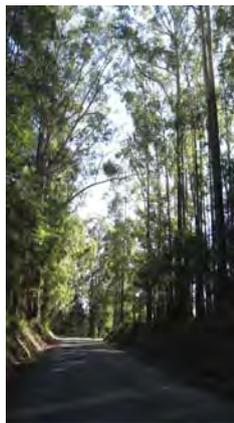




CLIENTS | PEOPLE | PERFORMANCE



# Coffs Harbour City Council North Boambee Valley (West) Structure Plan



July 2009



# Contents

Preamble	i
1. Introduction	1
1.1 Purpose Of This Structure Plan	1
1.2 How Will This Plan Be Used?	1
1.3 Key Objectives	1
1.4 The Study Area	2
1.5 Influences	3
2. Planning Context	4
2.1 North Boambee Valley Planning History	4
2.2 Relevant Planning Documentation	5
2.3 Relevant Statutory Documents	6
2.4 Relevant Strategic Documents	8
2.5 A Structure Plan in the Planning Hierarchy	12
3. Population and Housing	13
3.1 Population Profile	13
3.2 Housing Profile	15
3.3 Residential Densities	17
3.4 Employment and Industry Profile	18
3.5 Meeting the Housing Needs of the Population	18
3.6 Population, Housing and Employment Profile Implications	20
4. Community Values and Vision	21
4.1 Community Consultation	21
5. Land Suitability Assessment	23
5.1 Land Suitability	23
5.2 Environmental Constraints	23
5.3 General Development Issues	26
5.4 Constraints Analysis	28



6.	Sustainable Urban Design Principles	29
6.1	Sustainable Urban Design Principles for North Boambee Valley (West)	29
6.2	Flexibility of the Structure Plan	31
7.	Urban Structure	32
7.1	Precinct Area Recommendations	32
8.	Managing Urban Growth	49
8.1	Residential	49
8.2	Neighbourhood Centre	50
8.3	Industrial	51
8.4	Natural Environment	53
8.5	Environmental Hazards	54
8.6	Climate Change	55
8.7	Open Space	56
8.8	Scenic Protection	59
8.9	Education Facilities	60
8.10	Community Facilities	60
8.11	Access and Circulation	61
8.12	Infrastructure	63
8.13	Indigenous Heritage	64
8.14	Balancing Urban and Environmental Sustainability	64
8.15	Lot Yield	65
9.	Implementation	67
9.1	Community Comment	67
9.2	Recommended LEP Changes	67
9.3	Local Environmental Study	68
9.4	Precinct 4 – Potential Industrial Investigation Area.	68
9.5	Further Flood Studies	68
9.6	Industrial Lands Strategy	69
9.7	Development Control Plan	69
9.8	Financing – Contributions Plan	75
9.9	Staging	76
10.	References	78



## Table Index

Table 1	Population Size and Population Change in Coffs Harbour LGA (1996 to 2006)	13
Table 2	Occupied Private Dwelling Growth from 1996 to 2006	16
Table 3	Typical Dwelling Yields	17
Table 4	Proposed Dwelling and Population Yields for North Boambee Valley (West)	18
Table 5	Potential Population and Dwelling Yield	66
Table 6	Design Characteristics of Roads	75
Table 7	Staging	77
Table 8	Issues Ranking	83
Table 9	Land Suitability Analysis: Environmental Constraints	101

## Diagram Index

Diagram 1	Age Structure in 2006, Coffs Harbour and New South Wales	14
-----------	--	----

## Figure Index

Figure 1	Structure Plan	33
Figure 2	Planning Precincts	34
Figure 3	Precinct 1 – Low Density Residential	38
Figure 4	Precinct 2 – Village Centre	43
Figure 5	Precinct 3 and 4 Industrial Development	48
Figure 6	Open Space	58
Figure 7	Predominately Natural Developments	59
Figure 8	Access and Circulation	62
Figure 9	Overlooking Parks and Streets	73

## Appendix Figure Index

Appendix Figure 1	Land Suitability Analysis Framework	92
Appendix Figure 2	Study Area	104
Appendix Figure 3	Zoning Map	105
Appendix Figure 4	RTA's Preferred Pacific Highway Bypass Route	106



Appendix Figure 5	Topography	107
Appendix Figure 6	Contours	108
Appendix Figure 7	Slope	109
Appendix Figure 8	Acid Sulfate Soils	110
Appendix Figure 9	Bushfire Hazard	111
Appendix Figure 10	Contaminated Lands	112
Appendix Figure 11	Extractive Industries and Buffer Area	113
Appendix Figure 12	Flood Liable Lands	114
Appendix Figure 13	Koala Habitat	115
Appendix Figure 14	Vegetation Management	116
Appendix Figure 15	Land Constraints Map	118
Appendix Figure 16	Development Potential Areas	120

## Appendices

- A Community Consultation
- B Land Suitability Analysis
- C Figures
- D Land Constraints Map
- E Potential Development Areas



## Preamble

GHD and Coffs Harbour City Council met with the Department of Planning on 18 December 2007 with regards to the urban growth of North Boambee Valley. As a response to this meeting, Coffs Harbour City Council received a letter from the Department of Planning on the 15 February 2008. The Department of Planning reviewed the planning history of North Boambee Valley and concluded that some of the area will be included as a draft growth area in the draft *Mid North Coast Regional Strategy* (DoP: 2006) and with the remainder of the valley; the Department considers there is 'no compelling historical commitments made' for urban development.

Coffs Harbour City Council would now like to particularly engage residents and stakeholders in the North Boambee Valley (West) planning process. Therefore, Coffs Harbour City Council has resolved to complete the North Boambee Valley (West) Structure Plan as a future urban growth area for Coffs Harbour.

This structure plan recognises North Boambee Valley (West) as an urban growth area. In order to reduce land use conflicts frost-free horticulture in the area will be excluded as an absolute constraint to urban development.



# 1. Introduction

## 1.1 Purpose of This Structure Plan

The North Boambee Valley (West) structure plan is a strategic framework for the future growth and development of the area. A structure plan is an intermediate plan that sets a long-term direction, establishes standards where they are known and importantly provides a framework and guidelines for more detailed land use planning.

This structure plan has been prepared based on the investigation of a broad assessment of opportunities and constraints, taking into consideration future land use, physical characteristics of the area, traffic and infrastructure requirements, and the likely needs of the future community.

## 1.2 How Will This Plan Be Used?

This structure plan is a document that will be used by Coffs Harbour City Council to guide future use and development in a coordinated and orderly manner. The plan is instrumental in determining the application of local planning policy, planning zones and overlays in a manner, which manages growth, whilst protecting and maintaining the much-valued setting of North Boambee Valley (West).

The North Boambee Valley (West) Structure Plan will assist Council in determining development applications and rezoning requests, as well as being used as a reference document when assessing the future roll out of infrastructure and services. As importantly, the structure plan seeks to provide greater certainty for residents and stakeholders on the planning and development of the study area.

## 1.3 Key Objectives

The following objectives provide a statement about what the structure plan is seeking to achieve. The objectives of the structure plan are to:

- ▶ Update the North Boambee Valley Information Sheet in view of policy and legislative changes and the 2006 Australian Bureau of Statistics (ABS) Census data and other factors that were not applicable during its development.
- ▶ Identify the preferred future growth of North Boambee Valley (West) identifying the main land uses, infrastructure needs, environmental areas to be retained and enhanced, layout and hierarchy of roads and functional linkages with surrounding land.
- ▶ Ensure the vision for North Boambee Valley (West) is appropriate to its character as a place to live, work and visit.
- ▶ Investigate and provide for future needs of the community given the level of residential and employment growth anticipated to occur.
- ▶ Ensure that new development is linked to Council's physical and social infrastructure plans.
- ▶ Ensure future development is environmentally and economically sustainable, and is carried out in an environmentally and culturally responsible manner.



## 1.4 The Study Area

The study area is located on the north coast of NSW within the Coffs Harbour Local Government Area. It is on the southwestern fringe of Coffs Harbour city centre, in an area identified as North Boambee Valley. The North Boambee Valley (West) study area is west of the RTA preferred Pacific Highway bypass route and has a total area of 585 hectares (refer to Appendix Figure 2).

North Boambee Valley runs in an east west direction, and is bordered by a steep escarpment to the north, which forms part of Roberts Hill Reserve. Boambee State Forest and the North Boambee Valley quarry bound the investigation area to the west and agricultural activities bound the area to the south.

The majority of the area is currently zoned 1A Rural Agriculture and 7A Environmental Protection – Habitat and Catchment under the *Coffs Harbour Local Environmental Plan 2000*. A proportion of land in the northeast corner of the study area is zoned 2A Residential Low Density, 5A Special Uses – Community Purposes and 6C Open Spaces – Private Recreation (refer to Appendix Figure 3).

The study area has two main arterial roads including North Boambee Road to the north and Englands Road to the south of the study area. Newport's Creek and its tributaries are located throughout the study area with the largest running in an east west direction sited between North Boambee Road and Englands Road.

