consultants of NSW as a means of progressing this matter.</p>

Table 1: Summary response to updated Ecological Assessment & Environmental Offsets Strategy (KSR 8)

Issue	Comment in previous Adequacy Test	Considered adequacy of response	Additional Comments
	<p>A majority of the Wilton Junction proposed land is cleared agricultural land that includes native pastures and some pasture improvement areas. This may result in a larger area to be considered for conservation purposes than is currently proposed as the definition of what constitutes an EEC under both the TSC and EPBC Acts includes relevant native pastures.</p> <p>Grasslands should also be assessed in accordance with OEH Guidelines.</p>	<p><u>Not adequate</u></p> <p>The Strategy is not considered to have adequately mapped those areas of the project site containing native grasses or adequately identified the conservation significance of these areas</p>	<p>The proponent be requested to accurately map the boundary of the areas of the site that would satisfy definitions of derived native grassland under the Scientific Determinations for both SSTF and CPW.</p> <p>The proponent be requested to provide demonstration that areas of native grasses have been considered during the determination of biodiversity offsets.</p>
Issues associated with vegetation clearance in general	<p>There are inconsistencies between 2 relevant reports with disparities between the total hectares retained, and the true percentage, which will be conserved. The Ecological Report suggests that 640ha of bushland will be retained while the flora and fauna reports suggests that 620ha will be retained.</p> <p>As the definition of EEC is fundamental to the clearing proposed and the offset policy there is concern over the adequacy of protection and retention of appropriate areas to ensure that biodiversity outcomes are met.</p>	<p><u>Adequate</u></p> <p><u>Not adequate</u></p>	<p>The proponent be requested to amend the Strategy to include:</p> <ul style="list-style-type: none"> A map that clearly depicts the areas and types of vegetation to be removed for these purposes as well as a precise description regarding these matters. A recalculation of the offsets necessary to comply with the Biodiversity Certification Assessment Methodology Process. This calculation must take into account the existence of EEC's on the site as well as areas of native grasses that satisfy definitions within the Scientific Determinations for SSTF or CPW.

Table 1: Summary response to updated Ecological Assessment & Environmental Offsets Strategy (KSR 8)

Issue	Comment in previous Adequacy Test	Considered adequacy of response	Additional Comments
Issues associated with vegetation clearance for bushfire management purposes	The bushfire constraint to the site has been inadequately represented due to the definition of Endangered Ecological Communities used by the assessment/strategy.	<u>Not adequate</u> The assessment/strategy has not adequately described or mapped vegetation clearance intended to occur for bushfire protection purposes.	The recommended response is incorporated into the above recommendations regarding vegetation clearance in general. That consideration be given to the potential implications of the RFS's 10/50 Vegetation Clearing Code of Practice to the rezoning proposal. Nb: This Code commenced subsequent to the issuing of the previous comments.
Adequacy of surveys and habitat assessment	<p>Targeted threatened species surveys have been carried out but very few were found in comparison to other reports commissioned in adjoining areas. Further targeted work should be sought prior to any approvals.</p> <p>The Cumberland Plain Recovery Plan applies to the subject site. The Plan and its actions have not been addressed by the Strategy.</p> <p>The report is inadequate in its assessment of SEPP 44 and does not meet the BCAM suggested assessment methodology.</p>	<p><u>Partially adequate</u> The Ecology Strategy has partially adequately responded to requests by Council for greater habitat assessment as well as additional flora and fauna surveys. However, the Strategy has not adequately responded to deficiencies in regard to inconsistencies with applicable OEH Guidelines and Study Requirements.</p>	<p>The proponent be requested to:</p> <ul style="list-style-type: none"> Carry out discussions with the OEH to determine the appropriate Survey and Assessment Guidelines to be adopted. Carry out additional targeted surveys within the areas to be retained of high conservation significance. Amend the Ecological Strategy to incorporate the outcomes of flora and fauna surveys presented in Appendix D and E of the document respectively.

Table 1: Summary response to updated Ecological Assessment & Environmental Offsets Strategy (KSR 8)

Issue	Comment in previous Adequacy Test	Considered adequacy of response	Additional Comments
Adequacy of potential impacts	The definition of offsetting requires mitigation as the first principal- followed by transparent losses and gains. The flora and fauna report fails to be transparent by not addressing the impacts to the site.	<u>Partially adequate</u> The Strategy has been amended in relation to this matter. However, it has not adequately assessed potential impacts associated with the rezoning proposal in accordance with OEH Guidelines.	<p>The proponent be requested to amend the Strategy to</p> <ul style="list-style-type: none"> • Provide further justification that the development will not have a significant impact on threatened species and ecological communities. • Include an overview of all potential direct and indirect impacts associated with the development including impacts directly attributable to vegetation removal activities to a sufficient level to adequately inform the SEPP and future development applications.
Adequacy of the Offsetting Strategy	The offset land and management is proposed via an environmental trust operating to undertake vegetation management and bushfire risk. This proposal needs further detailed consideration before its adequacy regarding long term biodiversity conservation and asset protection from bushfire risk can be determined.	<u>Not adequate</u> The Offset Strategy has not been amended to provide the additional requested considerations for its adequacy to be determined.	Modification of the layout of the rezoning proposal may be required to allow for the provision of suitable biodiversity offsets.

Table 2 Summary Response to Remaining Wilton Junction Studies

Study & Relevant DGR Key Study Requirements ('KSR')	Adequacy Comments	Other Comments
Air Quality KSR 9, points 3 & 4	Considered adequate	
Bushfire (KSR 3)	Considered adequate	
Community Engagement Outcomes KSR Consultation Requirements	Considered adequate	
Contamination KSR 14	Considered adequate	
ESD KSR 5	Considered Adequate	
Economic Development & Employment KSR 4	Considered Adequate	
Employment Projections & Land Need KSR 4	Considered Adequate	
Gas Pipeline KSR 18, point 6	Considered Adequate	
Geotechnical Assessment KSR 7	Considered Adequate	
Heritage Report KSR 11	Considered Adequate	
Housing Population Projections KSR 3, points 1 & 2	Considered Adequate	

Table 2 Summary Response to Remaining Wilton Junction Studies

Study & Relevant DGR Key Study Requirements ('KSR')	Adequacy Comments	Other Comments
Integrated Water Cycle Management KSR 9, points 1 & 2	It is noted the Department of Planning and Environment expressed the view that the issues raised in <i>Council's submission required further consideration and response by the proponent during the merit assessment stage.</i>	<p>It is considered imperative that the proposal should be designed with a primary aim, (from an environmental perspective), to have neutral or negligible impacts on the condition of downstream waterways including in-stream and riparian ecosystems. The Strategy however is viewed as having a heavy engineering focus with the assessment of potential environmental impacts and description of mitigation measures for these impacts largely absent.</p> <ul style="list-style-type: none"> • It is recommended that the Strategy list specific objectives for the protection of water sources from potential impacts associated with the rezoning proposal as well as intended measures to monitor the achievement of these objectives. • It is recommended that a Stormwater Management Plan (or equivalent) be produced that provides an overall framework for the management of stormwater flow from diffuse and point sources on the Development site. It is preferable that this Plan (or equivalent) be in the form of an addendum to the finalised SEPP. • It is recommended that an appropriate water quality monitoring program be developed in accordance with applicable State, Commonwealth and International Guidelines and incorporate aspects of the program into the Water Cycle Strategy prior to its finalisation.

