

# Tweed Area E Local Environmental Study

March 2004

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Tweed Shire Council

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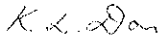
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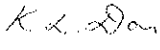
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## Executive Summary

On 19 July 2000, Tweed Shire Council resolved to prepare a draft Local Environmental Plan (LEP) and Local Environmental Study (LES) under Section 54 of the *Environmental Planning and Assessment Act 1979*, for land identified in Tweed Shire's Residential Development Strategy as Area E. Parsons Brinckerhoff Australia Pty Ltd has been engaged by Council to prepare the aforementioned statutory instruments for Area E. The purpose of the LES is to assess the site for opportunities, constraints, strengths and weaknesses, both statutory and 'on-site', for release as urban development.

Area E is identified in the Tweed Residential Development Strategy 1991 (p. 45) as a logical extension for urban development in the Shire. The site is located adjacent to the rapidly growing locality of Banora Point and is generally bounded by Mahers Lane, Terranora Road and Fraser Drive. Area E is comprised of fifty-seven allotments in seven agglomerated property holdings and thirty-three allotments in individual ownership. Under the Tweed LEP 2000, the site is zoned:

- 1(b1) Agricultural Protection (predominant zoning);
- 5(a) Special Uses (Lindisfarne Anglican Secondary School only); and
- 7(a) Environmental Protection (wetlands and littoral rainforests).

The then Department of Urban Affairs and Planning (DUAP) (now the Department of Infrastructure, Planning and Natural Resources (DIPNR)) advised that the Local Environmental Study for Area E would be required to have regard for:

- The need for consultation with, and agreement from, NSW Agriculture if the land is to be released. DUAP notes that Area E is one of few areas in the Shire zoned 1(b1), being a scarce natural resource.
- Policy 18 (Agriculture) of the Tweed Shire Strategic Plan 2000+, being "include prime crop and pasture land... in an Agricultural Protection Zone to ensure the economic base of Tweed's agricultural industry is maintained.
- A provision of the Terranora Strategic Interim Planning Statement being "to retain the integrity of remaining prime agricultural land".

This LES has been prepared in accordance with the Environmental Planning and Assessment Act 1979 and the requirements of Tweed Shire Council's Consultant Brief.

Area E has a number of development constraints and opportunities which are outlined within this report. The most significant of these are as follows:

- The site is a logical infill site bounded on two sides by existing urban development. It is also located in close proximity to services provided by Tweed Heads.
- The site can be readily serviced with most infrastructure required for an urban area and its development has been planned for a considerable period of time.
- Development of this area will limit pressure on uncoordinated development in other parts of the Shire.
- A number of environmental assets will require conservation and protection within any land-use options chosen for Area E. Buffers and rehabilitation strategies will be implemented for areas that are considered as containing high environmental values, including the wetlands area.

- Traffic generation of the fully developed Area E proposal was estimated to be 16,000 daily trips and 1,500 trips in the peak hour. There are currently four possible access routes between Area E and activity centres to the north-east, which include Terranora Road, Frazer Drive and Leisure Drive, Fraser Drive, Dry Dock Road and Frazer Drive, Leisure Drive and Greenway Drive. Analysis of existing mid-block traffic volumes on these access routes showed these routes would not have sufficient mid-block capacity to accommodate anticipated future traffic volumes resulting from the development of Area E and that road upgrades would be required. Tweed Shire Council is currently planning for these upgrades.
- The water supply, sewage, electricity and telecommunications infrastructure will require upgrading to service the proposed development of Area E. This will include:
  - ▶ The existing 600mm Duroby main will be used to supply water to Area E, along with the development of a pipeline on-site connecting the proposed 3ML reservoir with the 600mm Duroby main. Given the low lying land within Area E, a booster pump from the Duroby main to the reservoir is also recommended.
  - ▶ A new regional sewage pump station and rising main is proposed for servicing Area E when fully developed.
  - ▶ A 66,000 volt electricity transmission corridor will run through the area.
  - ▶ Future telecommunication services will be dependant on the planning outcomes for the site which are yet to be delineated, including residential lot yield.
- Social and community infrastructure and resources that are not present in Area E, may be required for the future development of the site. The existing infrastructure and resources for the site will be required to be augmented to adequately service the anticipated population growth for Area E.
- There are significant hydrology, flooding and drainage constraints for the development of Area E, including runoff from the site contributing to the silting of the mud basin in Terranora Broadwater. Furthermore, the area is identified as an area that may potentially generate acid runoff and nutrient problems as a result of development.
- The sections of the site that are considered as being unsuitable for development, due to geotechnical constraints, are recommended to be used for the purpose of stormwater quality treatment. Due to the soil components (silty and sandy clays) promoting an increase of fine material in stormwater runoff, larger sedimentation areas are advised to resolve this issue. The existing flow paths that are currently utilised for stormwater management should be retained and rehabilitated through the removal of weeds and the subsequent planting of native grass species to ensure adequate sediment and pollutant filtration.
- The rehabilitation of the wetlands area to return it largely to a freshwater regime will eliminate potential breeding habitat for salt marsh mosquitoes. The freshwater mosquito species have a substantially limited range of nuisance. In addition, this action would also ensure that the areas identified as potential acid sulfate soils (PASS) and acid sulfate soils (ASS) remains inundated, limiting potential ASS discharge events.
- As it is unlikely that any change in land use will be supported until the investigations to the appropriate guidelines have been completed for contaminated land, further assessment of point sources and broad acre soil contamination needs to be carried