The study area is characterised by large areas cleared for agricultural production (mainly bananas and grazing land), and a mosaic of remnant and regenerating vegetation predominantly along drainage lines and on steep areas. The undulating nature of the landscape provides extensive views.





## 1.5 Influences

The key influences to which this structure plan responds include the following:

- ▶ *Character:* The existing character of the area is an important consideration in preparing the structure plan. However, it is not paramount, where a change is supported by strategic planning policy.
- ▶ *Context:* The future planning of North Boambee Valley (West) must have regard to surrounding precincts and to the planning policies and the strategic directions applicable to areas such as the RTA's preferred Pacific Highway bypass route, North Boambee Valley quarry, Isles Drive Industrial Estate and surrounding residential land uses.
- ▶ *Economics:* The likely demand for residential and major land uses and the feasibility of providing these land uses.
- ▶ *Opportunities and Constraints:* The identification and evaluation of the constraints and opportunities, which will influence the ability of the North Boambee Valley to accommodate urban development.
- ▶ *Strategic Planning:* Given the location of the study area adjacent to the Coffs Harbour city centre, both State and local government planning policies are relevant in terms of influencing the future planning of the area.



## 2. Planning Context

### 2.1 North Boambee Valley Planning History

The potential for urban development in North Boambee Valley has been identified for approximately 26 years. The need to release additional land for urban development has been identified through Coffs Harbour City Council's strategic planning work, which suggests Coffs Harbour will continue to experience strong population growth pressure into the future and therefore additional residential land is needed.

The North Boambee Valley was initially identified as having potential for future urban development in 1982, when Council first resolved to prepare a draft LEP for the area north of North Boambee Road and formally advised the Department of Planning (known at the time as the Department of Environment and Planning) that it proposes to rezone the land for urban and industrial development. At this time the land was rezoned for rural residential and industrial purposes.

In 1983, 1984, 1985 and 1988 several Council resolutions and subsequent draft LEP's were made for the rezoning of the land to urban purposes, this also included an independent public inquiry. However, the draft LEP's were refused on the basis of urban development encroaching onto 'agriculturally significant' or 'prime agricultural' lands as defined by the former Department of Agriculture (currently the Department of Primary Industries). In brief, the Department reaffirmed the preservation of limited areas of good agricultural land to protect the existing banana industry.

In 1989, Coffs Harbour City Council commissioned a series of studies for the area in conjunction with a review of the 1986 Coffs Harbour Urban Release Outline Development Strategy (UNE, 1990). This included the commission of a study by the University of New England to investigate the agricultural issues and constraints related to urban development. This study concluded that "non – agricultural development should no longer be precluded from North Boambee Valley on agriculturally based rationale such as prime agricultural land and /or the economic significance of the banana industry" (UNE, 1990).

In the mid 1990's Coffs Harbour City Council prepared a master plan for North Boambee Valley. The master plan identifies three distinct stages for urban development. In 1996, Council adopted the Coffs Harbour Urban Development Strategy (1996), which supported the rezoning of stage 1 of North Boambee Valley the need to and undertake further investigation into stages 2 and 3. Following this in 1997 Council commissioned a local environmental study to facilitate the rezoning of stage 1 release area. As a consequence, in 1997 North Boambee Valley stage 1 release area (150 hectares) was rezoned for residential development (currently known as North Boambee Valley (East)). Stage 2 and 3 of the release area was earmarked to progress in 2001 – 2010 and 2010 –2021 respectively. The Coffs Harbour Land Capacity Assessment (1998) predicted that a total yield of 3,070 lots (9,350 persons) was achievable for stages 1, 2 and 3 of the North Boambee Valley release area. In September 2000 the North Boambee Valley Information Sheet was adopted by Council, which details guidelines for development of North Boambee Valley.



In December 2004, the RTA announced its preferred route of the Coffs Harbour Pacific Highway Planning Strategy that detailed the location of a bypass around the greater urban core of Coffs Harbour. The announced by pass effectively severed the proposed stage 2 and 3 rezoning of North Boambee Valley from the existing stage 1 urban zoned area. On the 23 September 2008, the RTA announced concept design for the Coffs Harbour bypass, which includes a four-lane duel carriageway from Englands Road to Korora Hill. At the time of developing this structure plan the detailed concept design was not available and therefore was not considered. For the purposes of this Structure Plan the previous RTA road corridor was considered.

## **2.2 Relevant Planning Documentation**

There is a hierarchy of statutory planning instruments and policies affecting urban development in North Boambee (West) including:

- ▶ Environmental Planning and Assessment Act, 1979 (EP&A Act);
- ▶ State Environmental Planning Policies (SEPPs);
- ▶ Regional Environmental Plans (REPs);
- ▶ Local Environmental Plans (LEPs);
- ▶ Development Control Plans (DCPs);
- ▶ Section 94 Contributions Plans; and
- ▶ Section 117 directions from the Minister for Planning.

These are described in Section 2.3.

At the local level there are several planning strategies, which guide the implementation of these statutory and policy documents as they apply to North Boambee Valley (West). These include:

- ▶ Draft Mid North Coast Regional Strategy 2006;
- ▶ NSW Coastal Policy 1997;
- ▶ Mid North Coast Farmland Protection Project, 2007;
- ▶ Catchment Action Plan (Northern Rivers Catchment Management Authority -CMA);
- ▶ Settlement Planning Guidelines, 2007;
- ▶ Coastal Design Guidelines for New South Wales – Discussion paper 2001;
- ▶ Vision 2020 A Strategic Plan for Coffs Harbour LGA 1993;
- ▶ Coffs Harbour City Council “Our Living City” Settlement Strategy, 2007;
- ▶ Draft Coffs Harbour City Council Employment Lands Strategy;
- ▶ North Boambee Valley Information Sheet 2000;
- ▶ The Vegetation of the Coffs Harbour City Council LGA (1996); and
- ▶ North Boambee Valley Flood Study (1991).

These are described in Section 2.3.



## 2.3 Relevant Statutory Documents

### 2.3.1 Environmental Planning and Assessment Act 1979

The EP&A Act sets the legal basis for planning controls in NSW. This structure plan is not intended to be a statutory instrument prepared under the EP&A Act, but it will be used by Council to prepare statutory plans at a later date.

### 2.3.2 State Environmental Planning Policies (SEPP's)

SEPP's that may be applicable to the North Boambee Valley (West) structure plan are as follows:

#### ***SEPP 44 Koala Habitat Protection***

SEPP 44 encourages the conservation and management of natural vegetation areas that provide habitat for Koalas to ensure permanent free-living populations will be maintained over their present range. Local Councils cannot approve development in an area affected by the policy without an investigation of core Koala habitat. The policy provides the statewide approach needed to enable appropriate development to continue, while ensuring there is ongoing protection of Koalas and their habitat. Typically, koala habitat is not considered available for future development.

#### ***SEPP 55 Remediation of Land***

SEPP 55 provides a statewide planning approach to the remediation of contaminated land. This policy aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. Contaminated land is constrained for certain types of development.

#### ***SEPP 71 Coastal Protection***

This policy came into effect on 1 November 2002. It seeks to ensure that development in the NSW Coastal Zone is appropriate and suitably located, to ensure that there is a consistent and strategic approach to coastal planning and management and to ensure that there is a clear development assessment framework for the coastal zone.

This SEPP requires a greater level of scrutiny of any development proposals considered to have potential to create an adverse impact on the coastal areas of the NSW (as per Schedule 2 of the SEPP) and originally required the adoption of a Master Plan by the then Minister for Infrastructure and Planning for all major subdivisions (generally 25 or more residential lots or 5 or more rural-residential lots). These Master Plans were subsequently required to be prepared as Development Control Plans.

#### ***State Environmental Planning Policy – Seniors Living***

This policy came into affect in 2004 and aims to encourage the provision of housing (including residential care facilities) that will increase the supply and diversity of residences that meet the needs of seniors or people with a disability; make efficient use of existing infrastructure and services, and be of good design.



The SEPP encourages development of housing for aged and disabled persons in urban areas and in certain circumstances in areas adjoining urban areas. The SEPP was adopted in 2004 and replaces SEPP 5. It contains additional provisions to guide the location and design of housing for the aged and disabled and allows for Section 94 contributions to be levied on such developments.

### **2.3.3 Regional Environmental Plan**

#### ***North Coast Regional Environmental Plan 1988***

The North Coast Regional Environmental Plan (NCREP) contains provisions specifying regional policies to control and guide the preparation of LEPs within the region and the assessment of development applications. Additionally it sets out Council's responsibilities with respect to the preparation of urban land release strategies. Although there is now also the draft Mid North Coast Regional Strategy, the NCREP has never been repealed and still applies to the Coffs Harbour.