Table 2 Summary Response to Remaining Wilton Junction Studies

Study & Relevant DGR Key Study Requirements ('KSR')	Adequacy Comments	Other Comments
Integrated Water Cycle Management KSR 9, points 1 & 2 Contd.		<p>It is recommended that the following clarified with the NoW and make any adjustments:</p> <ul style="list-style-type: none"> • The interpretation of definitions of 'watercourses' and "rivers" in the <i>Water Management Act 2000</i> by the Water Strategy Report. • The need for an application for a Controlled Activity Approval and its requirements for any required application. <p>As a result it is recommended that, a meeting be organised with the Department of Planning and Environment, the Office of Water and representatives of Council's Environmental Services and Planning Infrastructure.</p>
Mining Communications Strategy KSR 6, point 4	Considered Adequate	
Mining Subsidence Report KSR 6, points 2 & 3	Considered Adequate	
Noise Impact Assessment KSR 15	Considered Adequate	
S94 Valuations KSR 19	Considered Adequate	

Table 2 Summary Response to Remaining Wilton Junction Studies

Study & Relevant DGR Key Study Requirements ('KSR')	Adequacy Comments	Other Comments
TMAP	The TMAP appears to provide a comprehensive response to the requirements and generally appears to meet the adequacy requirements.	<p>It includes the modelling of 2 scenarios for free flow of freight with no at grade intersections east of the interchange, and the alternate use of at grade intersections, and includes an economic analysis to compare the 2 intersection options on freight activity. The outcome of the analysis indicates a positive BCR for the free flow of freight option, notwithstanding the additional \$7m cost of the additional bridge link at Pembroke Rd.</p> <p>The following issues also need to be considered:</p> <ul style="list-style-type: none"> The apportionment of costs probably does not meet the "no cost to government criteria" as there is still significant expenditure required by State Government on infrastructure items that are currently at or nearing capacity, such as the interchange and widening of Picton Road – indicated timing is 2015 for the interchange and widen Picton Road (between the interchange and Pembroke Rd) by 2021. The interim intersection upgrades at Pembroke with traffic signals and Almond St as a seagull treatment (as mentioned in the Executive summary, but in the body of the report refers to traffic signals), with ultimate replacement at Almond Street with a bridge and left in / left out. The issue of which option is the preferred short term upgrade for Almond St needs to be clarified. Note that the Pembroke Road intersection requires upgrade by 2015, and Almond St by 2016 in the TMAP without Wilton Junction. The preferred Pembroke Road upgrade does not accord with RMS's requirements for free flow of freight.

Table 2 Summary Response to Remaining Wilton Junction Studies

Study & Relevant DGR Key Study Requirements ("KSR")	Adequacy Comments	Other Comments
TMAP Contd.		<ul style="list-style-type: none"> Broughton Pass is identified as needing an upgrade by about 2031 by widening the existing bridge, to cater for existing traffic growth (no Wilton Junction) and by 2024 with Wilton Junction. Note there needs to be a larger discussion with regard to a high level bridge if Appin goes ahead - public transport services also cannot use this route if identified as needed, there is also a question as to improving freight access generally by allowing access via Wilton Road, as well as providing an emergency access route when either Appin Rd or Picton Rd are closed due to crashes. Wilton Junction increases traffic flows by about 240%, but off a low base. Public transport relies on a gradual increase in bus services, from local services to Picton up to 2018, then to Campbelltown / Macarthur, and with services to Wollongong as well, depending on growth and desire patterns. Park and ride capacity is to be provided at Wilton Junction, however existing data presented in the TMAP indicates that only about 20% of rail trips would be taken up by bus to rail, while 62% would be car driver to rail, so it is expected that there will be significant demand for commuter parking at Campbelltown/Macarthur, which is not proposed to be funded from Wilton Junction. The TMAP proposes centralised shared parking on a precinct basis rather than by a property by property basis, which appears logical, but it will need close control to ensure that overall parking provision is not compromised where several peak demands overlap. It is proposed to overprovide in the early phases of development to attract early success for the development.
Visual Impact Analysis KSR 7, point 2	Considered Adequate	
Waste Management KSR 5	Considered Adequate	

Table 2 Summary Response to Remaining Wilton Junction Studies

Study & Relevant DGR Key Study Requirements ('KSR')	Adequacy Comments	Other Comments
Wastewater Strategy KSR 18, point 3, sub-point 6	Considered Adequate	
Water Strategy KSR 18, point 3, sub-point 6	Considered Adequate	
Gas Drainage Considerations KSR 6, point 5	Considered Adequate	
Social Infrastructure KSR 3, points 3 & 4 KSR 17, points 1 & 2	A health impact assessment has not been provided by the proponents on the basis that Council is undertaking this. Council is not undertaking a full HIA for public exhibition purposes as part of the Draft SEPP. Otherwise considered adequate.	<ul style="list-style-type: none"> P. 23 Revised Study reinforces/endorse trends towards more flexible, multi-purpose and co-located facilities for Wilton Junction. This is reflected in the revised community centre provision – where greater emphasis has been placed on district level Community Hub, rather than a series of smaller local level community centres. It will be crucial to ensure adequate physical and social 'connectivity' between the 4 development fronts so that all residents have equal access to the centralised venue. P.24 Concerns over model of provision (country club style) have been acknowledged in the revised report. The consultants acknowledge that there needs to be consideration of the ultimate owner (eg Council) of such facilities and requirements for whole of community access/ongoing operational costs. P.20 Revised study states that discussions have taken place with regard to reducing overall land parcel for Public K-12 school (through shared playing fields model). It is acknowledged that further discussion is required on this issue. It would be good to develop an MOU with DEC on this matter. P. 37 Revised report reiterates that childcare at Wilton Junction is likely to be provided by the private sector. Report mentions the co-location of childcare and schools as an 'opportunity'. Suggested that co-ordination of Family Day Care could be included in the proposed district community centre.

Table 2 Summary Response to Remaining Wilton Junction Studies

Study & Relevant DGR Key Study Requirements ('KSR')	Adequacy Comments	Other Comments
<p>Social Infrastructure KSR 3, points 3 & 4 KSR 17, points 1 & 2 Contd.</p>		<ul style="list-style-type: none"> • P. 39 Acknowledgement that effectiveness of hard infrastructure relies on resourcing of 'soft' infrastructure to support it. Discussion around negotiation that will be required (using VPA instrument) to ensure this 'activation' is achievable as not covered by S94. Mentions the renegotiation of Bingara Gorge VPA is currently happening – opportunity to revisit in light of what recommended in this report. • p. 47 Revised report states that DEC have confirmed they intend to expand on existing Picton High School site prior to beginning construction of new K-12 school at Wilton. Report states that further discussions are required with DEC regarding the timing and staging of schools. • p. 42 Revised report has responded to concerns raised by stating that services could be delivered out of commercial/community space until threshold is reached. • P. 43 Revised study states that Council and the Local Health district have conducted a Health Impact Assessment of Wilton Junction. • Concerned about a reliance on this as the HIA was only for the proposal – not appropriate for Council (I understood that the proponents were conducting their own study?). • P. 48 Revised study states that the staging of community centres (in terms of early provision) is reliant on individual developers views. Concern that reliance on 'good will' could be problematic. The WJ master plan lists as one of its 'Principles for a New Town' "early provision of community services and facilities".

APPENDIX C

QUESTION TWO ON NOTICE



Figure 7.2. Riparian mapping and vegetation within the Study Area

500 0 500 1000 1500 2000 m

Biodiversity Outcomes

8.1 Biodiversity Outcomes

8.1.1 *Assumptions and General Observations*

The fundamental approach which has been adopted for the Proposal is one of generating a balanced outcome – involving appropriate and environmentally sustainable urban development as well as innovative and substantial biodiversity conservation outcomes.

This assessment of the Proposal, with respect to the imposition of adverse impacts upon the natural environment and/or threatened biota or their habitats, addresses:

- The acceptability (or otherwise) of the impacts to be imposed - rather than a requirement to avoid all impacts in their entirety;
- The likely significance of impacts upon threatened biota;
- The measures proposed to avoid impacts – to the extent that such avoidance is achievable;
- The efficacy of impact amelioration and environmental management measures, and the value of the proposed environmental offsets; and
- Assessment of the ability of the project to achieve an appropriate balance between development opportunities and biodiversity conservation outcomes.

It is acknowledged that the Proposal will inevitably have some impact on elements of the natural environment - as a result either of the clearing of some areas of open forest and woodland or as a consequence of indirect impacts in the future. There is also some potential for adverse impacts to be imposed upon some threatened biota or their habitats.

However, those impacts will be limited in extent and intensity, as a consequence of:

- The distribution of threatened biota and their habitats within the Study Area, and in the vicinity and general locality;
- The retention of substantial vegetation in the Conservation Area (see Figure 8.1); and

- The implementation of management actions within the Conservation Area.

In considering the likely or potential impacts of the Proposal on the natural environment, it is also necessary, and appropriate, to address the beneficial impacts which the Proposal will provide. Matters of relevance in this regard include:

- The identification of approximately 633.9 ha of vegetated land within the Conservation Area (Figure 8.1) – in addition to the 120 ha already dedicated by the Bingara Gorge project;
- The intent to dedicate approximately 617.7 ha hectares of open forest and woodland and 16.1 ha of derived native grassland/exotic for biodiversity conservation purposes; and
- The implementation of an array of habitat creation and habitat enhancement activities – as discussed in Section 7.4.

