

**BEGA VALLEY SHIRE
COUNCIL**

Eden Structure Report
Preferred land use elements and
actions

April 2006



Bega Valley Shire Council

Zingel Place

PO Box 492

Bega NSW 2550

Phone (02) 6499 2222

Fax (02) 6499 2200

council@begavalley.nsw.gov.au

www.begavalley.nsw.gov.au

Eden Structure Report

April 2006

Contents

1. Introduction	1
2. Purpose of this draft structure report	1
3. Aim	2
4. Objectives	2
5. Direction – Twofold Bay and hinterlands strategy	3
6. Study area	6
<hr/>	
Context and analysis of the study area.....	7
Demographic analysis.....	10
Social analysis	14
7. Outcomes of the Charette process	14
<hr/>	
Eden settlement.....	15
Boydton settlement	19
Map C1 Existing Zoning Controls – Study Area	22
Map C2 Current Eden DCP Sectors	23
Map C3 Current Boydton Urban Zones	24
8. Preferred land use elements and actions	25
<hr/>	
1. Eden township	25
2. Boydton	25
3. Maintain and enhance access and usability of natural resources throughout the study area.....	26
4. Assess the built environment of the town centre of Eden and its surrounding precincts.	26
5. Social impact analysis	27
9. Recommendations regarding zoning and structural land use controls	27
<hr/>	
Boydton zone review	27
Eden 2(e) zone review	29
10. Social / equity recommendations	32
11. Recommendations for environment and recreation lands	33
<hr/>	

12. Recommendations for Service infrastructure 33

Water 33
Sewer 34
Stormwater 34
Roading 34

13. Recommendations on Bushfire and flooding hazards 34

Bushfire 34
Flooding 35

Maps

Map A Charette outcomes – Eden 18
Map B Charette outcomes – Boydtown 21
Map C1 Current existing zoning – Study area 22
Map C2 Current Eden DCP sectors 23
Map C3 Current Boydtown urban zones 24
Map D Preliminary recommendations 31

1. Introduction

In March 2004, the Department of Infrastructure, Planning and Natural Resources published the “Twofold Bay and Hinterland Strategy”. The Strategy was the result of an extensive period of consultation and research that sought to define the characteristics of the Twofold Bay and Hinterlands community and identify the processes required to assist the community reach its goals.

The Strategy describes the profile of the Twofold Bay and Hinterland community, explores the community vision for the future and identifies strategies and actions to help the community achieve that vision.

The development of a structure report for Eden and Boydtown is an extension of the work conducted for the Strategy. The Twofold Bay and Hinterland Strategy identified a series of objectives and strategies and each strategy has a list of specific actions to achieve those strategies. The Eden Structure Report is Bega Valley Shire Council’s response to those key strategies where they impact on land use planning.

2. Purpose of this draft structure report

A structure report is the backbone for any specific development plan of a town or locality. It is anticipated that the structure report will develop the strategies identified in the Twofold Bay and Hinterlands Strategy and document the opportunities and constraints of the study area with the aim of guiding appropriate development of the study area over the long term.

Council is preparing a shire-wide Comprehensive Local Environmental Plan (LEP) as part of implementing the vision of Council and its community for the coming 20 years.

Structure reports are being prepared for each urban district of the shire (Bermagui, Bega, Tathra, Merimbula/Pambula and Eden).

The process from here is seen as follows:

1. Council staff prepare a draft structure report and seek input from the community and relevant government agencies through a public exhibition.
2. Issues raised in submissions and state government policy issues and requirements will be considered and reported to Council for resolution.
3. Council will then resolve the following products from the adopted structure report:
 - Any urgent amendments sought to the current (2002) LEP
 - Input of a long term nature prepared for inclusion in the comprehensive LEP. The comprehensive LEP is targeted for public exhibition in late 2007
 - Any changes needed to the Eden Development Control Plan (DCP) no.34 and the incorporation of Boydtown in that DCP

- Any recommendations relevant from the land use reviews for referral to Council's economic development or environmental programs.

3. Aim

To develop a 20 year land use vision for private and vacant crown lands within the study area.