Clause 37 of the NCREP states the Plan's objectives in relation to urban development, which are to:

- (a) provide for the orderly and economic release of urban land and identify growth centres, and*
- (b) promote the efficient commercial functioning of subregional and district centres.*

### **2.3.4 Local Environmental Plan**

The Coffs Harbour City Council's major local planning instrument is Coffs Harbour Local Environmental Plan 2000, which is a shire wide LEP. Coffs Harbour LEP 2000 currently zones a range of areas for various urban land uses. It provides the main statutory basis for future development and is the statutory instrument. This Plan has been written to assist in the achievement of the stated objectives of the LEP.

Coffs Harbour City Council is currently reviewing Coffs Harbour LEP 2000 to create an LEP that is consistent with the Standard LEP issued by the State Government in March 2006.

### **2.3.5 Development Control Plans**

Development Control Plans (DCPs) are created by Council under the provisions of the EP&A Act. They deal in more detail with selected areas of Coffs Harbour or with selected issues that apply across the entire LGA. Council is currently in the process of consolidated all of its DCP's into a single document consistent with the approach recommended by the State government. The DCP's that take a strategic approach and are relevant to this structure plan are as follows:

- ▶ DCP – Industrial Lands (2000);
- ▶ DCP – Low Density Housing (2000);
- ▶ DCP – Off Street Car Parking (2007);
- ▶ DCP – Complying Development;
- ▶ DCP – Subdivision (2000); and
- ▶ DCP – Waste Management (2006).

### **2.3.6 Section 117 Directions from the Minister for Planning**

Under the EP&A Act, the Minister for Planning also has the ability to direct Council to comply with certain directions when preparing draft LEPs. These Ministerial directions (117 Directions) relate to local



environmental plan preparation by Council for specific development proposals, flood prone land, residential zones, acid sulfate soil occurrence, development near licensed aerodromes and requirements for the environmental studies within one kilometre of the coast under the New South Wales Government Coastal Policy. A revised set of 117 directions was issued on the 19 July 2007, and these have been considered for the purpose of this structure plan.

## **2.4 Relevant Strategic Documents**

### **2.4.1 Draft Mid North Coast Regional Strategy**

The draft Mid North Coast Regional Strategy was prepared by the Department of Planning in 2006. It is intended to guide local planning in the six local government areas of Clarence Valley, Coffs Harbour, Bellingen, Nambucca, Kempsey, Port Macquarie–Hastings, Greater Taree and Great Lakes, and inform decisions on service and infrastructure delivery. It will be reviewed every five years. The purpose of the draft Regional Strategy is to manage the Region's expected high growth rate in a sustainable manner (DoP, 2006). The draft Regional Strategy directs new development to regional growth centres (Grafton, Coffs Harbour, Port Macquarie and Taree) and their surrounding settled areas (Maclean, Woolgoolga, Bellingen, Macksville, Kempsey and Forster–Tuncurry) as a means of preventing sprawl into undeveloped areas.

The draft Regional Strategy estimates that an additional 18,600 dwellings will be needed for the Coffs Coast sub region over this time. It projects that 40 percent of new housing will be met through urban renewal, with 60 percent of the future growth needs being met through 'greenfields' rezoning. The sustainability of this future development will be achieved through: restricting unplanned new urban or rural residential settlement (unless additional sites can satisfy specified criteria for sustainability); limiting development in places constrained by coastal processes, flooding, wetlands, important farmland and landscapes of high scenic and conservation value; and protecting the cultural and aboriginal heritage, landscape setting and visual character of rural and coastal towns and villages. Coffs Harbour, Moonee Beach, Woolgoolga and Sawtell-Toormina-Boambee East are viewed as having the greatest potential to accommodate the growth expected in the coastal areas of the Coffs Coast sub region.

The draft Regional Strategy states that new commercial and retail development, employment, professional services and transport logistics will be concentrated in centres such as Coffs Harbour, rather than isolated areas, sensitive coastal locations and natural environments. The draft Regional Strategy estimates 83 hectares of additional industrial land will also be needed over the next 25 years in the Coffs Coast sub region to cater for anticipated employment growth.

The North Boambee Valley (West) Structure Plan addresses all of the matters for consideration as detailed in the *Draft Mid North Coast Regional Strategy (DoP, 2008)*.

### **2.4.2 NSW Coastal Policy 1997**

The NSW Coastal Policy is the State Government's policy for the co-ordinated planning and management of the NSW Coastline. The Policy represents an attempt to better co-ordinate the management of the coast by identifying in a single document the various management policies, programs, and standards as they apply to a defined coastal zone.

This Policy applies to the coastal zone along NSW including coastal estuaries, lakes, lagoons, islands and rivers; therefore a proportion of the Coffs Harbour LGA is covered. In relation to urban land release, this Policy applies to all new developments and publicly owned lands within urban areas covered by the



coastal zone. The principles in the Coastal Policy relevant to this structure plan are also covered in the Mid North Coast Regional Strategy and the NCREP.

### **2.4.3 'Our Living City' Settlement Strategy**

Coffs Harbour City Council developed the '*Our Living City' Settlement Strategy* in 2007 and this provides a long-term framework for land-use planning in Coffs Harbour. The settlement strategy satisfies the requirements of the NCREP. The NCREP requires Councils to prepare an urban land release strategy for the LGA before preparing a LEP for significant urban growth. The settlement strategy including population forecasts until 2031, outlines existing land supply options for urban development and balances this supply against demand, offers a range of quality styles of living, working and recreation and provides a series of policies to tackle transport and urban growth issues

The settlement strategy has nominated North Boambee Valley (West), (subject to further investigation), as having development potential. The settlement strategy identified 84.9 hectares of land as possible residential (north of North Boambee Road) from 2011 and 73.5 hectares as possible industrial (south of North Boambee Road).

In addition, the settlement strategy encourages urban development in this area as a hinterland village. The Strategy defines a hinterland village as a small centre with a population of up to 1,000 people. It consists primarily of a "locality", may contain a main street, pre- or primary school, local church, and several shops. The ecological systems surrounding the settlement tend to dominate the built environment.

This structure plan has been prepared in consideration of '*Our Living City' Settlement Strategy* (CHCC, 2007). The settlement strategy should be read as a companion document to this structure plan as it provides a broader context for the development expectations in Coffs Harbour and specifically the role of the North Boambee Valley as major supply of vacant land for the region.

### **2.4.4 Settlement Planning Guidelines (2007)**

These guidelines were released in August 2007 by the Department of Planning to assist Councils in preparing local growth management strategies. They document the scope and content of a local growth management strategy and the planning principles on which the work should be based. These guidelines have been useful in preparing and evaluating the structure plan to ensure that where possible it meets the expectations of the State government.

### **2.4.5 Regional Farmland Protection Project– Department of Planning**

Agriculture is an important industry on the North Coast. Agricultural land is a finite resource and is under increasing development pressure. Population pressures have resulted in substantial urban and rural residential encroachment onto farmland. The protection of agricultural land on the NSW North Coast is a long-term government initiative. The Farmland Protection Project seeks to protect important farmland from urban and rural residential development by mapping farmland and developing planning principles. The project has endeavoured to put forward policies, which can be of genuine long-term benefit to agriculture in the region without imposing unnecessary restrictions on farmers (DoP, 2005).

The maps provided with the Project identify areas in the North Boambee Valley (West) containing regionally significant farmland. This includes areas of used for banana production. Regionally significant farmland is not an absolute constraint to future urban development, but to be included it must be consistent with seven criteria documented in the project.



Council's *'Our Living City' Settlement Strategy* (CHCC, 2007) nominated North Boambee Valley (West) as a growth area for inclusion in the *draft Mid North Coast Regional Strategy (DoP, 2007)*. This area has been adopted by Council as a growth area due to its proximity to Coffs Harbour city centre and existing residential development in North Boambee Valley. Council does not believe that developing this area will compromise agricultural potential or any agricultural uses in Coffs Harbour. In addition, the development proposed does not involve filling in a flood plain or location of residential development where there was an identified agricultural risk of land use conflict. Council has determined that it achieves all seven criteria (as documented in the Regional Farmland Protection Project) and does not consider the DoP's identified regionally significant farmland as a constraint to urban development in North Boambee Valley (West).

#### **2.4.6 Vision 2020 A Strategic Plan for Coffs Harbour LGA**

Vision 2020 was developed by Council in 1993 and represents a long-term plan for Coffs Harbour. It outlines the objectives and strategies designed to achieve outcomes, which have been developed between the private sector, community groups and the three tiers of Government.

#### **2.4.7 Northern Rivers Catchment Management Authority (NRCMA) – Catchment Action Plan (2006)**

The purpose of the Catchment Action Plan (CAP) is to manage natural resources within northern NSW. Local government is a key stakeholder in this management process. This Plan (NRCMA, 2006) identifies that increasing population growth and associated urban expansion is putting pressure on the present natural resources and Aboriginal cultural landscapes. All Councils in the NRCMA (including Coffs Harbour) are currently revising their local planning instruments, which incorporate natural resource issues. The treatment of natural resources in planning instruments is a major influence on the resource condition and the achievement of local, state and national catchment targets.