At the time of writing, a number of mechanisms are being considered to permanently secure the Conservation Area for the purpose of conservation and management. The final outcome will be determined post rezoning and will depend on consultation with relevant government agencies.

8.1.2 *Vegetation and Habitat Retention, Enhancement and Maintenance*

In addition to considering the potential or likely adverse impacts on the natural environment, and upon threatened biota and their habitats, it is also both relevant and appropriate to consider the potential or likely beneficial impacts which might arise from a development project.

In determining the appropriate balance between development opportunities and environmental outcomes with respect to the Project, it is pertinent to consider the significant environmental benefits that will result from the Project, as documented in this EIAR. These nett environmental benefits deserve as much consideration as the potential or likely adverse environmental impacts which will arise as a result of the Proposal.

There are a number of actions and activities which are integral elements of the Project, including:

- The removal of grazing, and other agricultural pursuits, from the Study Area. This is particularly of relevance to peripheral vegetation and areas of 'Thinned or Disturbed' vegetation - which will be retained within the Conservation Area, and significantly enhanced, as well as maintained (at no cost to state or local government) in perpetuity;
- The cessation of timber harvesting for agricultural purposes from areas of retained open forest and woodland vegetation around the periphery of the Study Area;
- The 'dedication' of a very substantial area of vegetated land (633.9 ha) within the Conservation Area for biodiversity conservation purposes.

- An option for the establishment of an Environmental Trust and the creation of an Environmental Trust Fund for the management in perpetuity of lands dedicated for biodiversity conservation purposes - at no cost to the public purse or government. This option may also include the consideration of payment of the Significant Infrastructure Contribution to ensure a management body and funds for the environmental lands;
- The dedication of funds and resources to the maintenance, rehabilitation, enhancement, and active management of the Conservation Area; Management could include:
 - The establishment and promotion of a variety of local community education and environmental management programs;
 - The implementation of an intensive weed removal and feral pest eradication program; and
 - The implementation of an active management regime for tree-hollows.

Table 8.1 details the extent of vegetation retention within the Conservation Area. The vegetation within the Conservation Area is predominantly comprised of intact vegetation, however, opportunities exist for the improvement of this vegetation.

Table 8.1 Vegetation impact and retention summary

Vegetation Community	Variant	Study Area			Development Footprint			Conservation Area					
		Intact (ha)	Fragmented (ha)	Total (ha)	Intact (ha)	Fragmented (ha)	Total (ha)	Intact (%)	Fragmented (%)	Total (ha)			
Cumberland Shale Plains Woodland (CSPW)	N/A	142.9	58.0	200.9	74.9	56.3	131.2	68.0	47.6	1.6	2.8	69.7	35
	Low sandstone influence, ironbark variant	307.5	10.5	318.0	80.1	10.5	90.6	227.4	73.9	0.0	0.0	227.4	72
	High sandstone influence, Grey Gum and apple variant	134.8	1.3	136.0	12.4	1.3	13.7	122.3	90.8	0.0	0.0	122.3	90
Cumberland Shale Sandstone Transition Forest (CSSTF)	Low sandstone influence, Woollybutt and stringybark	10.5	0.0	10.5	0.0	0.0	0.0	10.5	100.0	0.0	0.0	10.5	100
	High sandstone influence, Grey Gum and stringybark	19.3	0.0	19.3	1.3	0.0	1.3	17.9	93.1	0.0	0.0	17.9	93
		12.9	0.0	12.9	0.0	0.0	0.0	12.9	100.0	0.0	0.0	12.9	100
Burratorang-Nepean Hinterland Woodland (BNHW)	N/A												
Hinterland Sandstone Gully Forest (HSGF)	N/A	127.3	0.0	127.3	1.4	0.0	1.4	126.0	98.9	0.0	0.0	126.0	99
Sydney Hinterland Transition Woodland (SHTW)	N/A	36.7	0.0	36.7	5.7	0.0	5.7	31.0	84.4	0.0	0.0	31.0	84
Derived Native Grassland/ Exotic	N/A	N/A	N/A	1205.5	N/A	N/A	1189.2	N/A	N/A	N/A	N/A	16.1	1
Total		792.0	69.7	2067.2	175.9	68.1	1433.1	616.1	77.8	1.6	0.0	633.9	31

* In some cases totals may not equal the appropriate total number due to rounding



Legend

Study Area

Vegetation Community

- | | | | |
|--|--|--|--|
| | Cumberland Shale Sandstone Transition Forest (Low Sandstone influence, Ironbark Variant) | | Hinterland Sandstone Gully Forest |
| | Cumberland Shale Sandstone Transition Forest (High Sandstone influence, Grey Gum and Apple Variant) | | Burragorang-Nepean Hinterland Woodland |
| | Cumberland Shale Sandstone Transition Forest (High Sandstone influence, Grey Gum and Stringybark variant) | | Cumberland Shale Plains Woodland |
| | Cumberland Shale Sandstone Transition Forest (Low Sandstone influence, Woollybutt and Stringybark variant) | | Sydney Hinterland Transition Woodland |

Image Source:
Image © 2016 DigitalGlobe
(dated 16-10-2015)

Data Source:
SLR Consulting Australia, 2013

cumberland
ecology

Figure 8.1. Forest and woodland to be retained within the Study Area

500 0 500 1000 1500 2000 m

Chapter 9

Koalas and Koala Habitat

9.1 State Environmental Planning Policy No. 44

9.1.1 Application of SEPP 44

State Environmental Planning Policy No. 44 - Koala Habitat Protection (SEPP 44) aims to protect the Koala and its habitat by identifying matters for consent authorities to consider during the assessment of relevant development applications or proposals. In particular, SEPP 44 contains definitions of "potential koala habitat" and "core koala habitat" to be applied in the consideration of developments within those LGAs listed in Schedule 1 of SEPP 44.

The Wollondilly LGA is listed in Schedule 1 of SEPP 44 as an area to which the policy applies, and the Study Area is greater than 1 ha in area.

9.1.2 Potential Koala Habitat

SEPP 44 defines "potential koala habitat", as native vegetation in which the trees of types listed in Schedule 2 of the SEPP "constitute at least 15% of the total number of trees in the upper or lower strata of the tree component".

A number of forest and woodland types in the Study Area are potential koala habitat, as explained below.

Schedule 2 of SEPP 44 lists ten species of trees that are recognised in the SEPP as food trees utilised by the Koala. Those tree species are forest red gum (*Eucalyptus tereticornis*), tallowwood (*E. microcorys*), grey gum (*E. punctata*), ribbon or manna gum (*E. viminalis*), river red gum (*E. signata*), white box (*E. albens*), bumble box or poplar box (*E. populnea*) and swampy mahogany (*E. robusta*).

Only 2 of 16 *Eucalyptus* species found across the Study Area are listed as koala feed trees in the SEPP 44. These are *Eucalyptus punctata* and *Eucalyptus tereticornis*.

Eucalyptus punctata was recorded in 66 (34%) quadrats surveyed across the Study Area. It was found to be a dominant tree species within the following plant communities:

- Cumberland Shale Sandstone Transition Forest – Grey Gum and Apple Variant (high sandstone influence);

- Cumberland Shale Sandstone Transition Forest – Grey Gum and Stringybark Variant and
- Hinterland Sandstone Gully Forest.

Eucalyptus punctata is a co-dominant species in Cumberland Shale Sandstone Transition Forest – Ironbark Variant. It was also a frequent tree in Sydney Hinterland Transition Woodland and an occasional tree in Burratorang-Nepean Hinterland Woodland.

Eucalyptus tereticornis was recorded in 46 (24%) quadrats of CSPW (39 quadrats), CSPW DNG (six quadrats) and one quadrat of CSSTF – Ironbark Variant. It is a co-dominant tree species in Cumberland Shale Plains Woodland and an occasional species in Cumberland Shale Sandstone Transition Forest – Ironbark Variant. The percentage cover of *E. tereticornis* trees (i.e. upper strata) was equal or greater than 15% (C score) in six quadrats of CSPW, whereas its cover as small trees (i.e. lower strata) with cover equal or greater than 15% was found in two CSPW quadrats.

9.1.3 Core Koala Habitat

SEPP 44 defines "core koala habitat", as "an area of land with a resident population of koalas, evidenced by attributes such as breeding females (that is, females with young) and recent sightings of and historical records of a population".