4. Objectives

The objectives of the Eden Structure Report are;

1. To define the desired character for the direction of Eden and Boydtown over the next 20 years.
2. To define the footprint and boundary of settlement in the study area.
3. To meet population projections for 20 years and ensure a diversity of housing choice.
4. To identify adequate land supply for diverse business uses to cover the coming 20 years, including opportunities for:
 - land based and Bay based aquaculture
 - maximising use of harbour and wharves
 - expanding tourism opportunities
 - adjustments for emerging trends in agriculture, fishing and forestry.
5. To ensure open spaces and natural areas are connected to provide recreation, conservation, public access and cultural and heritage opportunities in and around the study area.
6. To identify and protect the natural edges of the study area so ensure the area is a well-defined and compact settlement. To conserve the scenic qualities of Twofold Bay and the environmental integrity of existing natural areas.
7. To identify and reinforce the existing and proposed street pattern to ensure important places are connected within and around the study area. To allow for improved choice when moving from place to place, and provide commercial and social benefits, especially employment.
8. To encourage appropriate building design in a coastal context. To ensure development relates to the natural features of the site and locality.
9. To ensure future development meets the expectations of the community in terms of social, cultural, environmental and economic outcomes.

5. Direction – Twofold Bay and hinterlands strategy

The Twofold Bay and Hinterland Strategy identified a series of actions for implementation. The following matrix identifies the Actions specified by the Strategy that the Eden Structure Report aims to address.

Note: The Twofold Bay and Hinterlands Strategy identified a range of actions that relate to the study area. Only those identified actions that relate to matters influenced by the Bega Valley Shire Council through its land use and social planning are identified and addressed in the Eden Structure Report.

Matrix of strategies and actions identified by the Twofold Bay and Hinterlands Strategy to be developed through the Eden Structure Report.

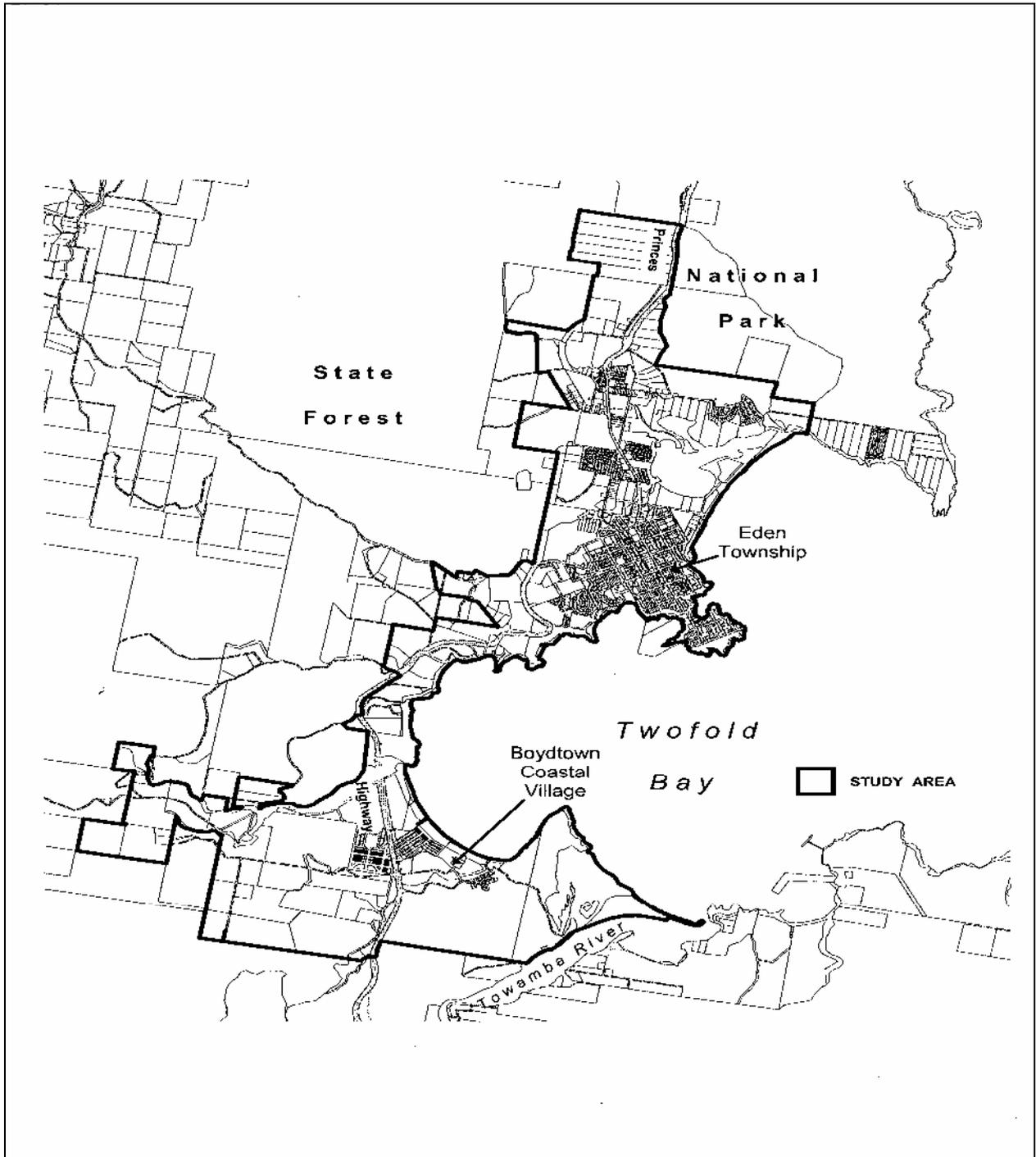
Strategy	Action	How the action is to be addressed in the Eden Structure Report.
1 Ensure availability of suitably zoned land and water	Finalise and develop the industrial land options in Eden listed below: <ul style="list-style-type: none"> • Wirriga Street • Hopkins Street • Boydtown • Multi-purpose wharf. 	The structure report will review supply of all urban land needs for Eden and Boydtown. Actions will then flow to Plan amendments, if needed and DAs for actual subdivision.
2 Ensure clear responsibility, leadership and accountability of governments	BVSC to demonstrate in the report to council that the Twofold Bay and Hinterlands Strategy has been considered in BVS LEP 2002. <ul style="list-style-type: none"> • Link with Rural Lands Review and Local Planning processes Finalise decision on Boydtown LEP.	The Structure report will advance the supply of business sites, redevelopment of the commercial centre and lead to amendments of the LEP 2002 or the subsequent comprehensive LEP to reflect these new strategies. The Eden Structure Report seeks to identify the opportunities and constraints of land at Boydtown with the aim of identifying more appropriate zonings to direct desired land use outcomes. Plan amendments will then follow and some interim amendments such as the 2(c) zone review are under action.
3 Ensure community involvement in the implementation and monitoring of the Twofold Bay and Hinterlands Strategy	In co-operation with the Boydtown developer, investigate the preservation and management of Torarago Point and its access as a historical and recreational area.	The structure report will address the future uses of the Torarago Point area and review routes of public access. Heritage items will also be identified, assessed and conserved/managed.
4 Provide for a range of specific housing and accommodation needs	Develop a rural subdivision and smallholding policy including: <ul style="list-style-type: none"> • The Kiah Study • Review of rural concessional allotment policy. 	Council has adopted a small holdings supply report for the Eden district. The structure report will review small holding zones close to Eden/Boydtown. The rural review is exploring future policy for concessional lots.