#### **2.4.8 Coastal Design Guidelines for New South Wales – Discussion Paper**

The Coastal Council of NSW, the Government's advisory body on coastal planning and management, commissioned the NSW Coastal Design Guidelines. The Guidelines were prepared to reflect the directions of the NSW Coastal Policy 1997 and to complement the Government's Coastal Protection Package. The Coastal Guidelines identify seven coastal settlement types ranging from coastal cities to coastal hamlets and isolated dwellings. North Boambee Valley (West) falls into the category of a 'new coastal settlement (residential subdivision)', as its location is related to Coffs Harbour and it will be predominately residential with some commercial and industrial uses.

The foot print for potential development will be defined by the environmental constraints of North Boambee Valley, maintaining the water quality of the surrounding water ways at pre-development levels, retaining existing trees and vegetation, providing facilities and services appropriate to scale, including a neighbourhood centre, requiring a permeable, hierarchical street subdivision pattern that relates to the original topography.



#### **2.4.9 Draft Coffs Harbour City Council Industrial Lands Strategy (2008)**

The draft Coffs Harbour Council Industrial Lands Strategy was developed by Geolink for Coffs Harbour City Council and is currently on exhibition (November 2008). The draft Industrial Lands Strategy provides Council and the community with a strategic planning framework to guide the future development of industrial lands within the Coffs Harbour. The main objectives of the Strategy are to (CHCC, 2008):

- ▶ assist Council in preparing its new Local Environmental Plan (LEP) in accordance with the Standard Instrument (Local Environmental Plans) Order 2006 and the Standard Instrument—Principal Local Environmental Plan;
- ▶ establish the existing supply of, and future demand for industrial lands;
- ▶ provide a strategic framework for the provision of future industrial lands;
- ▶ provide a recommended zoning scheme for existing and future industrial lands; and
- ▶ assess the current and future employment opportunities and economic impacts of industrial lands within the LGA.

The draft Industrial Lands Strategy examined existing industrial areas and found there is limited vacant land that is without constraint and available for development. There is a significant amount of undeveloped zoned land that is constrained by environmental factors such as vegetation, drainage lines, state significant coastal wetlands, acid sulfate soil potential and flooding (CHCC, 2008).

The Strategy developed a baseline industrial land demand forecast for the Coffs Harbour LGA which determined that an additional 50 ha of industrial land will be required by 2031. The Strategy identified North Boambee Valley as an investigation area for future industrial land. The outcomes of this structure plan will inform the draft Industrial Lands Strategy (CHCC, 2008).

#### **2.4.10 The Vegetation of the Coffs Harbour City Council LGA (1996)**

The *Vegetation of the Coffs Harbour City Council LGA* (CHCC, 1996) identifies vegetation communities and identifies the conservation significance of these communities in Coffs Harbour LGA.

The goals of the *Vegetation of the Coffs Harbour City Council LGA* are to:

- ▶ map the vegetation of the Coffs Harbour LGA;
- ▶ classify and assign mapping units and communities to the vegetation;
- ▶ identify areas that are potential Koala Habitat in accordance with SEPP 44;
- ▶ identify vegetation communities of conservation significance.

The document describes a distribution of different vegetation types throughout Coffs Harbour, which are the result of the interaction of climate, soil, topography, geological history, land use and fire.

#### **2.4.11 North Boambee Valley Flood Study (Bewsher Consulting, 1991)**

North Boambee Valley Flood Study (Bewsher Consulting, 1991) profiled the catchment areas and the existing creek system for North Boambee Valley. The study identified:

- ▶ high, low and low fringe flood areas;
- ▶ distinguishes between low and high hazard categories based of depth of floodwaters and average flood velocities;



- ▶ a high hazard depth is 1.0 metre or more and a low hazard depth is less than 0.8 metres; and
- ▶ modelled detention basins in the catchment to offset impacts of urbanisation.

#### **2.4.12 Information Sheets**

Council has a series of information sheets designed to provide information and guidelines on various issues. Some provide additional information concerned with environmental constraints to development, and procedures for applicants to follow if their proposal is affected by such constraints. Others apply to specific places in Coffs Harbour or land uses.

The North Boambee Valley information sheet provides a broad planning strategy for North Boambee Valley Residential Release Areas (all three stages), and development controls for Stage 1 of the Release Areas. Other information sheets relevant to this structure plan include:

- ▶ Acid Sulfate Soils;
- ▶ Bush Fire Hazard;
- ▶ Contaminated Lands;
- ▶ Energy Efficiency;
- ▶ Koala Habitat;
- ▶ Landscape;
- ▶ Landform modification; and
- ▶ Rainwater tanks.

### **2.5 A Structure Plan in the Planning Hierarchy**

This structure plan builds on the information and direction provided from the *'Our Living City' Settlement Strategy* (CHCC, 2007) to address local issues, focusing on where different types and intensities of development are appropriate. Structure plans set visions for broad areas and identify the preferred location and intensity of development, along with looking at issues of access, scenic protection and environmental management objectives.

The structure plan will set the policy context to guide detailed technical studies to be undertaken at the rezoning stage, in accordance with statutory requirements.



### 3. Population and Housing

Rapid population growth and a trend toward coastal living have had a significant impact on the Coffs Coast region, driving unprecedented residential and tourism development and giving rise to environmental, economic and social pressure. The population and housing profile has been prepared to provide a clear understanding of the characteristics of the resident population in North Boambee Valley (West) and to identify trends. Key drivers of current and future population growth include:

- ▶ In-migration from the Sydney Greater Metropolitan Region and other areas of NSW;
- ▶ Population flow from SEQ; and
- ▶ Greater accessibility due to the upgrading of the Pacific Highway.

This report assumes that the potential population and housing profile of North Boambee Valley (West) will have similar characteristics to that of the Coffs Harbour LGA. Data has been drawn from the ABS census data held in 1996, 2001 and 2006. Please note the 2006 Census data is first release data and therefore not all data for this census year was available at the time this report was prepared.

#### 3.1 Population Profile

##### 3.1.1 Resident Population

The resident population of Coffs Harbour LGA has been experiencing steady growth since 1971 (CHCC, 1996). In the past five years, the Coffs Harbour has averaged 0.88 percent annual growth, which is comparable to State growth of 0.7 percent.

Of the population counted during the 2006 Census, 51 percent were female and 49 percent were male. In addition, 3.6 percent were indigenous persons and 12 percent were born outside Australia.

**Table 1 Population Size and Population Change in Coffs Harbour LGA (1996 to 2006)**

Year	Population	Average % Change p.a.
1996	55,572	
2001	57,811	0.81%
2006	60,359	0.88%

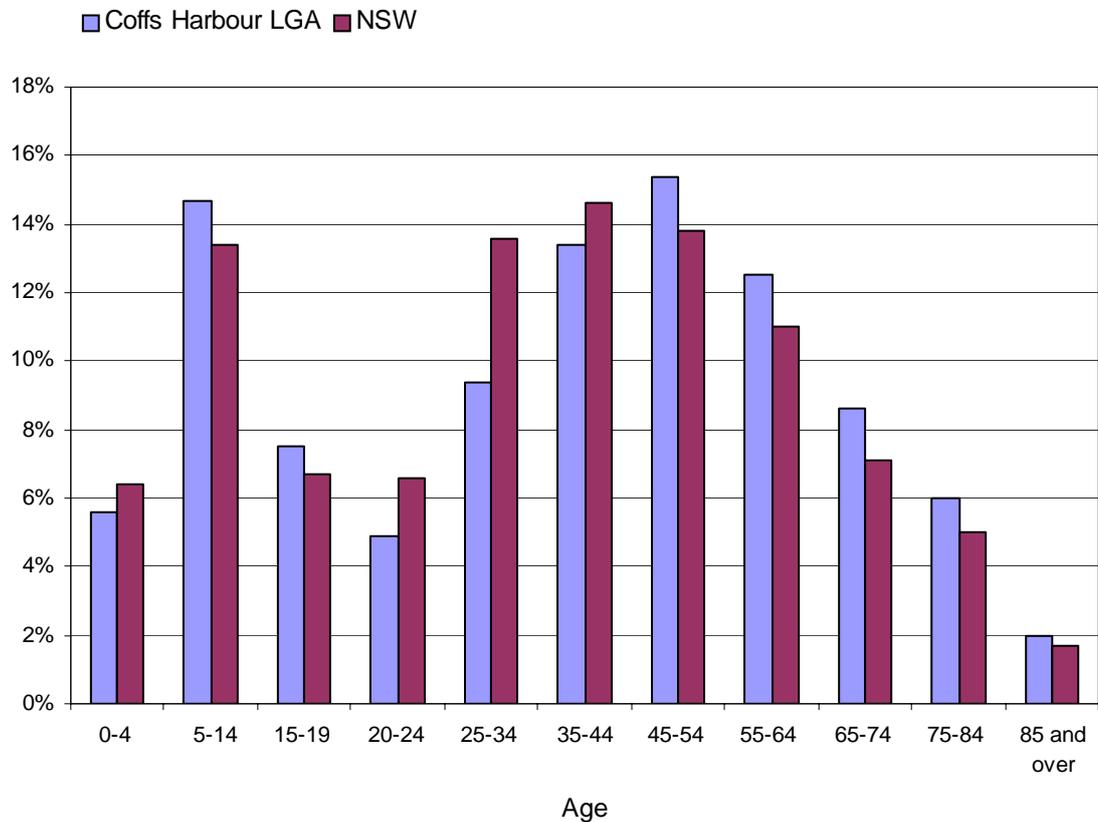
*Source: ABS Census 2006 (First Release) Time Series Profile (Place of Enumeration)*

##### 3.1.2 Age Structure

A large proportion of the resident population is aged over 55 years (2006 census), which may be primarily due to the popularity of the LGA as a 'sea/tree-change' retirement destination. This can impact the local availability of skilled labour. In 2001, of those persons over 55 years old approximately 83 percent were not engaged in the work force.

