

22 February, 2021

Submission to Transport NSW on the Heathcote Bridge Widening Project

Sutherland Shire Environment Centre is an independent, not-for-profit, non-government, community organisation that has been actively involved in advocating for the environment since 1991. We welcome the Heathcote bridge widening and upgrade as an important road safety initiative – the fatalities there demonstrate the upgrade is long overdue.

We have been researching the issue of wildlife crossings around major road crossings in the Sutherland Shire and bioregions for some time now, and have carried out extended research, consulting with a number of other environmental and community organisations around the region in order to determine the issues that need to be addressed.

This submission has been prepared in consultation with and is co-signed by:

- National Parks Association Southern Sydney
- Rewilding Sydney's Koalas
- Woronora Valley Residents Association
- Sandy Point Residents Association
- Friends of the Royal
- Oatley Flora and Fauna Conservation Society
- Georges River Environmental Alliance

Our joint submission focuses largely on one aspect of the upgrade – the wildlife crossings in the proposed design brief. It is based on the assumption the selected design will be for the Transport NSW preferred option, widening the bridge using the headstock technique.

Beyond our focus on wildlife crossings one key additional point of concern is that we share Sutherland Shire Council's reservations regarding "the huge potential for irreversible harm to be done to the aquatic habitats of the Woronora River", and we request further information on this matter. We anticipate Transport NSW will address this and institute careful monitoring systems. We would like to be kept informed as to what surface water monitoring will be put in place, and the frequency and type of testing that will be carried out.

The main focus of this submission is a result of the concern members of our respective organisations have expressed about the number of koalas being killed on the road around the Heathcote Road bridge over Woronora River. We believe many in the wider community share these concerns, and we welcome the inclusion of native animal friendly biodiversity

¹ Sutherland Shire Council draft submission to Transport NSW regarding the Heathcote Rd Bridge widening

measures suggested in the Transport NSW initial report. We were delighted to see koalas mentioned in the video overview of the project (at 00:24-00:27, 00:35), and a proposed design of koala crossing furniture included in the video (at 01:29-01:33).

We understand you have already reviewed the Bionet data and included this in your "Review of Environmental Factors". We have **attached** an addendum to this submission – koala sightings in the near vicinity which have not yet been logged in Bionet. We are in the process of collecting more of these reports.

The recent NSW Legislative Council inquiry has found koalas are on track to be extinct in the wild by 2050 unless urgent action is taken. Koala sightings and kills have been reported regularly in our local newspaper, *The Leader*, and images have been shared widely on social media.³

Even on Christmas Day 2020 a koala was photographed at the side of Heathcote Road.

Community opinion regarding the need for wildlife corridors is also formally reflected in one of the aims of the 2015 Sutherland Shire Local Environmental Plan -

"to protect and enhance the natural environment and scenic quality of the Sutherland Shire through the retention and rehabilitation of wildlife habitats, wildlife corridors, bushland, foreshores and waterways."

Wildlife corridors are a critical 'green highway', an escape route from bushfires and urban development. They foster genetic diversity, so important for this particular koala population.



In relation to the measures that have been proposed with the Heathcote Bridge widening we have six specific points of concern -

1. Koala crossing furniture on both sides of Woronora river

The Transport NSW video only showed koala crossing furniture on one side of the bridge underpass even though koalas inhabit both sides of the river. Koalas and other native animals need to be supported with formal crossings on both sides. We ask Transport NSW to install koala friendly crossings on both sides of Woronora river.

⁴ https://www.legislation.nsw.gov.au/view/whole/html/inforce/current/epi-2015-0319 See 1.2 (2) f.

² "there are 186 records of koalas within 10 kilometres of the study area, including 13 records in 2020 (as at 21 October 2020). These records include 18 records within two kilometres of the proposal area, including a live sighting in 2010 and two roadkill records from Heathcote Road within the proposal area in 2018. This indicates that the study area does provide koala habitat and is a corridor for movement." p.118

³ A number of these news articles are listed on the Sutherland Shire Environment Centre webpage – https://www.ssec.org.au/our-campaigns/koalas-and-resilient-habitat-in-the-sutherland-shire/

2. Industry standard directional exclusion fencing

There is no point in having koala crossings without also implementing measures to prevent koalas accessing the road. We ask Transport NSW to consider exclusion fencing to direct koalas and other animals away from the road, and channel them toward the underpasses. Best practice industry standard exclusion fencing should be installed in appropriate locations on both sides of the river, over a suitable length and distance to be effective. We suggest the type of exclusion fencing used in the Compton Road wildlife crossing project in South-east Queensland be considered:

"The design incorporates measures to block small mammals, lizards, amphibians attempting to access roads as well as metal sheet strip to stop climbing animals. It also includes escape measures for small terrestrial species that find themselves on the roadway side of the fence."

We note that less animals on the road means less chance of car accidents (and further human fatalities) caused by motorists swerving to avoid animals. The NSW Legislative Council inquiry *Koala populations and habitat in New South Wales* report also supports exclusion fencing - recommendation 14 states,

"That the Roads and Maritimes Services allocate appropriate and sufficient funds for the ongoing maintenance and management of exclusion fencing along roads."