Strategy	Action	How the action is to be addressed in the Eden Structure Report.
	<p>Develop a strategic plan to provide land and house packages by:</p> <ul style="list-style-type: none"> • Reviewing housing demand and supply and promote opportunities to consolidate • Updating and circulating a 2001 edition of the Land and Housing Monitor noting best market and site location prospects • Developing specific house/land packages • Promoting local workshop series to consider ways to reduce local design and construction costs. 	<p>Council is identifying what factors add to the cost of design and construction</p> <ul style="list-style-type: none"> • preparation of design guidelines for residential and non-residential development. • identification of localities that may be suitable for specific housing types, eg. medium density residential, accessible/adaptable housing, larger lot/detached dwellings • preparation of desired future character statements for precincts • appropriate zoning of land relating not only to demand but land characteristics and constraints.
<p>5 Ensure socially responsible development and management</p>	<p>Utilise the natural environment to promote health and fitness within the community by:</p> <ul style="list-style-type: none"> • constructing new and maintaining current recreational facilities (eg> walk/cycle tracks, parks/gardens, playing fields) • participation/consultation with all ages/communities. <p>Minimise negative impacts of development by:</p> <ul style="list-style-type: none"> • evaluating the broad community advantages and disadvantages to projects • ensuring effective monitoring of social impacts • assessing likely impacts for future developments • cost and develop a contributions plan (s94) policy that ensures the benefits are directed to the local community. <p>Develop a visual amenity framework for Twofold Bay:</p> <ul style="list-style-type: none"> • establish urban design principles for all new industrial and residential developments • Eden Town Plan and rural strategy will include visual analysis. 	<p>The structure report will cover these issues in outline and with an emphasis on the land use interactions.</p> <p>Council is:</p> <ul style="list-style-type: none"> • Currently preparing the Eden foreshores plan of management which will look at the detail for all recreation development and needs for all foreshore reserves in the study area. • Revising its Social Plan and economic strategies. Those programs will address the details of social and economic planning. <ul style="list-style-type: none"> • Council has targeted a full review of all S94 plans. Recent amendments to the legislation allow Council to negotiate developer agreements and these will be pursued for larger projects. • The structure report attempts to develop desired future character statements for individual precincts of Eden and Boydtown. • The shire Commercial Centre Strategy has set parameters (a detailed DCP amendment is under preparation) for the key business precinct of Eden and support precinct of Boydtown.