There are significantly lower numbers of person's aged 20 to 44 that live in Coffs Harbour, especially when compared to NSW. The low number of children and young adults is complementary to the ageing population. The ageing population will therefore require services and infrastructure to cater for their specific needs.

**Diagram 1 Age Structure in 2006, Coffs Harbour and New South Wales**



Source: ABS Census 2006 (First Release)

### 3.1.3 Household Type

Reflecting the age structure of the population, couple only households (42.4 percent of family households) and lone person households (26 percent of all households) in 2001 comprised a large proportion of the households in Coffs Harbour. This is much higher than for New South Wales where couple only households are 27 percent of family households and lone person households are 25 percent of all households.



Only 55 percent of family households in Coffs Harbour comprised of couples with children compared to 62.2 percent in New South Wales. The proportion of single parent families (16.8 percent) is relatively higher than that of New South Wales (13.5 percent). The proportion of group households (non family households) is slightly higher than for New South Wales, 3.4 percent compared to 2 percent during the same period.

#### **3.1.4 Income**

Although there is a wide range of income levels in Coffs Harbour, there is a tendency towards the lower level of weekly individual incomes. In 2006, 67 percent of people earned less than \$599 per week compared to the NSW average of 54 percent. The median individual income in 2006 was \$364 per week, which is lower than the NSW average (\$461 per week).

In 2006, 42 percent of households earn less than \$649 per week. The “poverty line” in Australia was over \$626.32 per week for a family of four in June 2006 (*University of Melbourne, June 2006*). The ‘poverty line’ estimates the amount of money people need in order to cover their basic costs and maintain a minimum living standard. This indicated a large proportion of the households in Coffs Harbour lives below the poverty line.

### **3.2 Housing Profile**

#### **3.2.1 Overview**

It is anticipated that future housing in North Boambee Valley (West) will be in a variety of forms and in accordance with State Government policy. The future housing choices in Coffs Harbour have been widened to provide for changing housing needs. More demand is expected for multi unit housing development; however, separate houses will continue to be the dominant housing choice. The increase in the separate housing developments has occurred in conjunction with an increase in smaller household size. In addition, aged care/ seniors housing is likely to increase due to increasing demand for this type of accommodation and the ageing of the population.

There is a high demand for housing in Coffs Harbour reflecting the priority that people place on location and lifestyle as well as improved residential amenity. Consequently, property and rental values have increased resulting in pressures for the redevelopment of housing for the low to medium cost housing market. Housing in Coffs Harbour tends to cater for smaller households in the low to middle income sector of the market.



### 3.2.2 Dwelling Stock and Growth

**Table 2 Occupied Private Dwelling Growth from 1996 to 2006**

Dwelling Type	1996		2001		2006	
	No.	%	No.	%	No.	%
Separate house	15,017	68.8%	17,220	71.27%	18,519	75.20%
Semi-detached, townhouse	2,078	9.5%	2,462	10.19%	2,707	10.99%
Flat, unit or apartment	2,619	12.0%	2,952	12.22%	2,611	10.60%
Other dwelling	1,372	6.3%	1,415	5.86%	778	3.16%
Not stated	754	3.5%	114	0.47%	11	0.04%
<i>Total Occupied private dwellings</i>	<i>21,840</i>	<i>100%</i>	<i>24,163</i>	<i>100%</i>	<i>24,626</i>	<i>100%</i>

Source: Coffs Council (2004), ABS 2006

The key characteristics of dwelling growth in Coffs Harbour (as shown in Table 2) from 1996 to 2006 include:

- ▶ During the census period 1996 to 2001, the total number of occupied dwellings in Coffs Harbour increased by 2,786 or 12.8 percent.
- ▶ Separate houses and semi –detached houses accounted for the growth in Coffs Harbour between 1996 and 2006.
- ▶ In 2006, 11 percent of dwelling stock in Coffs Harbour was semi-detached or attached. This is comparable to the detached housing total for New South Wales of 9.7 percent during the same period.
- ▶ During the census period 1996 to 2006, the number of separate houses grew by 23 percent.
- ▶ The number of flats, unit or apartments decreased by 0.3 percent over the 1996 to 2006 period.

Table 2 demonstrates that although separate houses are the dominant form of dwelling type there has been an increase in the demand for other forms of housing such as semi-detached dwellings.

The average occupancy rate in Coffs Harbour during the 2006 and 2001 census was 2.5 persons per occupied dwelling.

### 3.2.3 Tenure

Coffs Harbour has a slightly higher proportion of fully owned dwellings (37 percent) when compared to NSW (34 percent) in 2006. Only 28 percent of dwellings are currently being purchased which is slightly less than the NSW figure of 31 percent. The number of dwelling rented in Coffs Harbour (31 percent) is comparable to the number of dwelling rented in NSW (29 percent).



### 3.3 Residential Densities

#### 3.3.1 Typical Dwelling Yields (Source: Urban Development Advisory Service - UDAS)

The following information is provided to demonstrate the typical dwelling yields that can be achieved from various forms of housing. The densities referenced are net densities (excludes roads and footpaths):

**Table 3 Typical Dwelling Yields**

Dwelling Type	Typical Density
Large detached house on a large lot (>1000m <sup>2</sup> );	<9 dw/Ha
Large detached house on a large lot (700m <sup>2</sup> );	10-13 dw/Ha
Detached house on a medium size lot (575m <sup>2</sup> );	14-16 dw/Ha
Small lot housing with reduced setbacks (450m <sup>2</sup> );	17-19 dw/Ha
Semi-detached one and two storey houses (360m <sup>2</sup> );	20-24 dw/Ha
Two storey attached townhouses (300m <sup>2</sup> )	25-30 dw/Ha
Two storey attached houses with rear car/courtyards (225m <sup>2</sup> )	30-34 dw/Ha
Small lot two and three storey townhouses (200m <sup>2</sup> )	35-40 dw/Ha
Three storey terrace houses with shared wall (200m <sup>2</sup> )	41-60 dw/Ha
Three to four storey apartments	60-79 dw/Ha
Five to eight storey apartments	80-99 dw/Ha
High-rise apartments >8 storeys	100+ dw/Ha

Source: Urban Development Advisory Service - UDAS

#### 3.3.2 Potential Dwelling and Population to be Achieved in North Boambee Valley (West)

For the purposes of determining the potential dwelling and population to be achieved in North Boambee Valley (West), fully developed sites from North Boambee Valley (East) were identified and surveyed to determine typical dwelling yields per hectare.

Within North Boambee Valley (East) (currently zoned Residential 2A Low Density Zone under the *Coffs Harbour LEP 2000*) two nominal dwelling types were evident. This includes single dwellings and multi unit / seniors housing. The typical single dwellings lot sizes ranged from 600m<sup>2</sup> to 1000m<sup>2</sup>, which achieved average net densities of between 10 to 12 dwellings per hectare. The typical multi unit housing / seniors housing lot sizes ranged from 300m<sup>2</sup> to 600m<sup>2</sup> which achieve average net densities of between 16 to 28 dwellings per hectare.

This plan assumes the same yields will be achieved in North Boambee Valley (West). Table 4 shows the ratio of each dwelling type based on observations of existing development.



**Table 4 Proposed Dwelling and Population Yields for North Boambee Valley (West)**

Dwelling Type	Typical Dwelling Yield per net Hectare	Assumed Occupancy Rate by Dwelling Type	Typical Population yield
Predominately Single Dwelling	10-12	2.6	26-31 persons
Predominantly Multi unit Housing/ Seniors Living	16-28	2.3	37-64 persons

### 3.4 Employment and Industry Profile

In June 2007, the estimated number of employed persons in Coffs Harbour was 28,789, representing an increase of 9.5 percent from the level recorded in June 2006. Coffs Harbour contributed approximately 23.9 percent of the total number of employed persons in the Mid-North Coast (120,542) in June Quarter 2007.

The unemployment rate in June 2007, in Coffs Harbour was 7.5 percent, which was 1.5 percent below the rate recorded in June 2006 (9.0 percent). The unemployment rate has fallen by 2.1 percent from a peak of 9.6 percent recorded in September 2005. Coffs Harbour's unemployment rate in June 2007 was the same as the rate for the Mid-North Coast (7.5 percent) but was higher than the average for New South Wales (5.1 percent) and Australia (4.6 percent).