3. Koala underpass furniture

Koala crossings installed at the Woronora Heathcote Bridge underpass should be constructed in accordance with best practice standard designs. We have qualms about the design of the koala crossings shown in the Transport NSW video of the proposed changes, and depicted on p.38 of the Transport NSW "Review of Environmenal Factors". Underpass designs such as those developed with the Compton Road project are included in the Queensland Transport and Main Road Department's *Road Sensitive Design Manual*. In the underpasses at Compton Road the koala crossings consist of ledges above the waterline, much lower to the ground. The video of the Compton Road project on their website shows these crossings at 1:41-1:49. The Compton Road ledges were also used by wallabies and possums. Koalas tend to walk from tree to tree, and do not swing through the treetops, although if there are adjacent branches they will use these.

We note that the Department of Planning, Industry and Environment *Koala Vehicle Strike Fact Sheet* states that most koalas prefer not to use timber crossing furniture, and that timber crossing furniture is only used primarily to prevent dog attacks.⁶

The Transport NSW "Review of Environmental Factors" states that

"The final design solution would be confirmed during detailed design in consultation with specialist ecologists".

It is heartening that this bridge infrastructure program promises to use best available research advice to ensure that koalas and other animals have safe passage. We ask Transport NSW to ensure proper consideration and research be put into the koala underpass furniture at the Heathcote Bridge underpass – to ensure this is fit for purpose, and not tokenistic, a waste of

⁵ https://www.griffith.edu.au/research/impact/compton-road-wildlife-corridor

⁶ https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Threatened-species/koala-vehicle-strike-fact-sheet-2-how-to-keep-koalas-off-roads-200230.pdf

⁷ Transport NSW "Review of Environmental Factors", p.9

taxpayers money. We believe further community consultation and explanatory information regarding this design would be valuable.

4. Rope crossings and rope ladders

In the interests of supporting and building biodiversity we also suggest rope crossings above Heathcote Road be installed, in particular around the areas where exclusion fencing is used. These may be difficult to fix up in some locations, for instance an overhead crossing at the bridge would need to run from the high position on the western side of the road to the lower and steeper area on the eastern side of the road (as per figure 3-5 on p.46 of the "Review of Environmental Factors"), but consideration should be given to rope ladders nonetheless. Rope ladders for possums above the road and beneath the underpass, as well as poles for gliders could be critically important in sustaining these populations from predation, and road kill. At the risk of repetition, rope crossings and rope ladders are also used at Compton Rd.

5. Adequate fox control measures

We ask Transport NSW to liaise with the relevant authorities to ensure adequate fox control measures are put in place. Foxes are far too prevalent across Sutherland Shire. They do tremendous damage to our native animal populations, including turtles, all ground dwelling birds, and marsupials. It will be pointless implementing measures to sustain native animals if this work is undone because no effective programs are put in place to control predators.

6. Removal of hollow bearing trees

The Transport NSW "Review of Environmenal Factors" states "The proposal would involve the removal of up to 3.08 hectares of native vegetation, of which 0.05 hectares is consistent with an Endangered Ecological Community (EEC) listed under the Biodiversity Conservation Act 2016 (BC Act) (Sydney Freshwater Wetlands in the Sydney Basin Bioregion), which could lead to a reduction of threatened fauna habitat within the proposal area." 9

We note Transport NSW has identified five trees with hollows greater than 20 cm that are slated to be removed. Medium sized hollows can take hundreds of years to form. Large, deep hollows of the type suitable for Black Cockatoos and owls are often only found in old and over-mature trees which are deteriorating, dying or dead. The loss of hollow-bearing trees has been listed as a key threatening process by the NSW Scientific Committee. We note Transport NSW has consulted with the National Parks and Wildlife Service and adopted the mitigation measures NPWS suggested so that

"Any trees to be removed be fully assessed by a qualified arborist to establish if animals may be living in them. If this is a possibility, then alternatives to direct felling should be considered." ¹²

⁸ See also the 2018 thesis on this issue by Dean Karas "Scoping for potential wildlife crossings for koalas and marsupial gliders in crossings for koalas and marsupial gliders in the Sutherland Shire and Campbelltown regions of New South Wales, Australia" https://www.ssec.org.au/wp-content/uploads/2020/10/Potential-wildlife-crossings.pdf

⁹ Transport NSW "Review of Environmental Factors" p.9

Transport NSW "Review of Environmental Factors", p.118

¹¹ https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species/nsw-threatened-species-scientific-committee/determinations/final-determinations/2004-2007/loss-of-hollow-bearing-trees-key-threatening-process-listing

¹² Transport NSW "Review of Environmental Factors", p.80

Nesting hollows may not be in continuous use, but they are scarce, and once removed cannot be replaced. Even if no animals are currently in residence we submit that trees with hollows should be retained wherever possible, particularly trees with larger hollows. We ask further mitigation / protection measures be instituted to avoid the loss of such critical habitat.

