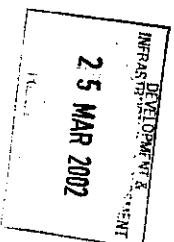


19 March 2002



Ms Caitlin Richards  
Development and Infrastructure Assessment  
PlanningNSW  
20 Lee Street  
SYDNEY NSW 2000

**NSW  
NATIONAL  
PARKS AND  
WILDLIFE  
SERVICE**

3050/5

Our Reference:  
Your reference:  
Dear Ms Richards,

### **Pacific Highway Upgrade - Bulahdelah Bypass**

I refer to a recent discussion between your and National Parks and Wildlife Service (NPWS) representative Ms Kim Forsyth. In this discussion, the NPWS requirements on the preparation of an Environmental Impact Statement (EIS) for the Bulahdelah Bypass were requested. It is understood that the following comments may form part of the Director-General's Requirements for an EIS.

The NPWS has a statutory responsibility for the care and protection of native flora and fauna and sites of Aboriginal heritage throughout NSW and for the management of NPWS estate. The following comments relate to these statutory responsibilities.

It is recommended that the relevant issues in the attached general list of environmental issues be addressed during the course of the project. Some of the issues detailed will be of greater relevance than others depending on the natural and cultural heritage values of the area involved.

Of particular interest are the following:

- Areas of significance for native vegetation, with particular reference to the value of habitat for threatened species, populations or ecological communities and their habitats, or regionally significant species and vegetation associations, including Rare or Threatened Plants (ROTAPs).
- Areas of potential significance for native fauna with particular reference to the value of habitat for threatened species, populations or ecological communities, or regionally significant species.
- Areas of archaeological potential and Aboriginal heritage value as identified by the Aboriginal community and sites registered on the NPWS Aboriginal Sites Register.
- Areas of the NPWS estate.

It is recommended that, initially, a search of the NPWS Wildlife Atlas be undertaken for flora and fauna records. If the study area possess attributes such as those identified above, it is recommended that detailed surveys be undertaken

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to determine the natural heritage values of the area and potential impacts on these values.

Attention should be given to mitigating impacts through appropriate amelioration methods, including modifications to the proposal. Depending on the nature and extent of impacts and the natural heritage values of the study area, consideration should be given to amelioration measures which compensate for impacts such as securing native vegetation protection or restoring native vegetation within or adjacent to the study area.

To assist evaluation of the potential impacts of the proposal on Aboriginal heritage values, it is recommended that the proponent undertake a search of the NPWS Aboriginal Heritage Information Management System (HIMS). An assessment of the archaeological sensitivity of the subject land should be undertaken by an appropriately experienced person in consultation with the local Aboriginal community and should address the above matters. The outcome of the assessment and consultation should be incorporated in the proposed strategy. Pending the outcome of this preliminary assessment, there may be a need for an archaeological survey of the subject site to be carried out by a suitably qualified person.

Should you require further information on this matter please contact Ms Kim Forsyth at this office on (02) 6659 8218.

Yours faithfully,



**GARY DAVEY**

Manager Conservation Programs and Planning Division  
Northern Directorate

for DIRECTOR-GENERAL

ATTACHMENT: ENVIRONMENTAL ISSUES TO BE ADDRESSED.

CC: DAVID YOUNG - PPK, PO Box 1162, NEWCASTLE NSW 2300

**NSW NATIONAL PARKS AND WILDLIFE SERVICE, NORTHERN DIRECTORATE**  
**ENVIRONMENTAL ISSUES TO BE ADDRESSED**

**INTRODUCTION**

The following list is provided to assist in the preparation of environmental impact assessment reports. The list details the type of information that is recommended by the New South Wales National Parks and Wildlife Service (NPWS) for inclusion in such assessments.

Please note that the provision of information in accordance with this list does not negate the applicant's obligations under any legislative or planning instruments. NPWS suggests that the applicant contact the relevant local council and the Department of Planning to ascertain these obligations.

**GENERAL**

1. Map(s) showing the locality of the proposed development in a regional and local context. Local context maps should be based on 1:25 000 topographic plans. Photographs of the site's key attributes may provide useful documentation.
2. A description of the existing environment on the subject land and surrounding land, the proposed development and ancillary works, and the manner in which the environment will be modified by the proposal (particularly with regard to the clearing of native vegetation and impacts on fauna habitat).
3. A map showing the vegetation communities identified within the study area.
4. A description of the vegetation communities identified within the study area including a description of the vegetation structure (including 'stags', hollow-bearing trees and other old growth attributes) and a plant species list for each community. The species list should not include the presence of any 'sensitive species'; see *Flora 2*, and *Sensitive Flora Species* below. A separate list should be forwarded to NPWS noting the presence of these species.
5. An estimate of the number of hectares of each identified vegetation community likely to be removed by the proposal.
6. An estimate of the number of any hollow-bearing trees likely to be removed by the proposal.
7. A map showing any identified vegetation and/or wildlife corridors in the study area.
8. The area subject to development should be clearly identified on an appropriately scaled plan. This includes all ancillary works such as buildings and other structures, parking areas, loading/processing/treatment areas, access roads, and material stockpiling areas.
9. The applicability or otherwise of Local Environment Plans (LEP), Regional Environment Plans (REP) and State Environmental Planning Policies (SEPP) and Regional Vegetation Management Plans (RVMPs) to the site should be determined and detailed. In particular, your attention is drawn to SEPP No. 14 - Coastal Wetlands, SEPP No. 26 - Littoral Rainforest, SEPP No. 44 - Koala Habitat Protection and the *Native Vegetation Conservation Act 1997*.
10. Existing land use in the area including adjacent roadworks and land already zoned, proposed or approved for urban development.
11. A description of likely accumulative impacts in the area including land already zoned or approved for urban development, adjacent roadworks and further developments and resulting impacts likely to occur as a result of the proposed development.
12. Any proposals for nature reserves, national parks and/or Aboriginal land claims in the area.
13. Your attention is also drawn to the new Commonwealth legislation, the *Environment Protection and Biodiversity Conservation Act 2000*. The Act specifically focuses on matters of national environmental significance (NES matters) which include listed threatened species and ecological communities, World Heritage properties, Ramsar wetlands of international importance, internationally protected migratory species and Commonwealth Marine Areas. If any NES matters under this legislation may be affected by the proposal, approval for the development may also be required from Environment Australia.