The Gross Regional Product (GRP) of Coffs Harbour was estimated at approximately \$2,173.4 million in 2006/07, representing an increase of 10.4 percent from the level recorded in 2005/06 (\$1,968.1 million).

With regard to industry, the largest contribution was made by the Property & Business Services sector, with approximately 11.3 percent of the total GRP for Coffs Harbour, followed by Retail Trade (9.1 percent), Health & Community Services (8.2 percent) and Manufacturing (8.1 percent) (CHCC, 2007).

### 3.5 Meeting the Housing Needs of the Population

It is assumed that the population moving in to North Boambee Valley (West) will have similar needs in terms of housing to the current population (because the characteristics of the new population will be similar to those of the current population). As a result, the following housing needs could be expected:

- Housing Needs for the Elderly (80+ years):** It can be assumed that the majority of these people will have specific health care needs and that they will require varying levels of support to maintain a reasonable lifestyle. Therefore, to best meet the future accommodation needs of the elderly, Council should look at promoting aged care facilities incorporating self-care and hostel accommodation; granny flat style accommodation (to promote self-care at home with support from immediate family); villa style (single level) units near shops and health care facilities; housing designs that provide (or can be converted) for disabled access; and convertible houses designed to be easily modified to create a small self-contained unit within the main residence.



- ▶ *Housing Needs for the Retired (60-80 years)*: statistics indicate that a majority of these people are retirees that have moved from the cities or from inland to enjoy the quality of life and amenity offered by the coastal environment. They are relatively financially secure and living in single and two person households (2-3 bedroom dwellings and units including self-care units within aged care facilities). Throughout Australia, the next decade will see increased numbers of retirees, due to the 'baby boomers' born in the 1940's and 1950's reaching retirement age in this period. In this regard, Council should promote aged care facilities incorporating self-care and hostel accommodation; and dual occupancies (attached and detached).
- ▶ *Housing Needs for Mature Families*: this category includes the 'baby boomers' and makes up a significant proportion of the population (1 in 4 people) in New South Wales. Typically, the mature family is made up of one or two mature adults and two or three young adults or teenagers. The accommodation is usually the second or third family home and is generally of a modern design and is larger in size. The standard mature family both now and in the future will continue to seek the larger residential lot (600m<sup>2</sup> plus) to meet their needs. Couples no longer with children at home may seek smaller housing forms such as units, villas and townhouses.
- ▶ *Housing Needs for Singles and Young Families (18-40 years)*: this category typically includes the singles, married and de facto couples without children and sole parents and couples with children less than 15 years of age. Typically these families will rent housing or are paying off mortgages on their first or second home. These families will seek to accommodate themselves in a variety of housing forms usually dependent on their ability to pay rent or make mortgage payments. The main factors that will influence housing choice will be affordability (to purchase or rent); access to services including childcare facilities, schools, recreation areas, convenience shopping, entertainment and public transport; and proximity to family, friends and neighbours of a similar age and family type. The housing types will range from small units and shared rental accommodation to first and second homes in new release residential areas on the fringe of town.

### **3.5.1 Affordable Housing**

The term 'affordable housing' expresses the notion of reasonable housing costs in relation to household income. The 1992 National Housing Strategy identified the housing affordability benchmark as households in the lowest 40 percent of income distribution spending more than 30 percent of household income on housing costs.

The UDIA State Reports on housing affordability (UDIA, 2007) found that the median detached house price in the Coffs Harbour area had increased by 211% in the period from 2001 to 2006. Increases occurred in all other localities reviewed in NSW but Coffs Harbour was identified as 'seriously constrained' in terms of the affordability index.

Affordable housing demand can also increase as a result of pressures on existing supply, especially in coastal regions such as Coffs Harbour, which have experienced rapid increases in land and housing prices. As the cost of housing increases, the availability of housing for lower income groups becomes tighter. Rent levels increase and the competing market of residents and tourists who can afford higher rents puts a squeeze on the availability of rental housing for lower income households.



Coffs Harbour has relatively high levels of unemployment, retirees on fixed incomes and low-income earners, thus placing increased demand on the provision of affordable and special needs housing. It is also home to an increasing number of families, especially single parent families. It is therefore, clear that Coffs Harbour LGA as the main population centre, is going to experience pressures from population growth that are unique to only a few coastal locations in Australia. In coming years the demand for affordable and special needs housing will escalate and for this reason immediate action needs to be taken.

Key strategic approaches to affordable housing include providing housing choice so there is a range of housing types and corresponding costs. Currently, Coffs Harbour housing supply is made up primarily of detached single-family homes (75 % in 2006). As our population ages and the number of single-person household's increases, the need for greater housing choice also increases. Providing a choice of homes, without certain amenities (such as views) that contribute to higher housing prices, will help ensure long-term affordability.

Council must also ensure that integration through design to ensure affordable housing is attractive and blends in with the communities in which it is built. Design issues include the style of the buildings, quality of materials, heights, lot coverage and landscaping.

Implementation of a range of measures intended to improve housing affordability should be a major goal of Council. Such implementation will be the responsibility of a range of stakeholders in the housing industry – including public sector housing agencies, the private sector (covering housing finance, design and construction) and government at all levels. The Council can be both a facilitator and implement actions to provide sustainable affordable housing.

### **3.6 Population, Housing and Employment Profile Implications**

It is difficult to accurately predict in what ways the characteristics of the resident and worker population of North Boambee Valley (West) will change and evolve. For the purposes of this report, it is assumed that the population resulting from future development will have similar characteristics to the existing population in Coffs Harbour.

It will be necessary to continue to provide a range of facilities that meet the needs for all age groups. The following characteristics need to be considered in any future development of the area:

- ▶ To ensure that the remaining land suitable for development is efficiently used light industrial land uses should be incorporated into appropriate precincts in North Boambee Valley (West).
- ▶ There will also be a need for a local neighbourhood shopping centre to cater for the everyday shopping needs of the future residents.



## 4. Community Values and Vision

### 4.1 Community Consultation

An important input to this structure plan has been and will continue to be, consultation with stakeholders. This has enabled a full understanding of the land use in the study area.

Council undertook a community consultation workshop that had a major influence on the North Boambee Valley (West) Structure Plan. The workshop provided practical and informal input for the preparation of the structure plan. The purpose of this consultation was to allow the people of Coffs Harbour to express their views on issues affecting North Boambee Valley. The stakeholders consulted with thus far include state and local government authorities and agencies, landowners, developers and business owners.

#### 4.1.1 Public Workshop

Coffs Harbour Council issued an invitation to local community members and stakeholders to be involved in the process of preparing the structure plan through a public workshop, which was held in October 2007. Feedback forms were supplied and residents and stakeholders were requested to complete them at, or soon after, the workshop to document specific requirements or information relating to their concerns.

The workshop structure was designed to inform the participants of the nature of the project and its statutory framework and to gain some broad indication of community expectations, concerns and desires in terms of the structure plan outcomes. The significance of the community workshop exercise was that it enabled the project team and Council representatives to gain a first hand appreciation of the concerns and expectations of the community and stakeholders in relation to the development of the study area (North Boambee Valley (West)).

#### 4.1.2 Key Resident and Stakeholder Values

A range of issues has been identified through the public workshop and feedback forms. Some issues were common to both the workshop and feedback form such as the reduction of the quarry buffer, alternative haulage road, effective traffic management, mixed land uses and the retention of vegetation. Further details on the community consultation are contained in Appendix A.

#### 4.1.3 State Government Agency Consultation

Discussions have been held with the Department of Planning, Department of Primary Industries, Department of Education and Training, Roads and Traffic Authority and Country Energy in order to identify issues for the development of North Boambee Valley (West).

The agencies participating in the consultation process provided technical advice, which enabled the structure plan to be developed. Once the structure plan is prepared and adopted it will provide the agencies with a direction for urban growth and infrastructure, including likely timing of development.

#### 4.1.4 Vision

The vision for North Boambee Valley (West) has been developed through the consultative process described above.

The vision statement sets the overall framework within which the detailed urban design principles and implementation of the structure plan have been formed.

The vision for North Boambee Valley (West) is:

*North Boambee Valley (West) is a designated growth area. It will retain its bushland character and protect and promote the attributes of the natural environment, which will provide both a visual backdrop and usable open space to its residents.*

*The new housing will accommodate different household types and age groups and North Boambee Valley (West) will provide many opportunities for new light industry and employment.*





## 5. Land Suitability Assessment

### 5.1 Land Suitability

North Boambee Valley (West) is subject to a number of environmental constraints, which affect the ability of land to be used for urban purposes. The type of constraints and how they affect North Boambee Valley (West) is discussed in Appendix B. The extent of the constraints is shown in Appendix Figure 2 to Appendix Figure 14 (Appendix C)

Using this information on constraints and opportunities, a land suitability analysis was undertaken for North Boambee Valley (West). The methodology used in this structure plan aims to identify and evaluate a range of constraints, which will impact upon the ability of the area to accommodate further residential and industrial development. The identification of a sound methodology will also enable the community and landowners to better understand the process of planning, site selection and development.

