

CONACHER



TRAVERS

*environmental  
consultants*

Our Ref: 7018:JT/ec

3 October 2007

National Manager – Strategic Urban Planning  
Development Division  
Stockland  
Level 12  
157 Liverpool Street  
SYDNEY NSW 2000

Attention: Deborah Dearing

Dear Deborah

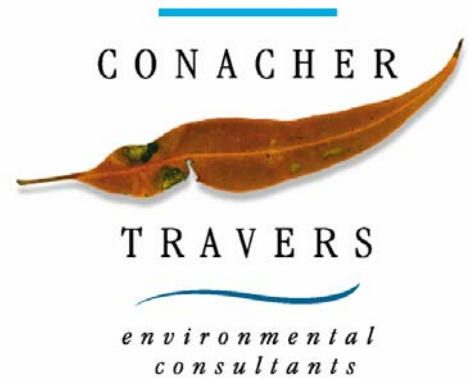
**Re: Expert Summary Statement - Catherine Hill Bay and Gwandalan**

Please find attached the expert summary statement in the format requested.

I trust that information meets your requirements. If you have any queries or require further information, please do not hesitate to contact our office on (02) 4340 0677.

Yours faithfully

John Travers  
Director  
**CONACHER TRAVERS PTY LTD**



## Catherine Hill Bay and Gwandalan

### Review of Environmental Assessment Report by John Travers October 2007

#### Ecological and Bushfire Issues

#### Credentials

Bachelor of Applied Science (Parks & Recreation). Charles Sturt University 1990  
Associate Diploma of Park Management (Parks & Wildlife). Riverina Murray Institute of Higher Education 1987.  
Associate Dip. Applied Science 1980 (part)  
Aerial Photo Interpretation Course, NPWS 1983  
Park Rangers Correspondence Course, 1975 (part)  
NSW Association of Consulting Ecologists  
The Australian Natural Resources Management Association  
Environmental Institute of NSW & New Zealand

#### **Professional Panels**

Fairfield Council *Independent Hearing and Assessment Panel*, 1999 on Rural Fire Service *Working Party*, since 2003  
Liverpool Council *Independent Hearing and Assessment Panel* (1998-03)  
Wyang Threatened Species Assessment Committee (2001)  
Central Coast *Regional Catchment Committee* (2001)  
Coronial Inquiry "*Taskforce Boyne*" NSW bush fires (1994)  
Chairman of the *Standing Committee* of the Co-ordinating Committee (1992-1993)  
Exec. Officer of the Co-ord. Committee of the Bushfire Council of NSW (1991-1993)  
Tuggerah Lakes *Catchment Management Committee* (1998-2001)  
TLCMC Natural Resources *Task Group* (1998-2000)  
Secretary, Grabine State Recreation Trust, NPWS – (1985)  
Secretary, Munmorah State Recreation Trust, NPWS (1987-1989)  
Member of Wyong District Bushfire Protection Committee (1986-1991)  
Member of the Hunter District *Bush Fire Prevention Association* (1985-1986)

#### Relevant Experience

#### **ECOLOGICAL AND BUSHFIRE PROJECTS**

I have been the principal consultant for a variety of ecological and restoration projects. These have ranged from flora and fauna studies and assessments for single-lot developments to ecological surveys and assessments for areas of several hundred hectares. Projects have related to impact assessment, baseline surveys, ecological management planning, restoration planning and monitoring, as well as other environmental studies.

I have also directed over 4,000 bushfire related projects, including bushfire protection and bushfire threat assessments, evacuation management plans, risk analysis and management studies and fuel management plans. Relevant projects include:

#### **Wallarah Peninsula Eco-residential Development**

##### *Stockland Wallarah Peninsula*

This site is a mosaic of ecological communities and significant vegetation. The integration of bushfire and ecological outcomes for this project has involved innovative solutions and input

into the design process since inception. The wide variety of topographic and ecological aspects of the site has resulted in varying development outcomes in different sectors. This project is been a major achievement in terms of delivering integrated bushfire, conservation and development outcomes.