Although Koalas have been found in the locality, and although potential Koala habitat occurs on site, no Koalas were found during targeted surveys of the area and there is no evidence of a resident population in any of the vegetation of the Study Area.

A search undertaken in the OEH Wildlife Atlas indicated that a total of three records of koala are registered between 1999 and 2003 within the Study Area and 23 koala records between 1980 and 2015 exist in land surrounding the Study Area (**Figure 9.1**). It is understood that koalas were not observed by SLR Consulting in the Study Area.

The OEH Wildlife Atlas search results do not include information on breeding females being part of the records. It is unknown if a resident population is present within the Study or Study Area.

9.1.4 Recovery Plan for the Koala

The DECC approved the "Recovery Plan for the Koala (*Phascolarctos cinereus*)" (RPK) in November 2008 (DECC 2008). The RPK adopted the objectives of the National Koala Conservation Strategy (NKCS) (ANZECC 1998).

The Recovery Plan for the Koala (RPK) recognizes that the definition of koala habitat in relation to a list of ten feed tree species for the koala in Schedule 2 of the SEPP 44 is not adequate to identify all habitat of importance to koalas because there is a considerably greater variety of food tree species used by koalas across the state. Consequently, habitat of importance to koalas will not always be identified and adequate protection and management of koala habitat does not always occur.

The RPK indicates that throughout NSW, koalas have been observed to use 66 eucalypt species (Phillips 2000b in DECC 2008). However, in any one area, koalas feed almost exclusively on a small number of preferred species which vary widely on a regional, local and possibly seasonal basis (Hindell and Lee 1990 in DECC 2008).

The RPK proposed regional tree species lists be aligned to regions managed by Catchment Management Authorities (CMA). The Study Area is located within the RPK's proposed Hawkesbury-Nepean and Sydney Metro Koala Management Area (KMA), corresponding to Phillips (2000b) Central Coast/Sydney Basin KMA, where most primary koala habitat has been cleared. The remaining peri-urban populations are small, highly fragmented and disjunct, occupying areas of secondary (Class B) habitat. Most populations are within or on the edge of urban areas and threats are very high.

From the RPK (DECC 2008 and Phillips 2000b therein), a description of a three tier of koala food tree is as follows:

- Primary food trees exhibit a level of use that is significantly higher than that of other *Eucalyptus* spp. While also demonstrating a mode of utilisation by koalas that is independent of density.
- Secondary food trees invariably exhibit (on average) a significantly lower level of use than a primary food tree while also demonstrating evidence of more complex variables associated with their use, generally by being both density and/or size class dependent.
- Supplementary food trees exhibit a level of utilisation that is also size class/density dependent, but the level of utilisation of supplementary food trees are generally lower than that of a secondary food tree species, and possibly dependent upon the presence of the latter in the first instance. Interestingly, supplementary food tree species invariably tend to be stringybarks but with significant variation in the use of some species across their range.

The RPK indicates that work done at the time the RPK was prepared was showing that koalas are concentrated on flat, fertile, low-elevation soils and are not widely found in public forests, particularly national parks. Those findings have the implication that although pockets of koalas are conserved in parks and reserves, the bulk of the population resides outside these parks, reserves and state forests. Therefore the management of koalas needs to be focused off-park and land acquisition will not address the central issue of declining populations unless it concentrates on the fertile soils on flat land.

Regionally, Madani (2008) recorded *Eucalyptus punctata* as a primary feed tree for koala in the Upper Wingecarribee Shire area (located to the south-west from the Study Area) and indicates that Sluiter et. al. (2002 in DECC 2008) report *E. punctata* as a preferred feed species in the Campbelltown population (located to the north-east from Wollondilly council area).

9.1.5 Conclusions

Based on the information currently available, it is recognised that some areas within the Study Area represent 'potential koala habitat'. However, although Koalas have been found in the locality, and although potential Koala habitat occurs on site, no Koalas were found during targeted surveys of the area and there is no evidence of a resident population in any of the vegetation of the Study Area.

9.2 Koala Habitat Linkage

9.2.1 Background

The Office of Environment & Heritage (OEH) has undertaken investigations of the Koala population in southern Sydney, as part of a suite of investigations within this part of the Sydney Basin region (DECC 2007a, b). This project mapped Koala "habitat linkage" (Koala habitat corridors) and the mapping indicates that parts of the Study Area are considered to be Koala Habitat Linkage (Figure 10).

The study included the Southern Blue Mountains to Woronora Regional Pathway, which is believed to be an important habitat link between the two major sandstone plateaus of the Greater Southern Sydney Region. DECC (2007a) indicated that any species intolerant of large expanses of clearing must use this pathway to move between these two key landscapes. There are two separate fauna linkages within this Regional Pathway, the Cumberland Koala Linkage and the Bargo Linkage. The Bargo Linkage includes the sandstone vegetation that links the sandstone plateaux of the Woronora with that of the southern Blue Mountains. The Cumberland Koala Linkage includes remnants of linked or closely-spaced vegetation around the rim of the Cumberland Plain.

As noted in **Section 9.1.3**, a search in the OEH Atlas of NSW Wildlife indicated that there are few historical records of koala within the Study Area and approximately 23 records in land surrounding the Study Area (**Figure 9.1**).

There are known Koala populations located in the Sydney Water Catchment lands (to the south and southeast of the Study Area) and at Wedderburn (10km to the north of Wilton Junction, south of Campbelltown). Given the location of those two populations, it is possible that individual Koalas from either population could traverse or occur on the Wilton Junction New Town lands, notwithstanding the difficult terrain (with steep gorges) which surrounds the Wilton Junction New Town project site.

No evidence of Koalas (obvious scratches on trees or scats) was recorded during the SLR Consulting surveys in the first half of 2013, although it is acknowledged that occasional individual Koalas could (theoretically at least) occur on or traverse the Study Area on occasions. It is acknowledged that occasional individuals have previously been recorded in the Study Area and nearby (**Figure 9.1**) and that the possibility of future sightings cannot be precluded because portions of the Study Area as shown in **Figure 9.1** are located within the Cumberland Koala Linkage. It is not considered, however, that isolated sightings of koalas constitute a 'local population' of the Koala.

Based on DECC's (2007a and 2007b) mapping of the Cumberland Koala Linkage it is acknowledged that forests and woodland on the Study Area contain potential Koala Habitat and form a potential habitat and/or a potential movement corridor for Koalas through the locality (Figure 9.1).

It is noted that the proposed conservation areas of the Study Area are consistent with mapping of the Cumberland Koala Linkage. This is an indication of the congruence of government studies results (DECC 2007a, b) and survey results part of the present EIAR. .

9.2.2 Impacts of the Proposal on Koala Habitat Linkage

The table below provides an estimate of the total area of land mapped as Koala Habitat Linkage. It also provides an estimate of the areas that would be cleared, and the areas that would be conserved, if the land is rezoned.

The majority of Koala Habitat Linkage (65%) would be conserved within the proposed conservation area, including broad areas of forest and woodland where *Eucalyptus punctata* is a dominant tree species.

Table 9.1 Koala linkage within the Study Area

Description	Total	Development Footprint	Conservation Area
Land mapped by OEH as Koala Linkage	851.8	242.8	509.5



Figure 9.1. OEH Koala Habitat Linkage mapping around the Study Area

Priority Conservation Lands

10.1 Cumberland Plain Recovery Plan

The then Department of Environment, Climate Change and Water (DECCW) prepared the *Cumberland Plain Recovery Plan* in January 2011. The recovery plan identifies an array of Priority Conservation Lands (PCLs) – which *"represent the best remaining opportunities in the region to maximise long-term biodiversity benefits for the lowest possible cost, including the least likelihood of restricting land supply"*. The recovery plan also notes that the PCLs constitute *"the highest priority for future efforts to conserve the threatened biodiversity of the region"*.

The *Cumberland Plain Recovery Plan* also states that *"remaining native vegetation"* on the Cumberland Plain *"is highly fragmented and occurs largely on private land"*. Thus, the achievement of biodiversity conservation outcomes for threatened flora and fauna typical of the Cumberland Plain will require the involvement of private landowners. That is the approach which has been adopted by the proponents for the Proposal.

The *Cumberland Plain Recovery Plan* notes that *"active management to best practice standards is needed to prevent the degradation of the remaining bushland in such a fragmented landscape"*. The Proposal includes both the retention of substantial areas of lands in the Conservation Area, and the long-term management and enhancement of native vegetation within this area. This proposed approach, which would use private funding, will achieve the goals aspired in the recovery plan at no cost to government or the public purse.