Ultimately, the application of a sound methodology will help the development industry to invest in and develop appropriate sites within North Boambee Valley (West) that best serve the needs of the local and regional community and economy.

The land suitability analysis is explained in further detail in Appendix B.

### 5.2 Environmental Constraints

This structure plan has identified a number of environmental constraints and opportunities applicable to land in the North Boambee Valley (West). Further detail on the ranking of the constraints can be found in Appendix B.

#### 5.2.1 Acid Sulfate Soils (ASS)

ASS commonly occurs on coastal floodplains below 5 m AHD. Affected areas in North Boambee Valley (West) only have low probability of occurrence and are contained only in a small portion of the area. ASS can be effectively treated, depending on how severe the problem is (Refer to Appendix Figure 4).

#### 5.2.2 Aircraft Zone

The subject land is located over 5 kilometres to the west of the Coffs Harbour Airport. The land is not in a locality that is affected by an aircraft-landing zone or the associated height controls and ANEF contours.

#### 5.2.3 Vegetation Management

Coffs Harbour LGA contains important habitat for a diverse array of native fauna and flora. Certain areas have high conservation value and contain a number of endangered ecological communities and regionally significant vegetation communities. The location of flood prone lands, the retention of vegetation corridors and their associated buffers establish the basis for a network of habitat links and/ or corridors within the area.

The *Threatened Species Conservation Act 1995* and *Environment Protection and Biodiversity Conservation Act 1999* aim to protect threatened species and significant flora and fauna corridors. It is therefore necessary to incorporate appropriate constraints for vegetation management. It is also a requirement of the Mid North Coast Regional Strategy (2006) and the North Coast REP, 1988 that



significant vegetation be protected. It is therefore necessary to incorporate appropriate constraints for vegetation management in any land suitability analysis.

The *Vegetation of the Coffs Harbour City Council LGA* (1996) identifies vegetation communities and identifies the conservation significance of these communities. There are a number of vegetation communities present within the North Boambee Valley (West) including Tall Open Forests and Open Forests that have the potential to pose constraints to urban development (refer to Appendix Figure 14).

#### **5.2.4 Koala Habitat**

The *Coffs Harbour City Council Koala Plan of Management* (1999) provides a consistent approach to Koala management and planning throughout the LGA. Both primary and secondary Koala habitat is located throughout the study area with the majority of the primary habitat concentrated south of Englands Road and along the North Boambee Road ridgeline (refer to Appendix Figure 13). Primary Koala habitat aims to prevent further clearing, disturbance, fragmentation or isolation of this habitat and the planning controls have zero net loss in these areas; it will therefore pose constraints to urban development.

#### **5.2.5 Bushfire Hazard Management**

In planning development in rural areas or on the fringes of urban areas it is necessary to take into account the potential threat from bushfire. Bushfire hazard can be a major development constraint given the likelihood for extreme fire events periodically. The slope of the land, aspect and the vegetation types present, determines the level of bushfire hazard. Opportunities exist to manage the interface between new development and surrounding vegetation, including perimeter roads. Appendix Figure 9 shows that bushfire hazard affects a large portions of North Boambee Valley (West).

#### **5.2.6 Topography**

Slope is a significant factor influencing soil erosion, drainage and bushfire hazard. It also has implications with regard to the provision and cost of infrastructure, roads and services. Slope is a major constraint for urban land in portions of North Boambee Valley (West). Appendix Figure 5 illustrates the extent of steeply sloping land in particular the northern and southern ends of the study area and along the ridgeline of North Boambee Road.

Within the residential precincts slopes between 17 % and 25% present a high bush fire danger for dwellings, footings require a great deal of cut and fill, access is difficult and they present a greater erosion hazard. In areas with these grades development is more difficult (NSW Rural Fire Service: 2006). However, with specific engineering solutions development is possible and therefore slopes between 17 and 25 % have not been seen as a hard constraint.



Within the industrial precincts slopes constraints can be overcome by careful design, earthworks, and by adoption of site management techniques that ensure land surface stability. Given the shortage of developable industrial land and the current high levels of demand, costs incurred are unlikely to preclude development. Therefore for the purposes of this structure plan slopes over 17% will require further investigation (such as cut and fill techniques) and will not be considered as a hard constraint.

### **5.2.7 Flood Liable Land**

Flood liable land presents a constraint to development as it has implications with regard to the provision and cost of infrastructure, roads and services located within floodplains. In high hazard situations it presents a threat to life and property. Filling of flood areas (not high hazard) is possible in some situations but needs careful assessment to avoid causing problems elsewhere.

Flooding is a constraint for urban land in the North Boambee Valley (West). Appendix Figure 12 illustrates the areas of flood prone land, located along the Newport's Creek and its tributaries, which was based on the Bewsher Consulting, *North Boambee Valley Flood Study* (1991).

The current flood studies for this area date back to 1991 and do not consider the affects of the RTA's preferred Pacific Highway bypass route. Flood data from the RTA preferred Pacific Highway bypass route was not available at the time of preparing this structure plan.

Appendix Figure 12 illustrates sections previously identified in the Bewsher Consulting (1991) flood study as high hazard floodway. These sections within the study area are not designated watercourses and therefore it may be possible to be replaced by an engineering solution. Therefore these areas have been identified as 'flood ways subject to further investigation' and are not considered a hard constraint.

Further studies need to be undertaken to determine the extent of this constraint. Development in the North Boambee Valley needs to be flood modelled in detail with constraints and controls imposed to ensure that there are no adverse impacts from flooding on adjoining areas. In particular, areas downstream of the study area, such as the Health Campus and Industrial Estate. There may be opportunities in the design of the RTA's preferred Pacific Highway bypass route to incorporate flood mitigation measures, such as detention basins, and the RTA need to be approached to explore these options.

### **5.2.8 Extractive Industries**

Extractive industries should be protected from encroachment by incompatible land uses (including urban development) until the resource has been exhausted. North Boambee Valley (West) contains an extractive industry, which has been identified by the Department of Urban Affairs and Planning as being of regional significance (DUAP, 1999). A buffer area around the extractive industry is needed to cover areas, which will be affected by quarrying activities such as noise, dust and visual intrusion. A buffer is being created in this circumstance for the purposes of mitigating these impacts on the proposed adjoining land uses of residential and industrial development. It is also desirable to identify an appropriate buffer to prevent the sterilisation of a resource from the pressures of land use conflicts.



The Department of Primary Industries (Mineral Resources Division) has recommended a buffer around hard rock quarries including the North Boambee quarry involving blasting for the above reasons. A 1 km buffer is the preferred distance recommended by the Department for residential areas. However, the Department states a lesser distance is feasible for industrial zones. Therefore, a distance of 750 metres is recommended for potential industrial areas subject to an appropriate risk assessment being completed (refer to Appendix Figure 9).

### **5.2.9 Contaminated Lands**

Portions of North Boambee Valley (West) have been identified as potentially contaminated land due to the former use of the land for banana cultivation. Banana cultivation formally used arsenic and dieldrin as insecticides. The risk to health and the environment from contamination must be included in a preliminary assessment, which includes a preliminary site inspection of the contaminated lands. SEPP 55 requires that Council be satisfied that a site is suitable for its proposed use or can and will be made suitable. In the case of ex banana lands a site can be made suitable through measures such as site remediation (refer to Appendix Figure 8).

### **5.2.10 RTA Preferred Pacific Highway Bypass Route**

Council at its meeting on the 17 May 2007 recommended to incorporate the Coffs Harbour Pacific Highway Planning Strategy into the North Boambee Valley DCP and Structure Plan. The preferred route for the Coffs Harbour Highway Planning Strategy was announced in December 2004. The preferred route (inner south 1) is proposed to be located within the North Boambee Valley (West).

The announced bypass must be considered as a constraint for any future development with a realistic road easement of 150 metres (refer to Appendix C Appendix Figure 4 for RTA's preferred Pacific Highway bypass route map).

On the 23 September 2008, the RTA announced the concept design for the Coffs Harbour bypass, which includes a four-lane duel carriageway from Englands Road to Korora Hill. At the time of developing this structure plan the detailed concept design was not available and therefore was not considered. For the purposes of this Structure Plan the previous RTA road corridor was considered.

## **5.3 General Development Issues**

The following issues apply generically to new development occurring in the North Boambee Valley (West). Locality specific issues are discussed in the following sections.

### **5.3.1 Indigenous Heritage**

At the time of first European settlement, Gumbaingirr speaking people occupied the study area. The Gumbaingirr speaking people's territory traditionally extended over a wide area from the Clarence River to at least as far south as the Nambucca (Connell Wagner, 2004).