### **Seven Mile Beach Eco-Residential Development**

#### *Wise Property Group*

This eco-residential development is located within an ecologically sensitive area containing a locally important population of Squirrel Gliders. The bushfire management associated with this site involved a complex analysis of the ecological aspects of the area to develop a solution which protected the environmental values, whilst providing adequate bushfire protection for the future residents.

### **EXPERT TESTIMONY**

I have acted as an expert witness and prepared evidence for over 112 cases before the Land and Environment Court of NSW. I work with other specialists and the legal professionals to arrive at a positive and truthful representation of the facts of a case.

### **Overview**

#### ***Ecological Matters***

There are a number of deficiencies in ecological survey assessment outlined in the Environmental Assessment Report that has been written for the development proposal of two sites, Lot 3 DP 588206 Kanangra Drive Gwandalan and a number of lots at Catherine Hill Bay.

I have undertaken a review of the current application and, having found that the ecological reports prepared by Wildthing Consultants in October 2003 and February 2004 have not been updated in terms of the survey undertaken over the site, have included below information which was previously provided for the original submission refused by IHAP.

Further reports have also been reviewed including Appendix U of the Environmental Assessment Report entitled 'EPBC Draft Public Environment Report' by Asquith and deWitt (August 2007), and Appendix O Bushfire Hazard Assessment by Barry Eadie Consulting Pty Ltd.

The absence of adequate flora and fauna surveys within the proposed development and conservation offset areas make the suggestion within the Environmental Assessment Report (Asquith & deWitt) that the proposal will have positive biodiversity and conservation outcomes for the region unjustifiable. The principle existing threatened Flora and Fauna survey and assessments prepared for parts of the site (Wildthing Environmental Consultants 2003 and 2004), is now significantly out of date in its consideration of the relevant legislation.

In regard to the threatened species *Tetratheca juncea*, this assessment however clearly states that 'Whilst this species is recognised as being adequately conserved on a regional scale, the proposed development of this site may significantly impact upon the local population of this species'.

The additional flora study completed by Ecobiological (2006) included in the Environmental Assessment Report as Appendix I and titled 'Flora and Fauna Assessment – Catherine Hill and Moonee', only provides information in regard to additional targeted surveys for a portion of the species identified with potential habitat on site and provides no ecological assessment.

In relation to the application for state significance, *Section 3.1 Environmental* of that report identifies that the Catherine Hill Bay site "has significantly degraded few ecological values" and estimates that an offset of only 12 ha would be required to clear the site.

This statement is completely unsubstantiated by the limited ecological studies completed for the following reasons;

- The surveys completed to date do not cover the entire site area of the proposal,
- The surveys area grossly inadequate (which is supported by their own study Wildthing 2003),
- The assessment is now significantly out of date in its consideration of the relevant legislation, particularly the schedules of the TSC Act 1995.

In fact, the limited survey completed within the site actually identified a number of significant ecological values including, the presence of threatened species and potential habitat for a wide range of other species. While it is also likely that a number of recently listed species and endangered ecological communities are also present within areas proposed for development.

Therefore, the estimated offset of 12 ha for the Catharine Hill Bay proposal and 13ha for the Gwandalan site, which is unsupported by any scientific reasoning, is likely to be a gross underestimate, particularly in relation to the offsets currently being enforced under the *Native Vegetation Act, 2003*.

The EPBC Draft Public Comment Report (Asquith and deWitt, 2006) estimates that the loss of bushland at Catherine Hill Bay is likely to be 15ha, whilst Gwandalan would be 13ha. This report also relies on the dedication of offset lands as a justification for the removal of this habitat which is known to contain *Tetratheca juncea* populations and to potentially contain 4 species of threatened orchids, namely *Cryptostylis hunteriana*, *Caladenia tessellata*, *Diuris praecox* and *Microtis angusii*.

To make this statement, the Draft EPBC report referred to above relies on the survey undertaken by Ecobiological in 2006. Targeted surveys were undertaken between October 2005 and February 2006 to determine the presence or absence of the above 4 ground orchids, none of which were found. This is not surprising considering that the survey was undertaken outside of the flowering period for at least one of these species, *Diuris praecox*, which flowers in August.