Recommendation 12 of the NSW Legislative Council inquiry *Koala populations and habitat in New South Wales* report calls for the government to 'ensure that the combination of underpasses, overpasses and exclusion fencing along roads is incorporated into both the retrofitting of existing infrastructure and new development in areas of known koala habitat.' We note the NSW government has accepted this recommendation in principle.

Ideally we would like to see further measures implemented at other locations along Heathcote Road, particularly at the Heathcote Road underpass at Sandy Point. We have detailed these measures in a 2020 report co-signed by Friends of the Royal National Park, National Parks Association Southern Sydney Branch, Georges River Environmental Alliance, Oatley Flora and Fauna Conservation Society, and Sandy Point Residents Association. The substantive points from that report are detailed on our website: https://www.ssec.org.au/our-campaigns/koalas-and-resilient-habitat-in-the-sutherland-shire/

Undertaking such measures at the same time as the bridge upgrade would have a number of advantages. Critically, road closures required by the bridge upgrade will already be in place ensuring less traffic issues to impede the work. Procurement for equipment such as underpass furniture and fencing could be done simultaneously.

Sutherland Shire Councillors supported the measures at a council meeting 19 October last year (please see copy **attached**). Sutherland Shire and surrounding regions are crossed by freeways - while it seems many major freeways in Queensland now have underpasses - NSW by way of contrast, is lagging behind. We look forward to Transport NSW making good on this deficit, and again thank you for giving this submission your consideration.

Our groups would welcome further consultation with Transport NSW regarding the work to be carried out, and the possibility of instituting other wildlife crossings, and overpasses.

The contact details for our respective organisations are listed below.

Kind regards,

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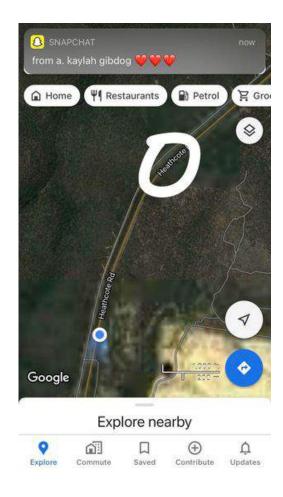
14 Marine Drive Oatley NSW 2223 go river @hotmail.com

Georges River Environmental Alliance



1. 25 Dec 2020 Heathcote Rd







2. 20 October, 2020 Lucas Heights, Mill Creek



3. Jan 27 2020 -34.1067417, 150.9534423 Lower Pipeline Rd, Heathcote



4. 27 December 2018, 9:14pm Pipeline trail at Heathcote – 4 sec movie available



5. Feb 18 2017 -34.0879779, 150.9912678 Pipeline Trail, Heathcote

6. 10 Nov 2016 Heathcote NP, Pipeline trail but do not have exact location

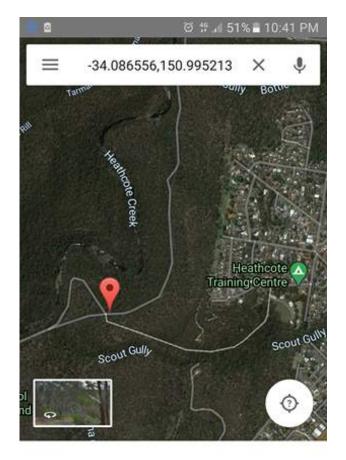




7. Nov 5 2016
-34.0911635, 150.9830827
Heathcote Creek and the Pipeline trail

8. Jan or Feb 2014 Koala on NPWS sign – Pipeline trail Heathcote





Dropped pin

Near Friendly Track, Heathcote NSW 2233



Council Meeting 19 October 2020

advising that his partner is the member for Holsworthy.

Councillor Johns advised that the matter is not significant as it is not a matter that has a monetary value.

Minute No: 251

MOT033-20 Koala Protection Initiatives

File Number: 2015/64732

***Councillor Johns declared a not significant non-pecuniary interest in this matter.

***Councillor Nicholls having declared a significant non-pecuniary interest in this matter, left the

Meeting and took no part in the discussion and did not vote.

RESOLVED: (Councillor Steinwall/Councillor Boyd)

THAT:

 Council write to the State Member for Heathcote and the Department of Planning, Industry and Environment (DPIE) requesting the DPIE to collaborate with Transport for NSW for the provision of infrastructure that will protect the native animals along Heathcote Road. The infrastructure should include, but not be limited to, the following:

- improved wildlife fencing for koalas along the Heathcote Road at appropriate locations, including Deadman's Creek, Sandy Point, Holsworthy and near the Heathcote Road Bridge; and
- Suitable wildlife crossings to allow passage of koalas and other species across
 Heathcote Road to support populations in the eastern parts of the Shire and beyond,
 that do not make the wildlife more susceptible to predators; and
- c. large and clear signage be installed along the Heathcote Road at critical locations to warn motorists at frequent koala crossing locations.
- 2. Council's Biodiversity Plan reflect its continued engagement with all stakeholders and land managers to improve management of local koala populations.

During debate on MOT033-20 the following Procedural Motion was moved:

PROCEDURAL MOTION: (Councillor Boyd/Councillor Provan)

That Councillor Steinwall be granted an additional two minutes to address item MOT033-20.