

To whom it may concern,

I refer to comments from the National Parks and Wildlife Service and the Office of Environment and Heritage referred to in the Bega Valley Shire council's agenda of August 4 2021 (1), with regard to a provisionally approved Application to Modify Development Consent for a Clay Target Shooting Range, on Lot 101 DP 1172182 off Murrah River Road south of Bermagui.

Council's initial consent on 26 May 1998 was for the use of Lot 10 DP 849934 as a Clay Target Shooting Range which applied for hours of operation between 10am and 5pm, with the usage of one day per fortnight. Subsequent council approval provided for one day a month and the provisionally approved modification provides for an additional 9 days shooting. Lot 101 DP 1172182 was subdivided from Lot 10 DP 849934 and purchased by the shotgun club in 2012. Prior to this time shooting was to the south of and outside the boundary Lot 101 DP 1172182.

As part of the original approval a flora and fauna assessment was undertaken by Southern Ecological Services (SES) in August 1997 on Lot 10 DP 849934 and within the boundary of Lot 101 DP 1172182. A more recent baseline contamination study was undertaken by Environmental Resources Management Australia Pty Ltd (ERM) in July 2020 on Lot 101 DP 1172182.

According to council staff reports the SES flora and fauna assessment, indicates there are no koala feed trees on the property listed in SEPP 44 and 'the impact of intermittent noise is difficult to assess'.

Surveys for the SES assessment were within "A single quadrat, 200m X 100m encompassing all the proposed range". The assessment indicates no koala feed trees on the property are listed in SEPP 44. The assessment found trees in the quadrat included *E. longifolia* and *E. cypellocarpa*, both of which had been identified as preferred koala feed trees from community surveys referred to in a report also produced in August 1997 (2). The SES assessment also indicates 'call-back' surveys were undertaken on 30 June 2017 for several species including koalas "At 1 kilometre intervals within the survey site" and a spotlight survey for nocturnal species that "covered the entire area of the study site" was undertaken on the same night.

The council agenda indicates " NPWS has reviewed the *Flora and Fauna Assessment* report by Southern Ecological Services 1997 and considers it to be a comprehensive document, adequately addressing the 8-part test of significance under the *Threatened Species Conservation Act 1995*. Provided there is no clearing of trees and very little disturbance of the understorey, NPWS agrees with the findings that this activity is not likely to impact on threatened species, population or ecological communities."

A condition of approval was "Trees shall not be removed without the approval of Council." However, Google Earth images indicate there has been significant clearing on the property.

The council staff report also refers to the Victorian EPA's guide for managing shooting ranges. According to the guide shotgun pellets are like to travel up to 210 metres and there is "an area of maximum lead contamination starting approximately 100 m from the firing position and extending out to approximately 180 m." Again according to Google Earth images the distance between the initial flora and fauna assessment area, access road and the north western boundary of the property ranges from 130 to 180 metres. The ERM study indicates clay target fragments were found outside the boundary of Lot 101 DP 1172182 in the Murrah Flora reserves.

Council's provisional approval for additional shooting days requires "Arrangements for emergency and evacuation are to comply with section 4.2.7 of 'Planning for Bush Fire Protection 2006'. Prior to training days commencing at the site, the applicant shall prepare and submit to council an Emergency/Evacuation plan consistent with the NSW Rural Fire Service document 'Guidelines for the Preparation of Emergency/Evacuation Plan' and in consultation with the Bega Valley Rural Fire District."

The council report also refers to advice from the Office of Environment and Heritage indicating the proposed additional training days do not require additional noise testing or threatened species assessments for koalas. While noting there are several studies (ie. 3,4,5) referring to the detrimental impacts of anthropogenic noise on koalas. A report (6) produced on the genetic and disease status of koalas in the area indicates "... It would be of interest to examine animal movement between the Mumbulla and Murrah SF populations to assess potential for chlamydial introduction and also population connectivity."

Could you please confirm or otherwise -

- (1) That in your opinion the flora and fauna assessment was 'comprehensive' even though it was not undertaken at the location where shooting was occurring at the time of the initial council approval.
- (2) That your current advice for council and private land holders, including via the Koala Action Network with regard to koala feed species is based on SEPP 44.
- (3) Whether Bega Valley Shire council has advised of and you have approved clearing on Lot 101 DP 1172182.
- (4) While noting the Murrah Flora Reserves are technically State Forests, has a permissive shooting right been granted and has a range danger area been established for the shotgun club.
- (5) Whether you will approve more clearing of the Murrah flora reserves to facilitate section 4.2.7 of 'Planning for Bush Fire Protection 2006' for the shotgun club.
- (6) Whether appropriate surveys have been undertaken demonstrating that the shotgun club is not a factor in the lack of genetic exchange between koalas north and south of the Murrah river.

Regards
Robert Bertram
19 October 2021

- (1) http://begavalley.infocouncil.biz/Open/2021/08/OC_04082021_AGN_612_AT_WEB.htm
- (2) Phillips, S. (1997) Analysis of data associated with habitat utilisation by koalas in the Bermagui-Murrah area of southeast New South Wales – A report prepared for the South-East forest Conservation Council. Australian Koala Foundation, Brisbane, Queensland. 4001.
- (3) Ropert-Coudert, Yan, Lisa Brooks, Maki Yamamoto, and Akiko Kato. "ECG response of koalas to tourists proximity: a preliminary study." *PLoS One* 4, no. 10 (2009): e7378.
- (4) Larsen, Megan J., Sally L. Sherwen, and Jean-Loup Rault. "Number of nearby visitors and noise level affect vigilance in captive koalas." *Applied Animal Behaviour Science* 154 (2014): 76-82.
- (5) Kinsella, GE (2014). Effects of Audible Human Disturbance on Koala (*Phascolarctos cinereus*) Behavior in Queensland, Australia and Implications for Management. Honours Thesis. University of New Hampshire
- (6) Higgins, D. Phalen, D. Casteriano, A. Krockenberger, M (2017) Management of Small, Isolated, Coastal Population of Koalas in Southeast New South Wales: Final Report, June 2017. Koala Health Hub, The University of Sydney.