

Our reference: DOC11/16472; FIL10/7926
Contact: Bill George, 4908 6821

- 3 MAY 2011

Department of Planning & Infrastructure (DP&I)
Infrastructure Projects
GPO Box 39
SYDNEY NSW 2001

Attention: Diane Fajmon

Dear Ms Fajmon

EXHIBITION OF ENVIRONMENTAL ASSESSMENT FOR NUNDAH BANK THIRD TRACK (MP 10_0094)

I refer to your letter dated 23 March 2011 seeking a written submission from the Office of Environment and Heritage (OEH) on the above proposal. I also refer to the documents '*Nundah Bank Third Track – Environmental Assessment - Volumes 1 to 3*' prepared by KMH Environmental, March 2011 ('the EA').

OEH understands that the project approval application is for the construction, operation and maintenance of a new third track (approximately 4km in length) and ancillary infrastructure adjacent to the existing Main Northern railway between Singleton and Camberwell.

OEH has reviewed the information provided and determined it is unable to recommend conditions of approval until the issues raised in Attachment A have been adequately addressed. Many of the issues associated with Aboriginal cultural heritage impacts were raised in our letter of 24 January 2011 in response to OEH's review of the draft EA prior to exhibition. OEH has also had no contact with the proponent regarding proposed biodiversity offsets for this project and notes that there are no details regarding proposed biodiversity offsets in the exhibited EA.

Summary of key issues:

- further detail of the proposed biodiversity offsetting is required;
- threatened species survey methodologies;
- further detail on local Aboriginal community consultation, assessments and management

The Department of Environment, Climate Change and Water is now known as the
Office of Environment and Heritage, Department of Premier and Cabinet

PO Box 488G, Newcastle NSW 2300
Government Office Block – 117 Bull St,
Newcastle NSW 2300
Tel: (02) 4908 6800 Fax: (02) 4908 6810
ABN 30 841 387 271
www.environment.nsw.gov.au

If you require any further information on this matter please contact Bill George on (02) 4908 6821.

Yours sincerely



KAREN MARLER
Head Regional Operations Unit - Hunter
Environment Protection and Regulation
Office of Environment and Heritage
Department of Premier and Cabinet

Enclosure: Attachment A - OEH comments on exhibited EA.

ATTACHMENT A

NUNDAH BANK THIRD TRACK PROJECT (MP 10 0094) - OEH COMMENTS ON EXHIBITED EA

THREATENED SPECIES ASSESSMENT

OEH has reviewed the Environmental Assessment (EA) for the proposed third track at Nundah Bank and notes that the proposal would remove approximately 22.12 ha of vegetation comprising up to 8.75 ha of Central Hunter Ironbark Spotted Gum – Grey Box Forest Endangered Ecological Community (EEC), 13.37 ha of derived grassland after Central Hunter Spotted Gum – Grey Box Forest EEC, 0.26 ha of aquatic vegetation, 0.12 ha of Swamp Oak, about 40.99 ha of weed dominated areas and 0.64 ha of planted vegetation. The proponent recognises that the proposal will require a biodiversity offset however details of the proposed biodiversity offset are not provided with the EA. OEH is unable to fully assess and provide comment on this proposal until a suitable biodiversity offset is provided which meets OEH's BioBanking requirements or Biodiversity offsetting principles.

BioBanking Assessment

OEH notes that the proponent is considering using the BioBanking Assessment Methodology (in accordance with the '*BioBanking Assessment Methodology*' (DECC 2008) as defined under Section 127B of the *Threatened Species Conservation Act (TSC) 1995* and the '*BioBanking Assessment Methodology and Credit Calculator Operational Manual*' (DECC 2009) as a guide to determine an offset package for this development. However they plan on then following the 'Principles for the use of biodiversity offsets in NSW' (OEH 2011) for the final offset package, which, as per section 8.2 of the Ecology report, may be combined with offset package for ARTC's third track project between Maitland and Minimbah (MP 08_0060; determined on 22 May 2009 but for which the offset package is still being finalised). OEH will require further details of the offset proposal. In order to assess the use of the BioBanking methodology OEH requests that the proponent provides the information described in Attachment B.