In 1982, Godwin conducted an archaeological survey of 640 hectares of North Boambee Valley for Coffs Harbour City Council. The survey area was located between Englands Road and the Roberts Hill ridgeline. A single recorded open campsite ('Drive-In Site') was found in a ploughed paddock on a hill that rises 10-15 metres above surrounding marshland (Godwin, 1982). The site, estimated to contain many hundreds of stone artefacts scattered across a 5-hectare area, is the largest artefact scatter so far recorded in the Coffs Harbour district (Connell Wagner, 2004). Godwin also recorded two stone flakes on a foot slope just north of Englands Road and a single artefact on lowland at the foot of Roberts Hill ridge.

Connell Wagner has undertaken further Indigenous Heritage Assessments in 2004 for the NSW Roads and Traffic Authority as part of the proposed Coffs Harbour Highway Planning Strategy. The assessment concentrated mainly around the vicinity of the two route options. The assessment stated that the area has been subject to a range of European land uses such as grazing pastures and banana plantations, which will have compromised the survival potential of archaeological sites – *'highly disturbed landscape that offers little potential for the preservation of in situ Aboriginal archaeological sites'*. However, the assessment does report a number of specific areas where the potential for archaeological sites is moderate or high have been identified such as isolated ground-edge axes reported in the vicinity of Roberts Hill and stone artefact scatters north of Englands Road.

It is important to note no studies, to date, have been conducted within the western portions of North Boambee Valley (West).

North Boambee Valley lies within the area administered by the Coffs Harbour Local Aboriginal Land Council (LALC). In addition to the above reports the Coffs Harbour Local Aboriginal Land Council (LALC) was consulted. A representative of the Coffs Harbour Local Aboriginal Land Council have advised that they have concerns that Aboriginal Sites do exist in the study area and that individual development sites will need to be surveyed for the presence of any relics or sites. Any excavations will need to be monitored for the presence of an Aboriginal site or relic and if found, work cease immediately and appropriate notification and approvals be obtained from the National Parks and Wildlife Service in consultation with the LALC.

### **5.3.2 Non – Indigenous Heritage**

Although settlers have occupied the land within and surrounding North Boambee since the early 1800s, most of the existing buildings are of more recent construction. As revealed by searches of the Register of the National Estate, the National Trust of Australia (NSW) Register, the State Heritage Register and heritage schedules of the North Coast Regional Environmental Plan 1998 and Coffs Harbour Local Environmental Plan 2001, no sites or places of acknowledged historic cultural heritage significance have been identified in North Boambee Valley (West).

Further non - Indigenous Heritage Assessments have been undertaken by Connell Wagner in 2004 for the NSW Roads and Traffic Authority as part of the proposed Coffs Harbour Highway Planning Strategy. The assessment concentrated mainly around the vicinity of the two route options. The assessment stated no non – Indigenous was located around the vicinity of the two route options in North Boambee Valley.



## **5.4 Constraints Analysis**

Using the land suitability analysis described above there are a number of areas that, subject to further investigation may be suitable for rezoning to accommodate future urban growth.

The map in Appendix D shows the land constraints analysis for North Boambee Valley (West). The map identifies areas that are relatively unconstrained and suitable for development. This map does not represent a detailed assessment of all economic and social constraints. It does, however, provides a reasonable representation of constraints and provides a sound basis for identifying potential growth areas for urban development.

The amount of relatively unconstrained land capable of accommodating long-term urban growth is approximately 172 hectares or 29% of the total investigation area.

The largest physical constraints in the study area are vegetation, the quarry, flood potential and slope. Again, this is a broad scale analysis and further detailed site investigation can then be undertaken by investors as part of their risk assessment and decision making process. However, as the map demonstrates a high proportion of land that is suitable for development is fragmented and widely dispersed.



## 6. Sustainable Urban Design Principles

In order to implement the overall vision presented in Chapter 4, North Boambee Valley (West) is to be planned and developed in line with a set of sustainable urban design principles that can be used to achieve local aspirations and maximise its capacity to be a liveable and sustainable urban area.

Urban Design, the art of making places for people, is inseparable from good planning. Good design is the key to creating sustainable communities: lively places, attractive, usable, durable and adaptable places; places with distinctive character; streets and public spaces that are safe and accessible. There is a plethora of guidance documents available for achieving well designed places; from designing safe places such as through considering the principles of 'Safety by Design' (DUAP, 2001), more vibrant urban communities through "Liveable Neighbourhoods" and for design that impacts positively on people's health and wellbeing "Healthy By Design" (National Heart Foundation, 2004). Some of these documents may be more appropriately applied at the detailed master planning level.

While the planning system has a key role to play in delivering better design, the creation of successful places depends on the skills of designers. It should be recognised that no two places are identical and that good design arises from a thorough and caring understanding of place and context.

### 6.1 Sustainable Urban Design Principles for North Boambee Valley (West)

The following objectives underpin the preparation of this structure plan and any future development in North Boambee Valley (West).

#### **Context**

- ▶ Places before buildings.
- ▶ Creation of a sense of place or a distinctive local character - new developments must draw inspirations from the local vernacular, including urban morphology, architecture and landscape design. The use of local materials and an innovative approach towards their applications will help establish a distinctive identity. Its identity needs to be set apart from the Lakes Estate or North Boambee Valley (East).

#### **Land Use**

- ▶ A mix of housing choices for all residents and which apply energy and water conservation principles.
- ▶ Support a range of housing options with residential density of up to 28 dwellings/net ha within a 400m walking distance of the neighbourhood centre.
- ▶ The surrounding neighbourhoods, sensitively designed should have residential density of up to 12 dwellings/ha net.
- ▶ Provide for extension to the existing industrial estate on England's Road to provide a range of employment opportunities.
- ▶ Provide for a broad range of environmentally sensitive bushland accommodation settings, associated with the lifestyle and the surrounding natural environment.
- ▶ Neighbourhood shops and other services including community services and aged care/ seniors living are provided in a location that makes it convenient and financially viable, accessible by a number of



means – car, bicycle and on foot, and supported by clustering complementary activity near it (such as home based businesses).

### ***Built Form***

- ▶ A built form which creates an attractive and unique coastal and rural character.
- ▶ To encourage a contemporary built form in the industrial areas which complements the surrounding coastal and rural setting, through encouraging landscaping wherever possible to improve its appearance and amenity.
- ▶ The promotion of intricacy, colour, pattern decoration, texture, rich materials, technical excellence, innovation and landscaping.
- ▶ Long lasting adaptable buildings.
- ▶ To promote environmental sustainability in building and other developments.
- ▶ Crime Prevention Through Environmental Design (CPTED) principles are applied to design of all public areas, including, centres, parks, cycle and walking paths, recreational, sporting and community/cultural facilities.

### ***Environmental***

- ▶ To achieve sustainable urbanism, a balance is required between urban and natural habitat priorities, to their shared long-term benefit.
- ▶ Areas of natural environmental values including significant vegetation and waterway systems are maintained in natural condition as is reasonably possible and appropriate buffers are in place.
- ▶ Areas of natural environmental value, cultural heritage value and scenic amenity are incorporated into the design and layout of development to enhance the appearance, interest and local identity of the neighbourhood.
- ▶ The relief of the land is maintained and followed as much as is reasonably possible with the placement of roads and the formation of building sites that have minimal disturbance to the site.
- ▶ The principles of water sensitive urban design and appropriate storm water and erosion and sediment control measures apply to the design and construction of drainage infrastructure.

### ***Open space and civic improvements***

- ▶ To improve the appearance and amenity of North Boambee Valley (West) as a place to live, work and visit. In particular, to improve the quality of public space and greening of streets throughout the area.
- ▶ Ensure the adequacy of infrastructure to support the needs of the Valley.

### ***Movement***

- ▶ An interconnected environment with safe and attractive pedestrian/bicycle and open space linkages, attractive streetscapes and a functional road network serviced by a local public bus service.
- ▶ To minimise the impact of through traffic on the area and to implement traffic calming measures in local streets.

### ***Economic***

- ▶ Additional industrial land is required accommodate the future needs of the expanding population that require various goods and services from uses established in industrial areas. Encourage light,



modern, value-added industries with low off site impacts in the area around Englands Road with average lot sizes of between 1000 to 2500 square metres.

- ▶ The economic base of the area will evolve from more traditional agricultural activities towards employment in industrial and service activities around Englands Road.

### **Community**

- ▶ Provide for future needs of the community given the level of population growth anticipated.
- ▶ To reinforce the already strong sense of community that exists in North Boambee Valley and the strong community links it traditionally has to the Coffs Harbour region.

## **6.2 Flexibility of the Structure Plan**

The plan must be applied over time having regard to any new policy, standards on infrastructure provision and a greater understanding of the needs of development as it occurs. This ultimately will influence more detailed planning responses. Changes may be made to the recommended direction of this plan as a result of more detailed planning. Change may be justified by new information or more detailed understanding of key opportunities and constraints.

This plan should function as a policy direction and guideline for development and as such will need to be applied flexibly. The plan will also provide a basis for long-term infrastructure planning by agencies and may need to be modified to respond to this.