10.2 Priority Conservation Lands at Wilton Junction

Some portions of some of the vegetated lands around the periphery of the Study Area have been identified by the OEH as PCLs. The location of PCLs in relation to the Study Area is shown in **Figure 10.1**. The total area of PCLs identified in the Study Area is 512.2 ha, of which 395 ha is open forest and woodland. The balance (approximately 117ha – or 23%) consists of grasslands and existing development and/or infrastructure.

The mapping of the PCLs around and within the Study Area appears to have been undertaken at a relatively broad scale, as there are notable areas of open pasture grassland in the southern parts of the Study Area which have been identified as PCLs, but which have long been cleared and pasture-improved for grazing purposes.

On the basis of the OEH identification of some of the Study Area as PCLs, there are other areas of vegetation within the Study Area which would also *prima facie* qualify as PCLs. For example, contiguous areas of the same vegetation types upstream along the Nepean River (i.e. along the northern, north-western and south-western periphery of the Study Area) could also have been included as PCLs – given that they are:

- Contiguous with the OEH-mapped PCLs; and
- Of identical vegetation types as the OEH-mapped PCLs.

Given their identification by the OEH as PCLs, some of these portions of vegetation within the Study Area would be appropriate for use as offsets for the removal of vegetation within the Development Footprint.

A significant proportion of the PCLs identified by the OEH within the Study Area are to be retained within the Conservation Area. Furthermore, a significant additional area of similar or identical vegetation around the Study Area, not identified as PCLs by the OEH, is also proposed to be retained and managed for biodiversity conservation purposes within the Conservation Area.

Table 10.1 outlines the extent of PCLs within the Study Area.

Table 10.1 Extent of PCLs within the Study Area

Description	Development Footprint	Conservation Area	Total
Derived Native Grassland/ Exotic	69.30	5.7	75.0
Forest and woodland in PCLs	61.56	354.7	416.2
Total Land mapped by OEH as PCLs	132.90	369.6	502.5

The Project will retain most of the areas of open forest and woodland vegetation which had been identified as PCLs by the OEH, as well as substantial additional areas of native open forest and woodland which were not so identified.



Legend

-  Study Area
-  Cumberland Priority Conservation Lands
-  Conservation Area

Image Source:
Image © 2016 Google
Image © 2016 Aerometrex
Image © 2016 DigitalGlobe
(dated 20-07-2015)

Data Source:
NSW DECCW (2011), Cumberland
Plain Priority Conservation Lands

cumberland
ecology

Figure 10.1. Cumberland PCLs around the Study Area

500 0 500 1000 1500 2000 m

Chapter **11**

Matter of National Environmental Significance (MNES)

11.1 Introduction

The EPBC Act requires consideration of the potential for a significant impact to be imposed by an activity on a listed Matter of National Environmental Significance (MNES). In the event that such a impact is likely to be imposed, the activity proposed must be referred to the Commonwealth for determination as to whether the activity constitutes a 'Controlled Action'. Where a development activity does constitute a Controlled Action, an approval from the Commonwealth Minister of the Environment is required.

The MNES listed in the EPBC Act include:

- World heritage properties
- National heritage places
- Wetlands of international importance (often called 'Ramsar' wetlands after the international treaty under which such wetlands are listed)
- Nationally threatened species and ecological communities
- Migratory species
- Commonwealth marine areas
- The Great Barrier Reef Marine Park
- Nuclear actions (including uranium mining)
- A water resource, in relation to coal seam gas development and large coal mining development.

11.2 Relevant MNES

The following MNES have been recorded within the Study Area during surveys by SLR Consulting and Cumberland Ecology:

- Ecological communities:
 - Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest;
 - Shale Sandstone Transition Forest of the Sydney Basin Bioregion;
- Flora species:
 - Bargo Geebung (*Persoonia bargoensis*);
 - Brown Pomaderris (*Pomaderris brunnea*);
- Fauna species:
 - Large-eared Pied Bat (*Chalinolobus dwyeri*)
- Migratory species:
 - Rainbow Bee-eater (*Merops ornatus*);
 - Satin Flycatcher (*Myiagra cyanoleuca*); and
 - Black-faced Monarch (*Monarcha melanopsis*);

The OEH Atlas of NSW Wildlife also holds records for the Koala (*Phascolarctos cinereus*) within the Study Area. A detailed assessment of impacts to MNES known to occur within the Study Area is provided in **Section 10.3**.

11.3 Assessment Criteria for the MNES

The DoE has provided a set of guidelines for determining whether there is likely to be a significant impact upon any MNES (*Significant Impact Guidelines 1.1* (DoE, 2013)). The *Significant Impact Guidelines* provide a set of criteria to determine whether a significant impact is likely to be imposed upon any relevant MNES – including specific criteria for:

- Critically endangered and endangered species;
- Vulnerable species;
- Critically endangered and endangered ecological communities; and
- Listed migratory species.

The relevant criteria area addressed for the known and potentially occurring MNES below.

11.3.1 Ecological Communities

Table 11.1 assesses the significance of impacts to the following ecological communities:

- Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest; and
- Shale Sandstone Transition Forest of the Sydney Basin Bioregion.

This assessment indicates that the Proposal has the potential to significantly impact both ecological communities. As such, the requirement for the preparation of a referral is triggered and DoE would need to determine whether the Proposal is deemed a Controlled Action.

Table 11.1 Significant impact assessment for ecological communities

Significant Impact Criteria	Response
Reduce the extent of an ecological community	<p>The Proposal will remove or modify 131.2 ha of Cumberland Plain Woodland within the Development Footprint.</p> <p>The Proposal will remove or modify 105.6 ha of Shale Sandstone Transition Forest within the Development Footprint.</p> <p>The extent of EPBC-listed TECs has been estimated for the purposes of preparing this report. The estimates will be revised when a referral is made as required under the EPBC Act. The areas cited in this chapter may vary depending upon modifications to the vegetation boundaries between SSTF and CPW, and based upon a more detailed analysis of which patches of CPW specifically are covered by Commonwealth definitions.</p>
Fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines	<p>The Proposal is not considered to significantly fragment these communities. The Proposal will remove and modify vegetation that is already fragmented or at the edge of cleared areas.</p>
Adversely affect habitat critical to the survival of an ecological community	<p>The occurrence of these communities within the Study Area is not considered to be critical to the survival of the communities.</p> <p>A portion of the local occurrence of these communities within the Study Area will be retained and managed within the Conservation Area.</p>
Modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of	<p>The Proposal is unlikely to reduce groundwater levels or alter surface water drainage patterns such that other occurrences of these communities outside the Development Footprint will be significantly affected.</p>

Table 11.1 Significant impact assessment for ecological communities

Significant Impact Criteria	Response
surface water drainage patterns	
Cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting	A substantial change will occur to the species composition of these communities within the Development Footprint as will be either be cleared or modified. However, there are areas of this community in the locality that go to make up the "occurrence" of these communities, and these areas will not be significantly affected by the Proposal. Accordingly, the Project is not considered likely to cause a substantial change in the species composition of an occurrence of these communities.
Cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including, but not limited to: assisting invasive species, that are harmful to the listed ecological community, to become established, or causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community	<p>It is not expected that the Proposal will result in a substantial reduction in the quality or integrity of the occurrence of the portions of this community outside of the Development Footprint.</p> <p>The condition of the vegetation within the Study Area is currently being impacted as a result of previous and current land uses. Invasive flora and fauna species are known to occur and agricultural activities are believed to have introduced fertilisers.</p>
Interfere with the recovery of an ecological community	<p>The proposed action is considered to interfere with the recovery of these communities, which has previously suffered a significant decline in extent.</p> <p>The Proposal will remove or modify 131.2 ha of Cumberland Plain Woodland within the Development Footprint.</p> <p>The Proposal will remove or modify 105.6 ha of Shale Sandstone Transition Forest within the Development Footprint.</p> <p>The areas of these communities to be cleared have been modified and continue to be impacted by previous and current land uses.</p>

11.3.2 Threatened Flora Species

Table 11.2 assesses the significance of impacts to the following threatened flora species:

- Bargo Geebung (*Persoonia bargoensis*); and
- Brown Pomaderris (*Pomaderris brunnea*).

The populations of these species occurring within the Study Area are not considered to comprise important populations.