Strategy	Action	How the action is to be addressed in the Eden Structure Report.
6 Celebrate the community's diversity to ensure access and equity	Provide adequate venues in Eden for cultural events, workshops and exhibition space for local people.	<ul style="list-style-type: none"> The structure report and Social Plan will identify existing and desired community facilities that may be provided by BVSC. Eg community centres, halls, childcare centres, libraries, galleries etc. Council is preparing a Section 94 contribution plan to ensure appropriate developer contribution to community facilities.
7 Ensure that legislation and regulations encourage responsible, sustainable development.	<p>Complete comprehensive environmental capacity study for Twofold Bay and hinterland by:</p> <ul style="list-style-type: none"> reviewing the Eden residential strategy to 2011 reviewing the draft Eden town plan including the development of a landscape theme reviewing DCP No. 38 (now referred to as DCP 34) – a strategic review of land use controls in Twofold Bay. 	<ul style="list-style-type: none"> Structure report will project land supply demand for the next 20 years. Structure report will overhaul DCP 34: Eden Urban Area and recommend landscape themes for development.
8 Improve infrastructure, services and utilities on land and in water	<p>Ensure there is adequate road infrastructure in place for all industries in Twofold Bay and hinterlands including equitable cost recovery measures by:</p> <ul style="list-style-type: none"> investigating a heavy vehicle bypass linking Snug Cove to the Highway. 	<ul style="list-style-type: none"> The structure report will review sewer, water and stormwater needs for the 20 year vision. A heavy vehicle bypass from Snug Cover is considered uneconomic to provide in the 20 year period.

6. Study area

The preparation of a structure report for the Eden and Boydtown areas is focused primarily on the urban zoned land but also includes land that geographically links the two precincts. The study area is therefore generally confined to the urban and urban fringe lands in the Eden and Boydtown area plus their rural hinterland. The study area is defined by the natural boundaries of the Tasman Sea and the State Forests and National Parks that surround the two settlements.



Context and analysis of the study area

The natural environment

The study area is defined and bound by the natural environment. The Tasman Sea to the east, National Park to the north and south and State Forest to the west each act as a confinement to future development within Twofold Bay and its Hinterland.

The environment contributes to the area's unique and immense beauty and is a significant consideration when planning for the future development of the region. The natural constraints of the area act as boundaries that create a sense of place and contribute to the local character, distinct from any neighbouring settlement. They also help to create a compact settlement, and this is considered essential in maximising the efficient provision of services and infrastructure. It is critical that land use is appropriately located and designed to ensure the best possible use of limited land supply within the study area.

The bulk of natural areas in the study area are State Forests, National Parks and Council managed public reserves, however, large patches of Crown land and privately owned natural lands exist. This strategy seeks the retention of most natural systems and detailed evaluation will be needed of any sections proposed for development.

Bushfire hazard

Much of the study area is classified as bushfire prone land. The land based perimeter of the study area is predominantly National Park and State Forest. As such it is recognised that bushfire management processes, particularly hazard reduction and securing appropriate asset protection zones, are important considerations to understanding the constraints and opportunities for development of the urban and fringe areas of the study area.

The opportunity is taken in the report to make recommendations to ensure that new developments meet Planning for Bushfire Protection and that existing areas of concern are improved.

Environmentally sensitive areas

The study area is rich in biodiversity and in areas that are considered to be environmentally significant to the character of the locality. Greater definition and recognition of such assets within and adjoining the study area will enable focused development and provision of suitable buffers to such areas. Suitable buffer zones should be identified to ensure a suitable transition zone between urban development and those areas recognised as contributing to the environmental significance of the study area.

Town character

The Eden and Boydtown precincts have an individual character that evolves from the natural setting of the settlements and the history of the development of the area,

particularly the township of Eden. As a result, significant vistas are afforded from most parts of the settlement. Core precincts are recognisable, such as the working port, business precinct, low-density residential precincts, coastal strip and bushland interface settlements.