out, as current data at hand indicates site contamination is present, and there is further potential for site contamination.

- Further details of the constraints and subsequent management strategies are outlined within this report.
- The proposed land uses within Area E will be apportioned as outlined below:
- The provision of trunk (or major/primary) infrastructure will be required to service both Area E and surrounding uses:
  - ▶ Mahers Lane - Terranora Road extension, which will be a minimum of 50 m from the extent of any wetland area (to facilitate wetland conservation);
  - ▶ both electricity transmission corridors (subject to Clause 37 of the LEP) identified in constraints mapping, including a buffer (in plan) of at least 20m (total width) to facilitate operational and occupational health and safety (the linear buffer would be able to be utilised for passive recreation and would provide connection to local and district level parks);
  - ▶ a 3ML water reservoir of 30m diameter that requires approximately 0.3ha of site areas; and
  - ▶ protection of existing sewer mains traversing the site and new corridors for such infrastructure.
- With the residual land area balance equalling 205.6ha, excluding the development constraints, and a nominal 25% of this area being allocated to infrastructure the following approximate land use distribution is envisaged:
  - ▶ 130.45 ha being utilised for residential development at varying lot densities;
  - ▶ 16 ha being utilised for open space (as identified previously);
  - ▶ 15.15 ha being utilised for educational purposes;
  - ▶ 1,000 m<sup>2</sup> being utilised for a local commercial centre; and
  - ▶ 1,000 m<sup>2</sup> being utilised for local community purposes infrastructure.

It is concluded that the proposed rezoning of Area E is appropriate and that recommendations for mitigating potential impacts outlined within this report are adopted.

# 1. Introduction

## 1.1 General

On 19 July 2000, Tweed Shire Council resolved to prepare a draft Local Environmental Plan (LEP) and Local Environmental Study (LES) under Section 54 of the *Environmental Planning and Assessment Act 1979*, for land identified in the Tweed Residential Development Strategy (1991) as Area E.

Area E is identified in the Tweed Residential Development Strategy 1991 (p. 45) as a logical extension for urban development in the Shire. The site is located adjacent to the rapidly growing locality of Banora Point and is land generally bounded by Mahers Lane, Terranora Road and Fraser Drive (see Figures 1.1 and 1.2). Area E is comprised of fifty-seven allotments in seven agglomerated property holdings and thirty-three allotments in individual ownership.

On 11 August 2000, Council advised the then Department of Urban Affairs and Planning (DUAP) (now the Department of Infrastructure, Planning and Natural resources (DIPNR)) of their intention to prepare the amendments to the LEP for Area E. DUAP in response, confirmed on 10 October 2000 that a Local Environmental Study would be required for Area E, having regard to:

- the need for consultation with, and agreement from, NSW Agriculture if the land is to be released. DUAP notes that Area E is one of few areas in the Shire zoned 1(b1), being a scarce natural resource;
- Policy 18 (Agriculture) of the Tweed Shire Strategic Plan 2000+, being "include prime crop and pasture land... in an Agricultural Protection Zone to ensure the economic base of Tweed's agricultural industry is maintained"; and
- a provision of the Terranora Strategic Interim Planning Statement being "to retain the integrity of remaining prime agricultural land".