This assessment indicates that the Proposal is not likely to have a significant impact on the threatened flora species known to occur within the Study Area. Known individuals of these species will be retained within the Conservation Area. Although some potential habitat for these species will be removed or modified within the Development Footprint, extensive areas of habitat, including known occurrences occur within the Conservation Area.

Table 11.2 Significant impact assessment for threatened flora species

Significant Impact Criteria	Response
Lead to a long-term decrease in the size of an important population of a species	As the Study Area does not support important populations of these species the Proposal is not considered to result in the long-term decrease in the size of an important population of these species.
Reduce the area of occupancy of an important population	As the Study Area does not support important populations of these species the Proposal is not considered to reduce the area of an important population of these species.
Fragment an existing important population into two or more populations	As the Study Area does not support important populations of these species the Proposal is not considered to fragment an existing important population into two or more populations.
Adversely affect habitat critical to the survival of a species	The habitat within the Development Footprint represents a small portion of the suitable habitat within the Study Area. Extensive areas of habitat, including known habitat, will be retained within the Conservation Area. For these reasons, the Proposal is not considered to adversely affect habitat critical to the survival of the species.
Disrupt the breeding cycle of an important population	As the Study Area does not support important populations of these species the Proposal is not considered to disrupt the life cycle of these species.
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	The habitat to be removed within the Development Footprint has previously been modified. These species are likely to only utilise the Development Footprint on occasion as part of a larger habitat range. Extensive areas of habitat, including known habitat, will be retained within the Conservation Area. The Proposal is not considered to result in the decrease in the availability of quality of habitat for these species to the extent that these species would decline.

Table 11.2 Significant impact assessment for threatened flora species

Significant Impact Criteria	Response
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat	The Proposal has the potential to result in the introduction of invasive plant species that may become established in the habitat for these species. However, management of the Conservation Area is proposed.
Introduce disease that may cause the species to decline, or	The Proposal is unlikely to introduce disease that may cause these species to decline.
Interfere substantially with the recovery of the species	<p>The habitat within the Development Footprint represents a small portion of the suitable habitat within the Study Area. These species are likely to only utilise the Development Footprint on occasion as part of a larger habitat range.</p> <p>Extensive areas of habitat, including known habitat, will be retained within the Conservation Area. For these reasons, the proposed action is not considered to substantially interfere with the recovery of these species.</p>

11.3.3 Threatened Fauna Species

Table 11.3 assesses the significance of impacts to the following threatened flora species:

- Large-eared Pied Bat (*Chalinolobus dwyeri*); and
- Koala (*Phascolarctos cinereus*).

This assessment indicates that the Proposal is not likely to have a significant impact on the threatened flora species known to occur within the Study Area.

Table 11.3 Significant impact assessment for threatened fauna species

Significant Impact Criteria	Response
Lead to a long-term decrease in the size of an important population of a species	As the Study Area does not support important populations of these species the Proposal is not considered to result in the long-term decrease in the size of an important population of these species.
Reduce the area of occupancy of an important population	As the Study Area does not support an important population of these species the Proposal is not considered to reduce the area of an important population of these species.
Fragment an existing important population into two	As the Study Area does not support important populations of these species the Proposal is not considered to fragment an existing

Table 11.3 Significant impact assessment for threatened fauna species

Significant Impact Criteria	Response
or more populations	important population into two or more populations.
Adversely affect habitat critical to the survival of a species	The habitat within the Development Footprint represents a small portion of the suitable habitat within the Study Area. Extensive areas of habitat, including known habitat, will be retained within the Conservation Area. For these reasons, the Proposal is not considered to adversely affect habitat critical to the survival of the species.
Disrupt the breeding cycle of an important population	As the Study Area does not support important populations of these species the Proposal is not considered to disrupt the life cycle of these species.
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	The habitat to be removed within the Development Footprint has previously been modified. Extensive areas of habitat, including known habitat, will be retained within the Conservation Area. The Proposal is not considered to result in the decrease in the availability of quality of habitat for these species to the extent that these species would decline.
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat	The Proposal has the potential to result in the introduction of invasive plant species that may become established in the habitat for these species. However, management of the Conservation Area is proposed.
Introduce disease that may cause the species to decline, or	The Proposal is unlikely to introduce disease that may cause these species to decline.
Interfere substantially with the recovery of the species	The habitat within the Development Footprint represents a small portion of the suitable habitat within the Study Area. Extensive areas of habitat, including known habitat, will be retained within the Conservation Area. For these reasons, the proposed action is not considered to substantially interfere with the recovery of these species.

11.3.4 Migratory Species

Table 11.4 assesses the significance of impacts to the following migratory species:

- Rainbow Bee-eater (*Merops ornatus*);
- Satin Flycatcher (*Myiagra cyanoleuca*); and
- Black-faced Monarch (*Monarcha melanopsis*).

This assessment indicates that the Proposal is not likely to have a significant impact on the migratory species known to occur within the Study Area.

Table 11.4 Significant impact assessment for migratory species

Significant Impact Criteria	Response
Substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat for a migratory species	The habitat proposed to be cleared or modified within the Development Footprint is not considered to be important habitat for migratory species known to occur. The habitat available does not constitute key breeding habitat for these species.
Result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species	The habitat proposed to be cleared within the Development Footprint is not considered to be important habitat for migratory species known to occur. The Proposal is unlikely to result in an invasive species becoming established.
Seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species.	The Development Footprint is not considered to support an ecologically significant portion of the populations of migratory species known to occur. As such, the proposed action is not considered to seriously disrupt the lifecycle of these migratory species.

Chapter 12

Conclusion

12.1 Overall Approach

The overall approach which has been adopted, which includes the provision of a Conservation Area to compensate for the removal of native vegetation within the Development Footprint is an holistic one.

This approach takes into account the benefits to be derived from active environmental management in this landscape, and from biodiversity conservation activities. It is noted that there is currently no requirement for or incentive to maintain or rehabilitate any vegetation in the Study Area.

The proposed Conservation Area incorporates an array of elements intended to achieve (indeed to exceed) a 'maintain or improve' biodiversity outcome over the Study Area.

Relevant elements which have been incorporated into the proposed Conservation Area for the Proposal include:

- The retention and protection of approximately 633.9 ha of vegetated land within the Conservation Area, in addition to the 120ha already provided at Bingara Gorge;
- The design, construction and operation of a stormwater management and treatment regime, and a sewage effluent management regime, which:
 - Ensures that water quality and stormwater discharges from the new town site meet or exceed current 'best practice' and/or statutory requirements;
 - Ultimately returns treated stormwater and treated effluent water to the Nepean River – to enhance 'environmental flows'; and
 - Provides habitat and resources for native biota (including threatened species) within elements of the stormwater and effluent treatment train;
- The creation of opportunities which provide for substantial community and personal experience - by the provision of dedicated and carefully located and constructed boardwalks, bicycle paths, pedestrian paths and information features – with respect to both the natural environment and aboriginal heritage items.

12.2 Vegetation of Conservation Significance

Two TECs, namely Cumberland Plain Woodland and Shale Sandstone Transition Forest have been recorded within the Study Area. The extent of these TECs within the Development Footprint is indicated in **Table 12.3**.

Table 12.1 TECs within the Development Footprint

Vegetation Community	Variant	TSC	EPBC	Intact Area (ha)	Fragmented Area (ha)	Total Area (ha)*
		Act Status	Act Status			
Cumberland Plain Woodland						
Cumberland Shale		CEEC	CEEC	74.9	56.3	131.2
Plains Woodland	Woodland form					
		Subtotal*		74.9	56.3	131.2
Shale Sandstone Transition Forest						
	Low Sandstone	CEEC	CEEC	80.1	10.5	90.6
	Influence_Ironbark Variant					
	High Sandstone Influence_Grey	CEEC	CEEC	12.4	1.3	13.7
Cumberland Shale	Gum and Apple Variant					
Sandstone Transition	High Sandstone Influence_Grey	CEEC	CEEC	0.0	0.0	0.0
Forest	Gum and Stringybark Variant					
	Low Sandstone	CEEC	CEEC	1.3	0.0	1.3
	Influence_Woollybutt and					
	Stringybark Variant					
		Subtotal*		93.9	11.7	105.6

* In some cases totals may not equal the appropriate total number due to rounding

12.3 Conservation Area

Approximately 633.9 ha of vegetated land will be retained in a substantial Conservation Area (in addition to the 120 ha already conserved at Bingara Gorge). This will include substantial areas of SSTF and CSPW as summarised in **Table S.2** and will form part of a large, well connected reserve network that will occur along the Nepean River valley and that of the Allens Creek.

