

**COMMENTS ON ENVIRONMENTAL CONSTRAINTS  
ANALYSIS REPORT**

**LOT 22 DP 1070182  
PACIFIC HIGHWAY  
SANDY BEACH NORTH**

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**Conacher Travers**

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## 1. INTRODUCTION

An application for a residential development of residentially zoned land at Sandy Beach (Lot 22 DP 1070182) has been lodged with the Department of Planning under Part 3A of the EP & A Act. Geoff Sainty of *Sainty and Associates* has been commissioned by the Department of Planning to review the available documentation on the ecological value of the land, identify and map lands suitable for environmental protection based on site survey and consideration of existing studies.

A Report has been prepared by *Sainty and Associates* in relation to the subject site titled Environmental Constraints Analysis, Lot 22 DP 1070182 Pacific Highway, Sandy Beach North. This Report is accompanied by a plan prepared by *Newnham Karl Weir and Partners Pty Ltd* which shows areas identified by *Sainty and Associates* as High Conservation Significance, Environmental Buffers, and Vegetation Communities.

In brief the *Sainty and Associates* Report identify that the areas of Eucalypt forest / woodland to the east of the Pacific Highway and other forested areas throughout the site have been determined as high conservation significance. Environmental buffers of 50 metres are proposed around these vegetated areas while a 100 metre buffer is proposed around the Salt Marsh edge of Hearn's Lake to protect the habitat of migratory shorebirds. A 30 metre buffer is proposed for the dunes.

This current report provides comments in relation to the methods used conclusions and recommendations of the *Sainty and Associates* Report.

## 2. ASSESSMENT METHODOLOGY

The *Sainty and Associates* Report relies on the vegetation mapping from Council's Draft Vegetation Conservation Strategy. It has been proven by detailed site vegetation survey by *Conacher Travers* that the vegetation classification maps of this strategy do not correspond to the vegetation actually present on the site. Therefore the use of these classifications for comparison purposes (Section 2.3) will result in inaccurate determinations of the Conservation Ratios of the vegetation types present. This has resulted in *Sainty and Associates* determining that the open forest / woodland between Hearn's Lake and the Pacific Highway has a high conservation significance rating.

No evidence of detailed site survey for vegetation types is provided in the *Sainty and Associates* Report. Therefore the vegetation types determined by *Conacher Travers* form the most accurate survey details for the site.

In relation to environmental buffers *Sainty and Associates* cite Winning (1997) as stating that "buffers should be determined on a case by case basis after site specific investigations".

This is a major oversimplification of the work by Winning (1997). In his report on the Functions and Widths of Wetland Buffers Winning (1997) states:

*"It is evident that most recommendations for minimal buffer widths are derived from previous arbitrary recommendations by others."*

*"It is also important that the buffer recommendation be clearly substantiated so that others may follow the reasoning, whether they agree or disagree with it."*

*"In summary enforcement by Government agencies etc of a strict requirement for a standard, arbitrarily determined buffer width is not necessarily the optimum solution for all situations."*

In determining that an arbitrary buffer width of 50 metres or 100 metres needs to be applied to the Endangered Ecological Communities and Hearn's Lake, *Sainty & Associates* have not utilized any site specific surveys or assessment of proposed impact mitigation measures. The determination of buffer zone requirements has been made on the following basis:

- Saltmarsh, being a low growing community, usually requires a 30 metre buffer,
- Migratory shorebirds using this habitat will require that this buffer be extended to 100 metre due to their sensitivity to noise and visual disturbance,
- Swamp Sclerophyll Forest being comprised of taller tree species requires a buffer of 50 metres.

The recommendation of buffer zone widths based on the height of vegetation is not an accepted methodology and is not based on scientific evidence. *Sainty and Associates* identify that the 50 metre buffer is to reduce edge effects and to allow for regeneration. Based on this statement there is a clear intent indicated in the *Sainty and Associates* Report that they are promoting the site to be utilized for the expansion of endangered ecological communities.

*Sainty and Associates* also identify that any bushfire asset protection zones are to be outside of the buffer zones. Therefore the buffer zone would essentially become a development exclusion zone.

In relation to the requirement for a buffer zone of 100 metres to the Saltmarsh to reduce noise and visual disturbance this recommendation came from Straw (2003), Straw and Saintilan (2006). This recommended buffer zone of 100 metres varies markedly from the 30-50 metre buffer zone (from waters edge) recommended by Straw (2000) to reduce noise and visual disturbance from a tourist development around the shores of a large lake in the Hunter Valley.