Tweed Shire Council subsequently prepared a Consultant Brief around 23 August 2002 for the preparation of the draft LEP, LES, associated Section 94 plans and Development Control Plans.

Parsons Brinckerhoff (PB) was engaged by Council in March 2003 to prepare the aforementioned statutory instruments for Area E. The purpose of the LES is to assess the site for opportunities, constraints, strengths and weaknesses, both statutory and 'on-site', for release as urban development.

This LES has been prepared in accordance with the *Environmental Planning and Assessment Act 1979* and the requirements of Tweed Shire Council's Consultant Brief.

In considering this LES, it is important to note that it has been established in the Land and Environment Court (*Burns Philp Trustee Company and Ors v Council of the City of Wollongong and Ors*) that an Environmental Study cannot be prepared by an applicant. Rather, such a study must be prepared by, or on behalf of, Council.

## 1.2 The Planning Framework

Tweed Shire Council's commission to Parsons Brinckerhoff was to establish a comprehensive planning framework for Area E. This framework requires the preparation of planning documents with ever increasing levels of detail to ensure that development across Area E is coordinated and that all issues are dealt with in an integrated manner.

The following table identifies this framework and briefly describes the role of each level in the framework.

**Table 1-1: The Planning Framework**

Component		Content and Purpose
1	Local Environmental Study (LES – this study)	<p>Addresses major planning matters and issues of relevance to the potential rezoning of Area E. Identifies and addresses:</p> <ul style="list-style-type: none"> <li>▪ values and characteristics of site;</li> <li>▪ general planning requirements;</li> <li>▪ requirements of State Government agencies;</li> <li>▪ impacts on and off-site;</li> <li>▪ services required;</li> <li>▪ impact control measures;</li> <li>▪ recommendations for overall land uses; and</li> <li>▪ recommended zonings and controls for inclusion in the Tweed Local Environmental Plan 2000.</li> </ul> <p>The LES also provides recommendations for more detailed assessment /studies and requirements to be included in further stages of the planning framework</p>
2	Local Environmental Plan (LEP) Amendment	<p>The Local Environmental Plan Amendment is an outcome of the LES.</p> <p>It is a statutory amendment to the Tweed Local environmental Plan 2000 to include rezoning of land and specific provisions required to control future development.</p> <p>The LES and LEP are advertised at the same time and submissions are called for.</p> <p>The LEP amendment is finalised following consideration of all submissions and finally approved by State Government when all issues have been satisfactorily addressed.</p>
3	Structure Plan	<p>Follows on from the LEP amendment.</p> <p>The structure plan is an overall framework for coordinated development of the area. It will be developed based on principles outlined in the LES, current Tweed Shire Council planning policies and contemporary planning/urban design theory.</p> <p>The structure plan will identify:</p>

	Component	Content and Purpose
		<ul style="list-style-type: none"> <li>▪ the overall road network;</li> <li>▪ locations for specific uses;</li> <li>▪ open space;</li> <li>▪ environmental areas;</li> <li>▪ general design requirements; and</li> <li>▪ other relevant matters</li> </ul>
4	Development Control Plan (DCP)	<p>The DCP is a legal document which will encapsulate the specific design and development requirements for Area E. Development will only be allowed to occur once the DCP has been finalised.</p> <p>The DCP will be based on the structure plan and any specific requirements of the LES. The DCP will be used to assess future development applications for the site and developers must adhere to its requirements. The DCP will also work in conjunction with other more general DCPs that apply across the shire. The DCP must be advertised and any comments taken into account before it is adopted by Council.</p>
5	Section 94 Plans	<p>Area E will require specific drainage, open space, roads and other facilities and infrastructure to ensure that it can develop in a manner which protects the environment and meets the needs of the community. Section 94 of the NSW Environmental Planning and Assessment Act 1979 allows Council to develop plans to allow developer contributions to be collected to fund these facilities and infrastructure.</p>