The Conservation Area will conserve viable occurrences of all of the vegetation types that currently occur in the proposal area, and will conserve viable tracts of habitat for threatened species that are known or considered likely to occur.

The Conservation Area will be permanently conserved and funded under an appropriate State and Commonwealth approved mechanism. The options for mechanisms that could apply at present include various conservation trust arrangements and BioBanking. However,

in the near future, the TSC Act and Native Vegetation Conservation Act are to be repealed and replaced with new biodiversity legislation. This may provide additional options for management of the Conservation Area which is proposed to be conserved in perpetuity.

The Conservation Area will form a major contribution towards offsetting of the impacts of the proposed development, providing most of the requirements for offsetting of impacts to SSTF, and a high proportion of offsets required to compensate for impacts to CSPW.

At the time of writing, a number of mechanisms are being considered to permanently secure the Conservation Area for the purpose of conservation and management. The final outcome will be determined post rezoning and will depend on consultation with relevant government agencies.

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Appendix A

Study Requirements

**WILTON JUNCTION PRECINCT STATE ENVIRONMENTAL PLANNING POLICY
STUDY REQUIREMENTS**

Study	State environmental planning policy study to identify rezoning potential of land for residential, employment and conservation purposes in the Wilton Junction Precinct.
Location	Wilton Junction Precinct located in the vicinity of the intersection of Hume Highway and Picton Road in the Wollondilly Local Government Area as identified in Attached Map.
Proponent	Elton Consulting (on behalf of the Wilton Junction Consortium of land owners, being Bradcorp Holdings Pty Ltd, Governors Hill and Walker Corporation Pty Ltd)
Date of Issue	2 MAY 2013
General Study Requirements	<p>The following issues will be considered and assessed as part of the Study:</p> <ul style="list-style-type: none"> (a) the State or regional environmental planning significance of the site; (b) the suitability of the site for any proposed land use taking into consideration environmental, social, or economic factors, the principles of ecologically sustainable development and any State or regional planning strategies; (c) the suitability of the site for any proposed residential land use taking into consideration the draft Metropolitan Strategy for Sydney to 2031 and the Long Term Transport Master Plan; (d) the implications of any proposed land use for local, regional and State infrastructure, service delivery and natural resource planning; (e) the means by which development contributions should be secured in respect of the site; and (f) the recommended land uses and planning controls for the site.
Key Study Requirements	<p>The Study must include an assessment of the following key issues:</p> <ol style="list-style-type: none"> 1. Strategic context <ul style="list-style-type: none"> • Address the provisions applying to the proposed rezoning and potential future development contained in relevant environmental planning instruments, policies and guidelines, including: <ul style="list-style-type: none"> • draft Metropolitan Strategy for Sydney to 2031 and relevant Sub-Regional Strategies • The Long Term Transport Master Plan • State environmental planning policies • Wollondilly Draft Growth Management Strategy • <i>Wollondilly Local Environmental Plan 2011</i> • Wollondilly Development Contributions Plan 2011 • Section 117 Directions 2. Land Uses and Planning Controls <ul style="list-style-type: none"> • Outline the proposed land use zones and preferred planning controls with reference to the <i>Standard Instrument (Local Environmental Plans) Order 2006</i> and the existing provisions in the <i>Wollondilly Local Environmental Plan 2011</i>. • Justify the mix, extent, staging and location of proposed land uses at the site and outline consideration of alternatives considered for the Precinct. • Demonstrate sufficient demand for the proposed residential, retail, commercial and other employment land, including locational advantages. • Demonstrate how the proposed land use zones and planning controls will complement surrounding existing land uses and incorporate any required buffers including (but not limited to) buffers for noise, bushfire, adjoining areas of high conservation value. • Outline urban design principles employed in determining proposed land uses and their locations, particularly for integration with the proposed Maldon to Dombarton freight rail link and the Commonwealth Government proposed High Speed Rail alignment. • Consider the findings of any Government investigation at Wilton following the <i>Joint Study on aviation capacity for the Sydney region</i> should it be released during the planning process. 3. Demographic profile and social infrastructure <ul style="list-style-type: none"> • Prepare a demographic analysis of the projected population of the Precinct as a potential sub-regional centre, including implications for infrastructure and services. • Projections should address broader market demand and growth patterns and socio-

	<p>economic profiles in the South-West Sydney Sub-Region, including affordable housing demand and supply.</p> <ul style="list-style-type: none"> • Undertake a benchmarking exercise to provide size, scale, linkages, delivery and location parameters of social infrastructure to support proposed service levels, including those proposed for the town centre. Benchmark with a centre in the Sydney Metropolitan Area which the proponent identifies as closest to the centre outcomes sought for the Precinct. • Detail strategies for delivery of social infrastructure. <p>4. Economic Development and Employment Strategy</p> <ul style="list-style-type: none"> • Prepare an assessment of the retail, commercial, industrial and other employment needs for the projected population of the Precinct and wider LGA to support the preparation of a local economic development strategy, including impacts on existing towns within the LGA. • Consider future industry dynamics for key sectors both currently in the area and those which could benefit from locating in the area. This requires strategic analysis and should not be limited to existing forecasts based on historical data. • Identify factors that may drive certain types of commercial, industrial or retail development investment and activity, particularly in relation to the site's connections between the Southern Highlands and South-West Sydney and placement in the Sydney-Canberra-Melbourne corridor • Develop an employment strategy to support a high level of employment self containment in the Precinct. The strategy should assess how jobs generated within the Precinct will contribute to job targets for the sub-region. <p>5. Ecologically Sustainable Development (ESD)</p> <ul style="list-style-type: none"> • Detail how ESD principles are proposed to be incorporated in the future design, construction and ongoing operation phases of the development, and outline any proposed sustainability best practice initiatives. This should also include appropriate waste management strategies to achieve Government policy. <p>6. Mining Resource and Subsidence</p> <ul style="list-style-type: none"> • Undertake an analysis of the implications (including cost), options and feasibility of the Wilton Junction proposal proceeding in conjunction with approved mining of the Bulli Coal Seam, including proposed staging of development and timing of mining operations (where possible, in consultation with relevant stakeholders and agencies) and any potential impact on resource extraction. • Assess and identify any risks and formulate appropriate mitigation/design measures to ensure that flood risks and surface drainage take into account mining induced ground subsidence. • Undertake a geotechnical analysis to ensure identified development areas and design parameters for housing and infrastructure are appropriate to manage impacts from mine subsidence and other geotechnical risks. • Develop a communications strategy to ensure all potential landowners, prior to purchasing land, are informed that mining will occur, implications with respect to building constraints, subsequent repairs and timelines. Develop appropriate policies/procedures for certifying authorities to ensure key aspects of building design/construction within a mine subsidence district are undertaken. • The staging and mix of proposed land uses must plan for and accommodate the requirements of future underground coal mining including: installation and operation of gas mine drainage equipment; additional exploration; installation and operation of subsidence monitoring and other mine related infrastructure such as ventilation shafts. <p>7. Topography, soils and geology</p> <ul style="list-style-type: none"> • Undertake a salinity assessment for the Precinct and identify potential impacts on future building, water management and open space. • Consider how future land use zones reflect appropriate levels of protection for ridges, waterways and other natural features. <p>8. Biodiversity</p> <ul style="list-style-type: none"> • Assessment of the impact of the proposal on threatened flora and fauna species and
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endangered ecological communities listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) and the *Threatened Species Conservation Act 1995* in accordance with Office of Environment and Heritage guidelines.

- Undertake an investigation of the Cumberland Koala linkage as it applies to this site and undertake a targeted search of *Pomaderris brunnea*; *Melaleuca deanei*; *Grevillea parviflora subsp parviflora*; *Persea barboensis* and *Epacris purpurascens* as well as all threatened species at the site. The identification of key vegetation areas should include potential grassland environments and their role as both habitat and foraging areas for fauna species in the Wilton Junction Precinct.
- Identify and address the Priority Conservation Lands in the Cumberland Plain Recovery Plan and evaluate any lands proposed as environmental offsets.
- Detail the proposed ownership and management arrangements for environmental offset lands, urban areas, open space areas and riparian corridors.