Services and infrastructure

Future development within the study area will be highly dependant on the provision of essential services, such as water and sewerage reticulation systems, to accommodate future development demand.

Studies of the capacity of the existing infrastructure in the Eden and Boydtown areas are being undertaken by Council in order to gain a greater understanding of the growth opportunities within the study area and the greater local government area.

Water services

Reticulated water for the Eden and Boydtown areas is provided by the Tantawanglo-Kiah water supply system. This system has two sources of water, the Towamba River alluvial aquifer (referred to as the 'Kiah borefield') in the south and Tantawanglo Creek in the north. The system also has two off-stream dams, Ben Boyd Dam (800ML full capacity) in the south and Yellow Pinch Dam (3000ML full capacity) in the north. Both dams are off-stream dams with small catchments and are filled with water piped from the respective sources. The dams were constructed to meet peak period demands and for drought security when availability of water at the two sources is limited. The transfer capacity to the dams is limited by existing pipe size and pumping capacity and availability of water at source.

Eden and Boydtown are located on the southern part of the Tantawanglo-Kiah water supply system and receive water from the Kiah borefield and occasionally Ben Boyd Dam when needed (ie Ben Boyd Dam water is for peak summer time and/or drought times). The peak capacity and licensed entitlement of the Kiah borefields is 1400ML/annum, however 1400ML/annum is rarely obtainable due to extended periods of low river flows at source and system transfer limitations between the borefield and the dam. The sustainable drought yield is estimated to be around 1000ML/annum.

Current water supply demand for the Eden and Boydtown area is approximately 700 megalitres per annum. Therefore it is estimated that an additional 300ML/annum is currently available to accommodate future growth in the Eden and Boydtown areas.

Given the introduction of BASIX in regional areas of NSW in July 2005, the household water usage for new developments is expected to be approximately 144KL/annum/ET. Based on this household usage, and assuming water supply for the Eden and Boydtown areas is received from the Kiah borefield and Ben Boyd Dam only, an additional capacity to service 2000 ET's exists.

Note : ET being an equivalent tenement or approximately one single dwelling.

The Tantawanglo-Kiah water supply system is the largest in the Shire with the highest population growth rate. It is affected most by drought and lack of water availability from the two sources (the Kiah borefield and Tantawanglo Creek). Future licence access conditions will likely reduce yields from the two sources further. Current demand is nearing system capacity from the sources, with drought placing added pressure on available supply and storage levels in the two dams. System augmentation is required to improve long-term water security.

Development of a pipeline from the Bega bore fields to supplement Yellow Pinch Dam is currently being planned. The key issues that will require further investigation in relation to water supply to the study area include the following;

- Borefield capacity limitations, particularly during times of no surface flow in the river.
- Water storage size. Ben Boyd Dam is a relatively small dam with only around one years (backup) supply of water for the current population of Eden and Boydtown. A larger dam with increased transfer capacity from the source would improve system capacity.
- Transfer capacity limitation between the borefield and Ben Boyd Dam. Ben Boyd Dam is filled with water from the Kiah bores. Council's ability to refill the dam quickly is limited by the existing pipe size, pumping capacity and the availability of water in the lower Towamba River. Regularly drawing down Ben Body dam water is not possible with the existing limitations on capacity to refill.
- Water quality issues – there are no water treatment plants on the system with water receiving chlorination only. Algal blooms in summer may be an issue.

In relation to the potential development at Boydtown, additional reservoir sites would be required for the east and west sides of the highway. Investigation of a potential reservoir site to the south of the existing 2(b) zoned land should be pursued and investigation of the potential for a 'dual system' to allotments at Boydtown should be encouraged. Such a 'dual system' would incorporate garden watering and toilet flushing from bore or rainwater with potable water being provided from reservoir sites. Implementation of the principles of Water Sensitive Urban Design would be essential.

More detailed investigations are being undertaken in relation to the Boydtown settlements and would be presented as part of a Master plan for the Boydtown area.

In overview and subject to completion of the above studies and works, water supply is not seen as a constraint on likely growth over the 20 year report period. The likely permanent population increase by 2025 is estimated at 1,300 persons, taking Eden/Boydtown to a little under 5,000. The peak tourist loading would be about 8,000.

Even allowing for strong growth in employment and development (in particular tourism), it is unlikely the peak demand would increase beyond the 9,000 equivalent person capacity and further capacity is likely to be achieved via the Bega – Yellow Pinch pipeline project.