The Draft EPBC report recognises that 'based on the guidelines, the survey periods were not matched to the likely occurrence of the orchid species *Cryptostylis hunteriana* on the Gwandalan site'. This report also recognises that survey has not been undertaken in the dedication lands but goes on to state that these lands 'appear to contain at least 100 hectares of *Tetratheca* and orchid habitat'. Without detailed survey being undertaken in the dedication lands, this statement is completely unsubstantiated.

These sites are definitely not "relatively free of physical constraints" as stated by the State Significance Proposal. It is however, highly likely that had these sites been adequately surveyed in accordance with industry standard Flora and Fauna survey guidelines and updated to consider the current species and communities listed as threatened on the relevant legislation, the limited ecological reports provided with this application would not support such a statement.

The draft EPBC report states in Section 9.7 that there is a high degree of confidence with which the impacts are known and understood. This confidence is based on the 'availability of like-for-like land offsets and the future management of the land as part of the National Park Estate'. Whilst it is agreed that the land will be suitably managed as part of the National Park Estate, based on the lack of survey undertaken within the dedication lands, it is highly questionable that the dedication lands provide a like-for-like offset. To substantiate this claim, considerable targeted survey would need to be undertaken in the dedication lands.

In summary the ecological reports are lacking in substance for the following reasons;

1. The limited survey completed within the site does not address the presence of threatened species and potential habitat for a wide range of species including; *Tetratheca juncea*, *Caladenia hunteriana*, *Caladenia tessellata*, *Diuris praecox*, Large-eared Pied Bat and Grey-headed Flying-fox.

2. Surveys undertaken by Conacher Travers within the nearby Munmorah State Recreation Area and Wallarah National Park have confirmed the presence of the threatened orchid *Rutidosia heterogama*. This species has not been considered in any of the ecological assessments undertaken for the current application.
3. The surveys completed to date do not cover the entire site area of the proposal.
4. The assessment is now significantly out of date in its consideration of the relevant legislation, particularly the schedules of the *TSC Act (1995)* and the *EPBC Act (1999)*.
5. There is no supporting information regarding riparian environments and or riparian values onsite or within the offset lands.
6. The survey and assessment has not been undertaken in accordance with the ecological survey guidelines and techniques required by *Lake Macquarie City Council and Wyong Council*, and or the *NSW Department of Environment and Conservation*.

These inadequacies highlight that this project and the Environmental Assessment Report have not adequately met the Director General's requirements, particularly as they relate to Impacts on Threatened species.

### ***Bushfire Matters***

Providing safe developments for both the immediate and the long-term future of this development is of vital importance. It is my opinion that further bushfire assessments and management opportunities be undertaken and considered as part of the decision making process for this area. Much more detail is required as to the level and types of bushfire protection measures that are to be employed.

Bushfire risk management planning is required to identify those areas of the greatest risk and plan accordingly. This includes managing the ecological aspects of the site as well as engaging the community to participate in bushfire protection measures. Fuel management planning is required to firstly assess the fuel levels within the area, then to adequately plan for the management and reduction of those fuels to address the bushfire risk and to result in appropriate residual fuel loads.

Planning for bushfire events is also required, with regards to providing safe evacuation for current and future residents of the site. An overarching review of the potential bushfire events should be undertaken to plan for major events and to reduce the likelihood of a high intensity bushfire occurring.

In addition a thorough monitoring, reviewing and consultation process is required. This includes a review period for documentation and plans, critical review by relevant agencies, such as the NSW Rural Fire Service and adequate consultation with the local Bush Fire Management Committee, the community, Council and other stakeholders.

The proposal does not provide sufficient information regarding bushfire protection or management. Given the nature of this site this appears to be a gross oversight in the pre-development planning that places current and future residents at risk from bushfire. With recent scientific evidence indicating a dramatic increase in fire event frequency and intensity due to climate change, it is prudent that developments adequately manage the bushfire risk.

Yours faithfully

A handwritten signature in black ink, appearing to read 'John Travers', with a stylized, looping initial 'J'.

John Travers  
Director

**CONACHER TRAVERS PTY LTD**