9. Water and Air Quality

- Identify watercourses, riparian land and wetlands that may be potentially affected by the proposed masterplan. Assess the potential impacts on water quality and quantity in order to demonstrate that key River Flow and Water Quality Objectives are achieved to protect environmental values including waterways, riparian land, wetlands and down slope vegetation.
- Address potential impacts on water quality of surface and groundwater and provide an Integrated Water Cycle Management Plans based upon Water Sensitive Urban Design principles, including consideration of climate change scenarios in accordance with relevant Government policies.
- Undertake an assessment for the Wilton Junction Precinct that includes recommended strategies that will be implemented to improve or maintain air quality to ensure National Environmental Protection Measures for ambient air quality are not compromised, in consultation with the EPA.
- Identify strategies at a local level to ensure air emissions do not cause adverse impact upon human health, the environment and community amenity.

10. Flooding

- Address the potential flood risk that may occur on site, in accordance with the *NSW Floodplain Development Manual (2005)* and Section 117 Direction, noting proposed mitigation measures.

11. Heritage

- Undertake an appropriate strategic assessment of Aboriginal and European cultural heritage significance and potential impacts in consultation with the Office of Environment and Heritage and Wollondilly Shire Council's Aboriginal Engagement Officer.
- The Aboriginal cultural Heritage assessment should provide sufficient basis for identification of Aboriginal heritage values to support their protection at a strategic level, including consultation, desktop studies, landscape assessment and relevant mapping of current conservation areas.

12. Roads, Traffic and Transport

- Base assumptions relating to population, employment, transport generation, degree of employment self containment and travel mode splits are to be generally agreed by TfNSW prior to the commencement of the Study.
- Strategic modelling shall then be undertaken in the Sydney Strategic Transport Model (STM). TfNSW shall undertake this modelling in consultation with the proponent and then provide the outputs to the proponent. The STM shall be used to determine the likely growth in travel demand associated with the proposal and assist to refine the mode split between vehicular trips and public transport trips.
- The proponent shall undertake mesoscopic modelling for the purpose of determining route assignment and identifying infrastructure upgrades required using the outputs of the STM modelling (It is noted that TfNSW, RMS and the proponent have agreed that AIMSUM will be used for the mesoscopic modelling). The mesoscopic model must be able to demonstrate that due consideration has been given to a range of factors including weave movements and lengths.

- The proponent's modelling must consider the implications of the development on the functionality of Picton Road and specifically the impact to freight, recognising that the Long Term Transport Master Plan acknowledges the need to provide efficient freight connections to Port Kembla. In this regard the modelling must consider two infrastructure scenarios for Picton Road:
 - Picton Road with no new at grade intersections and a free flow arrangement of the Hume Highway and Picton Road. The layout of the interchange of the Hume Highway and Picton Road to be modelled shall be determined in consultation with TfNSW and RMS.
 - Picton Road with at grade intersections east of the Hume Highway.
- Based on the results of the modelling, the proponent shall undertake an economic assessment on the impact of the two separate options on freight activity and access to and from the Illawarra Region.
- An assessment of mitigating measures to accommodate the proposal with an agreed scope and costs (at a strategic level) with TfNSW and RMS.
- A Transport Management and Accessibility Plan (TMAP) must be prepared in consultation with TfNSW to identify and assess:
 - the provision and staging of the required traffic and transport infrastructure, including regional and local intersection and road improvements required.
 - how the works required are to be funded and any proposed contributions to local and State or regional infrastructure.
 - public transport needs and the capacity of existing services.
 - scenarios including road networks.
- The TMAP shall identify a road hierarchy and access strategy that minimises local trips on Picton Road between the four quadrants of the development and safely manages pedestrian and cyclists desire lines in a high speed environment. Consideration must be given to the management of east west crossings of the Hume Highway and north south crossings of Picton Road (particularly east of the Hume Highway).
- The TMAP shall identify vehicular, pedestrian and cyclist infrastructure on (and above) both the Hume Highway and Picton Road required to accommodate the proposal as well as suitable public transport infrastructure, cognisant of the public transport infrastructure and services modelled in the Sydney Travel Model.
- The TMAP shall identify (and preserve) land required for future road infrastructure upgrades. The extent of land required shall be determined in consultation with RMS.

13. Bushfire

- Prepare a strategic Bushfire Risk Assessment against the Rural Fire Service's *Planning for Bush Fire Protection 2006*.
- Detail how asset protection zones can be achieved within future urban land, having regard to environmental and topographic constraints and environmental studies.
- Detail access and egress options for evacuation during a bushfire, proposed provision of emergency access roads and measures proposed to avoid need to evacuate vulnerable development (special fire protection purpose development)

14. Contamination

- Contamination and geotechnical issues should be identified and addressed in accordance with SEPP 55, in particular cattle dip sites, farm chemical storage, fuel and chemical storage at Wilton Aerodrome and any contamination from mining activities.
- Identify any remediation works required to rehabilitate proposed conservation lands.
- Undertake appropriate studies of unexploded ordnance consistent with previous studies for Bingara Gorge.

15. Noise Assessment

- Undertake high level noise assessment analysis to ensure potential noise conflicts are managed appropriately. In particular:
 - Consideration should be given to road traffic noise in relation to the Hume Highway and Picton Road (Note: RMS have advised that they will not accept any noise walls or other structures within the Hume Highway or Picton Road reserves).
 - Consideration should also be given to potential future rail noise in relation to the Maldon Dombarton Railway alignment in consultation with TfNSW.

	<ul style="list-style-type: none"> Consideration should also be given to potential future rail noise in relation to the Commonwealth proposed high speed rail alignment in consultation with TfNSW. <p>16. Agricultural land suitability</p> <ul style="list-style-type: none"> Underlake a high level study of the agricultural potential of the land. <p>17. Health & Emergency Services</p> <ul style="list-style-type: none"> Identify required community health and hospital services and undertake an assessment of the Health and Wellbeing impacts of the Precinct which will identify positive and negative impacts for the population and develop recommendations to mitigate negative impacts and enhance positive impacts. Identify required emergency services infrastructure within the Wilton Junction Precinct, including Fire, Rural Fire Service, Ambulance, Police, and SES Identify proposed water supply for fire fighting, in terms of the proposed design of the mains supply for domestic purposes and supplementary fire fighting supplies. <p>18. Infrastructure, Servicing, Staging and Housing Delivery</p> <ul style="list-style-type: none"> Prepare an Infrastructure, Servicing and Staging Plan in conjunction with relevant agencies and Council to address transport requirements and each essential services infrastructure to service the release area in a staged manner as well as a whole. The Infrastructure, Servicing and Staging Plan is to be prepared concurrently with the landuse planning and be endorsed by the Wilton Junction Precinct Government Working Group prior to Government considering any public exhibition. The Infrastructure Strategy and Implementation Plan will detail the infrastructure in a staged manner as well as required to service the ultimate development including: <ul style="list-style-type: none"> Road upgrades and augmentation for access and capacity generated by the development with due regard to the key freight routes through the area; Public transport; Stormwater detention and treatment for water quality (including infrastructure maintenance for future Council assets); Community and emergency services; Recreational and sporting needs; Essential services (Potable water; Sewage treatment and disposal of effluent; Recycled water and water reuse if proposed; Electricity; Gas; and telecommunications). The Infrastructure, Servicing and Staging Plan will detail the proposed staging of works with related development milestones, costs and Net Present Value cashflows for the entire life of the release area. Details of funding for staging and the entire cost of delivery of required infrastructure and the component and timing of funding proposed to be supplied by Government. Prepare a high level risk assessment for proposed Sydney – Moomba gas pipeline within the Precinct. Prepare a delivery plan for proposed housing including expected dwelling production, time involved and responsible parties, including staged dwelling production schedules and consideration of affordable housing products and seniors housing. <p>19. Planning agreement and developer contributions</p> <ul style="list-style-type: none"> Identify additional demand created by the development on public facilities/ infrastructure and provide details on the scope of any proposed planning agreement and/or developer contributions between the proponent, Council and State.
Consultation Requirements	<p>The Study should reference any consultation undertaken with relevant parties during the preparation of the Study.</p> <p>You should undertake an appropriate level of consultation local Councils, relevant State and Commonwealth agencies, utility providers, emergency services, adjoining landowners and the local community and provide written evidence/ documentation of any consultation carried out during the study period. The Study shall clearly indicate issues raised by stakeholders during consultation and how those matters have been addressed in the Study.</p>

Appendix B

Historical Photographs