Ambient weather conditions at the time of survey

OEH's amphibian survey guidelines (DECC 2009) and draft threatened biodiversity and assessment guidelines survey guidelines (DEC 2004), as well as the Commonwealth Government's threatened frog survey guidelines (DEWHA 2010) make reference to the importance in recording ambient weather conditions, particularly temperature during which biodiversity surveys were conducted. This is because the ambient weather conditions affect the activity and thus detectability of animals during any survey period. The ecology report does not appear to include details of the ambient weather conditions during the time of the biodiversity surveys. A search of the Bureau of Meteorology website for weather details from Singleton (Bureau of Meteorology 2011), about 7 km SE of the centre of the project area for the period 16 – 20 August 2010 indicates that freezing, or near-freezing minimum temperatures occurred on 17th and 19th August and that 5.6 mm of rain was also recorded on 19th August. OEH requests that the proponent provide an assessment of the likely impact of the weather conditions during the time of biological survey and how it may have affected the survey results for threatened animal species.

Swamp Oak Forest

Section 5.2 (pg. 49) of the Ecology report, has a reference to an area of Swamp Oak Forest (0.12 ha) affected by the proposal which appears to occur near the northern limit of the project area (Figure 3A). However, this vegetation community is not described in section 3.2 of the Ecology report nor does its conservation significance appear to have been evaluated. OEH considers this may represent 'Swamp Oak floodplain forest of the NSW North Coast, Sydney Basin and South East Corner Bioregions' endangered ecological community (EEC). OEH notes that in Table 4.1 this EEC was not considered to occur in the study area. In the absence of details about the 'Swamp Oak' mapped on site it is not clear to OEH whether or not this vegetation type matches the EEC criteria in the final determination (NSW Scientific Committee 2004). As such OEH recommends that the proponent provide further details of the Swamp Oak Forest on site (particularly floristic composition, vegetation structure, an indication of the frequency and

duration of waterlogging at the site, and an indication of the salinity of the groundwater), and if any of the 0.12 ha to be affected by the proposal is EEC vegetation, and if so must be offset.

Pine Donkey Orchids (*Diuris tricolor*)

The Pine Donkey Orchid (*Diuris tricolor*) is a widespread threatened terrestrial orchid along the western slopes and plains of the Murray-Darling Basin. The only plants of this species known from east of the Great Dividing Range occur in the upper Hunter valley (Royal Botanic Gardens & Domain Trust 2011) which, in the Muswellbrook Local Government Area, also comprise an Endangered Population. Therefore any plants of *Diuris tricolor* in the project area (in the Singleton LGA) would definitely be considered at the edge of the range of this species; contrary to what is stated on page E 11 in Appendix E of the ecology report.

Pine Donkey Orchids from along Thomas Mitchell Drive, south of Muswellbrook and about 29 km NW of the centre of the Nunbah Bank project area grow in derived grassland with a high component of exotic pasture species. Therefore, 'weed dominated areas' that are derived grasslands within the project area may also comprise suitable habitat for this threatened orchid. OEH recommends that the proponent considers that a larger area of suitable habitat occurs for this species in the project area, and as such must conduct appropriate targeted surveys for this plant during the next flowering period; which, based on observations of plants near Muswellbrook flower is between mid-September and mid-October (but best checked against known reference populations near Muswellbrook first for the 2011 flowering season). As per OEH's previous advice, if adequate seasonal surveys for this species are not conducted, when determining biodiversity offsets OEH will assume that those species with potential habitat on the site as in fact utilising the site.

Two additional threatened birds for consideration

OEH conducted its own search of the NSW Wildlife Atlas in April 2011 of records within 10 km of the project area. This search included two additional woodland bird species, the Olive Whistler and the Varied Sittella which were not considered in the ecology report. OEH recommends that, for completeness, the impact of the proposed development is assessed against these two threatened woodland bird species.

Questions about some plants mentioned in the Ecology report

Appendix A comprises a Table of species of plants recorded or previously documented from within the Study Site. Three plant species listed in Appendix A appear anomalous and OEH requests advice as to whether specimens of *Drosera pygmaea*, '*Austrostipa wakoolica*' and Smooth Helicia (*Helicia glaberrima*) were sent to the NSW herbarium for identification confirmation. None of these species are listed as occurring in the Central Hunter Valley (Peake 2006: Appendix 9). Additionally, *Austrostipa wakoolica* is a threatened species that is endemic to the floodplains of the Murray River tributaries of central-western and southern NSW (Jerilderie / Cunninyen to the Mid Lachlan Valley: CWS, SWS and SWP) (Vickery *et al.* 1986, Harden 1990-1993, Ayers *et al.* 1996).

The fauna habitats described in the Section 3.4.1 and Table 3-9 of the ecological assessment refer to the presence of mistletoe, particularly in the larger specimens of Grey Box (*Eucalyptus moluccana*) and yet no mistletoe appears to be listed in Appendix B. OEH requests that the proponent provide further details on these apparent anomalies in the report. If mistletoe is present then OEH is of the opinion the assessment of significance carried out on the Painted Honeyeater would need to be revisited.