In determining the width of buffer zones of 30,50 or 100 metres *Sainty and Associates* have not provided any evidence that they have considered the proposed stormwater management measures, habitat protection or other environmental protection / management strategies proposed.

*Sainty and Associates* quote Bennett and Mulongoy (2006) in relation to the purpose of a buffer zone, however this quote is incomplete.

The more complete version of this quote is:

*The prime purpose of a buffer zone is to insulate areas where biodiversity conservation is the primary objective from potentially damaging external influences, and particularly from those caused by inappropriate forms of land use. In principle, this function therefore permits a range of sustainable human activities.*

Therefore there is a stated intent in the purpose of a buffer zone that its function permits a range of sustainable human activities. This factor has not been identified by *Sainty and Associates*. It appears that the buffer zones are in fact development exclusion zones. In relation to the proposed buffer zone of 50 metres around the southern area of Swamp Sclerophyll Forest it is evident that areas of existing residential development, the sewer pump station and the overflow of this sewer pump station occur within 50 metres buffer zone. Likewise a 750 metre length of the Pacific Highway would be included within the required buffer zone to the vegetation identified as a high conservation area. *Sainty and Associates* have not identified how the functions and use of the sewer pump station, residential area and Pacific Highway will be curtailed and relocated to accommodate the provisions of a 50 metre buffer zone.

### **3. IMPLEMENTATION OF BUFFER ZONES**

Buffer zones are sometimes implemented in planning/development proposals in conjunction with engineering measures and environmental management strategies to manage and reduce the impact of a development on an area of land to be conserved for biological purposes. While some government departments may have recommended setbacks to creeks, lakes, water bodies etc there is no legislative requirement to implement a standard buffer zone to areas of land proposed to be retained for conservation purposes.

In relation to the development applications the legislative requirements in relation to threatened species, endangered ecological communities or their habitats is to undertake an assessment to determine if the proposed development is likely to result in a significant effect on threatened species or endangered ecological communities.

The assessment undertaken by *Sainty and Associates* did not undertake such a threatened species assessment but instead completed a report which determined the extent of buffer zones recommended for the site. In stark comparison to the recommendations by *Sainty and Associates* it is interesting to note that the Independent Review Panel for the South Coast Sensitive Urban Lands Review (Report by Mr A Refshauge Panel Chair to the Minister For Planning, October 2006) recommended the implementation of specific buffer zones of 30 metres around sensitive areas at only one site out of sixteen (16) sites considered to be environmentally sensitive within the South Coast Sensitive Urban Lands Review.

### **4. CONCLUDING COMMENTS**

The *Sainty and Associates* Report has recommended buffer zones (development exclusions zones) of 30 metres, 50 metres and 100 metres around vegetated areas with insufficient assessment and justification.

Bennett and Mulongoy (2006), a key reference used by *Sainty and Associates*, have identified that ...*"Decisions to restrict human activities in buffer zones will also impose costs on the landowners and users, raising the question of compensation"*.

In regard to the overall proposal and recommendation for extensive implementation of buffer zones throughout the site, the *Sainty and Associates* Report is a significant variance to currently accepted coastal development options. The application of large width buffer zones with no consideration of future ownership and management responsibilities is at variance with other significant proposals being considered by the Department of Planning under Part 3A of the EP&A Act.

The implementation of the buffer zones as recommended by *Sainty and Associates* should not be adopted for this site as they:

- i) Have not been determined on the basis of specific site characteristics, including site zoning.
- ii) Do not incorporate any scientific assessment or justification in relation to buffer zone width.
- iii) Do not incorporate any provision or consideration of ongoing management responsibilities.
- iv) Have not undertaken an appropriate assessment in relation to the requirements of the EP&A Act.
- v) Have not considered the proposed stormwater drainage and environmental impact mitigation measures.

Comments Prepared by

P A CONACHER  
1/11/2006

#### **Reference**

1. Straw P (2000) *Threatened waterbirds at Colliery Dam, Richmond Vale (Specialist Report for Species Impact Statement commissioned by Conacher Travers Pty Ltd.)*
2. Winning G. (1997) *The Functions and Widths of Wetland Buffers. Unpublished Technical Comment Hunter Wetlands Research.*