## FLORA

1. A comprehensive description of the vegetation on the site. This will include an assessment of the condition of the plant communities present, including the designation of conservation significance at a local, regional and State level, and an assessment of the likely occurrence of any threatened species, populations or ecological communities listed under Schedules 1 or 2 of the *Threatened Species Conservation Act 1995* and any Rare or Threatened Australian Plant (ROTAP) species.
2. A plan showing the distribution of species of conservation significance (including threatened, ROTAP or regionally significant species) and the vegetation communities on the site, and the extent of vegetation proposed to be cleared. If the location of the species is considered to be of a sensitive nature (eg the species is at threat from 'collection'), the location should not be included in the EIS or in any other document or pamphlet that is to be made available to the general public. A plan showing the location of the 'sensitive species' should be forwarded under separate cover to NPWS. A list of 'sensitive species' is provided below. Plans showing the distribution of threatened or ROTAP species should be at the same scale as the plan of the area subject to development in order to assist in the assessment of the impact of the proposal on the existing vegetation.
3. Where the assessment concludes that threatened species, populations or ecological communities, or their habitats, exist on or in proximity to the subject land, the effect of the proposed development should be determined in accordance with the eight point test described in Section 5A of the *Environmental Planning and Assessment Act 1979*. An assessment of the impact of the development on the plant communities and/or ROTAP species should also be provided.
4. A description of the measures proposed to mitigate and/or ameliorate the impact of the development on the plant communities, threatened and ROTAP species.

## SENSITIVE FLORA SPECIES ie:

### Orchids

*Phaius australis*  
*Phaius tankervilleae*  
*Sarcochilus* spp.  
*Dendrobium* spp.

### Ferns

*Angiopteris evecta*

## FAUNA

1. A fauna survey to identify the distribution and abundance of fauna species known or likely to utilise the site, including a description of available fauna habitats (including presence of hollow-bearing trees and other old growth attributes) and an assessment of the conservation status of each of the faunal components at a local, regional and State level.
2. A plan showing the results of the above survey. This plan should be at the same scale as the plan of the area subject to development to assist in the assessment of the impact of the proposal on fauna.
3. An assessment of the impact of the development on the identified fauna.
4. An assessment of the existence or likely occurrence of threatened species, populations or ecological communities, or their habitats on the subject land. Where the assessment concludes that threatened species, populations or ecological communities, or their habitats exist on or in proximity to the subject land, the effect of the proposed development should be determined in accordance with the eight point test described in Section 5A of the *Environmental Planning and Assessment Act 1979*.
5. A description of the measures proposed to mitigate and/or ameliorate the impact of the development on fauna. Details must be provided of the measures proposed to mitigate the effect of the proposal. The location of fauna over or underpasses, and exclusion fencing should be cleared identified on a plan. The plan should be at the same scale as the plan of the area subject to development.

## CULTURAL

1. The presence or absence of Aboriginal sites should be identified and the significance of the area to the local Aboriginal community must be determined. Accordingly, a search of the NPWS Aboriginal sites register should be made and the local Aboriginal community should also be consulted with regard to any Aboriginal heritage issues associated with the proposed development.

2. Aboriginal sites and places of significance to the Aboriginal community are to be detailed on a plan. This plan should be at the same scale as the plan of the area subject to development to assist in the assessment of the impact of the proposal on the identified cultural components.
3. An assessment of the impact of the development on the identified cultural sites.
4. A description of the measures proposed to mitigate and/or ameliorate the impact of the development on the identified cultural sites.
5. A contingency plan that details the measures to be taken in the event that archaeological sites are discovered during the course of operations must be prepared.

#### NATIONAL PARKS ESTATE

1. Where the proposal may result in impacts on NPWS estate or is on land adjacent to NPWS estate, an assessment of the impact of the development on NPWS estate.
2. A description of the measures proposed to mitigate and/or ameliorate the impact of the development on the NPWS estate.

#### NOTES

##### Surveys and Assessments

1. Fauna, flora and cultural surveys and assessments should be undertaken by suitably qualified persons and the qualifications and experience of the persons undertaking the work detailed.
2. Dates, site locations, design, methodology, analysis techniques, and weather conditions at the time of the assessments and surveys must be described. The limitations of surveys should be identified and the results interpreted accordingly.
3. Conclusions drawn in surveys and assessments should be substantiated by evidence resulting from those surveys and assessments. The document being supported by the surveys and assessments should reflect these conclusions and clearly state where recommendations of the survey and assessments have been incorporated in the proposal.

##### NPWS Databases

1. The NPWS can provide records of flora and fauna held in the Wildlife Atlas and / or Rare or Threatened Australian Plants (ROTAP) databases. In addition NPWS has a Aboriginal Heritage Information Management System of which searches can be made. These services generally attract a fee. Enquires should be made to NPWS Hurstville office, telephone (02) 9585 6444.
3. It should be noted that the above databases are not comprehensive and should only be used as a guide. They do not negate the need for specific site investigations.