References

- Ayers, D., Nash, S. & Baggett, K. (1996) *Threatened Species of Western New South Wales*. NSW National Parks and Wildlife Service, Hurstville.
- Bureau of Meteorology (2011) Climate Data Online: Singleton New South Wales: August 2010 Daily Weather Observation (Station 061397)
<http://www.bom.gov.au/climate/dwo/201008/html/IDCJDW2122.201008.shtml> [accessed 19 April 2011]
- Department of Environment and Climate Change (2009) *Threatened species survey and assessment guidelines: field survey methods for fauna: Amphibians*. (April 2009). Department of Environment and Climate Change (NSW), Hurstville.

- <http://www.environment.nsw.gov.au/resources/threatenedspecies/09213amphibians.pdf> [accessed 20 April 2011]
- Department of Environment and Conservation (2004) *Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities. Working Draft: November 2004*. Department of Environment and Conservation (NSW), Hurstville, <http://www.environment.nsw.gov.au/resources/nature/TBSAGuidelinesDraft.pdf> [accessed 20 April 2011]
- Department of Environment and Climate Change (2008) *BioBanking Assessment Methodology*. Department of Environment and Climate Change (NSW), Sydney. <http://www.environment.nsw.gov.au/resources/biobanking/08385bbassessmentmethod.pdf>
- Department of Environment and Climate Change (2009) *BioBanking Assessment Methodology and Credit Calculator Operational Manual*. Department of Environment and Climate Change (NSW), Sydney. <http://www.environment.nsw.gov.au/resources/biobanking/09181bioopsman.pdf>
- Department of the Environment, Water, Heritage and the Arts (2010) *Survey guidelines for Australia's Threatened frogs*, Department of the Environment, Water, Heritage and the Arts, Canberra. <http://www.environment.gov.au/epbc/publications/pubs/survey-guidelines-frogs.pdf> [accessed 20 April 2011].
- Harden, G.J. (ed.) (1990-1993; 2001) *Flora of New South Wales: Volumes 1 to 4*. New South Wales University Press, Kensington, NSW.
- New South Wales Scientific Committee (2004) Swamp oak floodplain forest of the NSW North Coast, Sydney Basin and South East Corner bioregions - endangered ecological community listing. Final determination: 17 December 2004. New South Wales Scientific Committee, <http://www.environment.nsw.gov.au/determinations/SwampOakFloodplainEndSpListing.htm> [accessed 21 April 2011]
- Office of Environment and Heritage (2011) *Principles for the use of biodiversity offsets in NSW*. Updated 23 March 2011. Office of Environment and Heritage, Sydney. <http://www.environment.nsw.gov.au/biocertification/offsets.htm> [accessed 20 April 2011]
- Peake, T.C. (2006) The Vegetation of the Central Hunter Valley, New South Wales. A report on the findings of the Hunter Remnant Vegetation Project. Hunter – Central Rivers Catchment Management Authority, Paterson.
- Royal Botanic Gardens & Doman Trust (2011) *PlantNet* <http://plantnet.rbgsyd.nsw.gov.au/> [accessed 20 April 2011]
- Vickery, J.W., Jacobs, S.W.L. & Everett, J. (1986) Taxonomic studies in *Stipa* (Poaceae) in Australia. *Telopea* 3(1): 1-132.

ABORIGINAL CULTURAL HERITAGE

A review of the documentation, including Sections 5.0 and 7.1 of the EA (dated March 2011) and Technical Paper 1 – Indigenous Heritage entitled: '*Nundah Bank Third Track: Aboriginal Cultural Heritage Assessment*' (dated February 2011) (the cultural heritage assessment), was undertaken by OEH to assess the potential impacts of the projects on Aboriginal cultural heritage in accordance with OEH's Aboriginal cultural heritage assessment guidelines and the requirements of Part 6 of the *National Parks and Wildlife Act 1974*.

The following issues must be addressed prior to any consideration or determination of the consent.

Summary of Key Issues/Inadequacies

- Incomplete evidence of the Aboriginal community consultation process. Additional evidence is required from the registered Aboriginal community stakeholders regarding their views on the outcomes of the Aboriginal cultural heritage assessment process.
- The Aboriginal cultural heritage assessment provided has not adequately addressed the cultural significance of the Aboriginal heritage identified within the project area.

Detailed Points for Consideration

Local Aboriginal Community Consultation

OEH acknowledges that the applicant has provided additional details in Section 1.7 of the cultural heritage report regarding the consultation process undertaken with the registered Aboriginal stakeholders.

However, it is noted there is a lack of written evidence from a majority of the registered Aboriginal stakeholders in support of the field survey methodology, results, significance assessment and final draft Aboriginal cultural heritage report provided by the proponent. OEH also notes the final cultural heritage report is dated February 2011, and the final review was undertaken on 16 February 2011, prior to the 18 March 2011 final deadline for all comments received from the registered Aboriginal stakeholders regarding the cultural heritage assessment process. The absence of evidence of support from the registered local Aboriginal stakeholders means OEH is unable to comment on the appropriateness of the proposed Aboriginal heritage management recommendations the overall Aboriginal cultural heritage assessment process.

OEH requests that the proponent provide comments/evidence from at least a majority of the registered Aboriginal stakeholders. The additional evidence should include comments from the local Aboriginal community discussing the proposed field survey methodology, their views on the results of the field assessment, the cultural significance of the area (and in particular the Aboriginal sites identified) and the adequacy of the proposed management recommendations. Evidence of consultation may take the form of records of advertisements, consultation/conversation logs, copies of all correspondence sent/received for the project, records of personal communications, documented phone calls, copies of agendas, minutes to all Aboriginal community meetings and records of participation in field assessments.

Significance Assessment

Effective Aboriginal cultural heritage management requires knowledge of values or cultural significance. It requires an understanding of the factors that make a place culturally significant, and why, and enables appropriate decisions to be made about the management of that place. OEH recognises and acknowledges that Aboriginal people are the primary source of information about the value of their heritage and how this is best protected and conserved and must have an active role in any Aboriginal cultural heritage planning process.

OEH notes that the proponent has not provided details of the cultural significance of the Aboriginal sites identified within the project area. The proponent has primarily relied on information regarding the cultural significance to be readily provided by the registered community members during field assessments. Consultation with the community should be separately undertaken to target the cultural significance of any identified Aboriginal objects. OEH requests that the proponent provide additional evidence from the registered Aboriginal stakeholders confirming the cultural significance and value of all Aboriginal cultural heritage within the project area to complete the overall significance assessment. Any information provided should also be addressed in developing Aboriginal cultural heritage management options and commitments.

ATTACHMENT B

Checklist of information required when utilising the BioBanking Assessment Methodology (DRAFT)

A hard copy and soft copy of all requirements:

- BioBanking Assessment Report. The BioBanking Assessment Report should include:
 - a description of the proposed development;
 - measures to avoid and mitigate the impacts of development;
 - an assessment of indirect impacts;
 - a statement of onsite measures;
 - a description of the application of the BioBanking assessment methodology, including details on and assumptions made in utilising the methodology, such as (but not limited to) placement of assessment circles, remnant value, connectivity and reasoning behind selection of vegetation types in the BVT database;
 - plot and transect values including a list of the indigenous plant species identified in each of the plots;
 - a description of targeted threatened flora and fauna surveys, and any general baseline surveys (including vegetation specific surveys). These should be also be provided schematically; and
 - the BioBanking Credit Report.
- Where required, the BioBanking Assessment Report should also include:
 - expert reports;
 - an application for a determination on red flag areas;
 - more appropriate use of local data for vegetation types, benchmarks or threatened species;
 - environmental contributions accompanied by a BioBanking Agreement Credit Report (if applicable); and
 - application for deferred retirement arrangements (if applicable).
- copy of the xml. File(s) exported for the proposal from the BioBanking Credit Calculator.
- copies of completed field data sheets, and updated with correct plant taxonomy in instances where field names have been used.
- maps (soft copy as A4 or as jpgs), preferably named:
 - Property boundary;
 - development footprint;
 - vegetation zones; and
 - Asset protection zones or other management zones.
- separate shape files should be supplied for all the maps mentioned above plus:
 - plots and transects;

- assessment circle; and
- species polygons.

NOTE:

- (i) All maps must include:
 - a title (as per the names above);
 - the site's name, location and lot/DP numbers;
 - the scale and grid;
 - the date it was prepared; and
 - a legend.
- (ii) Boundaries and zones must be confirmed on the site using a GPS. This information should be digitised onto an ortho-rectified aerial photo or SPOT-5 image. Maps must be easily readable and submitted to OEH as a Geographic Information System (GIS) file that is ESRI compatible.
- (iii) Shapefiles must use the GDA94 datum. Name each shapefile as: 'development site name_descriptor', for example, 'Nundah bank_vegetation zones'.