Sewer services

Investigations of the capacity of the existing treatment plant at Eden were undertaken for Council by the Department of Commerce (DOC) report released December 2003. It is assumed in the DOC report that:

- The permanent population of Eden to the year 2031 will rise to 4500 persons from existing 3350.
- Adding the tourist loading to the projected permanent population loading, the peak future population loading has been estimated at 8,500 ep.

Note: ep means equivalent person. Note: these figures are a little more conservative to Council's projections.

The report concluded that the existing treatment plant at Eden should be capable of processing flows, with no deterioration in effluent quality, of up to 6000 ep with the current tank configuration. Some upgrading works and reconfiguration of reactor tanks or chemical dosing may be required to cater for the projected growth. The upgrading works would likely include roadworks for improved access, bank stabilisation and UV disinfection system installation for pathogen removal.

Recently completed Inflow & Infiltration modelling of the Eden sewer collection and pumping system by Montgomery Watson and Harza (September 2004) concluded that the capacity of the system is sufficient to handle the dry weather flows but would require upgrading works to cater for wet weather flows. The extent of future upgrading works will depend on the desired Level of Service acceptable to the community and this will be subject to further investigations.

More recent population modelling estimates the permanent resident population for 2025 at a little under 5,000 and the peak season load at 2025 at approximately 7,500.

Augmenting the Eden plant is not considered necessary for at least eight years on current projections.

The existing treatment plant at Boydtown is a privately operated system. More detailed investigations are being undertaken in relation to the Boydtown settlement and would be presented as part of the servicing strategy of the Master plan being prepared for the Boydtown area. Boydtown will need to address all of its 20 year projected servicing needs.

Demographic analysis

An extensive overview of the Eden and Boydtown community profile is included in the Twofold Bay and Hinterlands Strategy however a summary is included here for reference. The figures have been updated to reflect latest modelling.

Population change and variations in age distribution

Eden's population at the 2001 Census was 3157 persons. This represented a growth of only 0.3% per annum since 1996, compared with an overall growth rate in the Shire of 1.1% per annum. Population change in Eden has occurred unevenly. For example, there has been a decline in the number of children aged 0-4 years but an increase in the numbers of young people aged 12-17 years and older people over 55 years.

Household composition and families

There are approximately 1160 households. The average family household has 3.0 people. The most common sizes were 2 persons (38% of households) and 1 person (24%). As with the rest of the shire, the population is ageing. The percentage of retirees is likely to continue rising in the study area throughout the 20 year period. As such more accessible housing will be needed.

Income levels

The average family income was around \$740 per week or \$38000 per annum, which is similar to the Shire overall. Average female income was around \$310 per week; average male income was about \$520 per week. The proportion of people on low incomes tends to be higher for young people and women (due mostly to lower wages and more working part-time) and older people (due mostly to retirement).

Population projections and residential land requirements

In 2001 Eden Urban Area had 3,157 persons in 1,365 dwellings (this equates to 2.31 persons per dwelling).

By 2025 a **low average** growth rate of 1% would result in

- approximately 4,000 persons
- 2.31 persons per dwelling
- this equals 365 dwellings.

By 2025 a **high average** growth rate of 3.6% for the period would result in

- 5,200 persons
- 2.31 persons per dwelling
- this equals 884 dwellings.

For the purpose of this report, the projected permanent population of Eden at 2025 is 4835.

Faster rates of growth could occur if marketing of land is intensive in the new Eden Cove and Boydtown estate.

Even at high rates of growth, the existing stocks of residentially zoned land are considered to adequately cater for the demand for residential land for the next 10 years.

Boydton urban serviced area was estimated to have 15 permanent residents in 2005 but perhaps another 30 – 50 people in the study area. The growth rate for Boydton could vary unpredictably over the next 20 years as there is significant potential in current urban zones. The current estimate is for 575 permanent residents in 2025. Current projected permanent population for the study area at 2025 is therefore $(575+4,835=)$ 5,410, however tourists and visitors are expected to increase this by approximately 55% in the January period resulting in a need to accommodate around 8,500 in January 2025.

The current peak population of the study area, estimated from treatment works peak flows is put at:

Eden	5,469
Boydton	1,200
TOTAL	6,669

So in the order of 1,800 additional persons would need accommodating in 2025 over 2005 with perhaps 500 – 600 of these being additional tourist visitors. This figure ignores any growth in tourist accommodation in the unsewered sections of the study area.

Even allowing for 50% of visitors being accommodated with permanent residents and in existing accommodation, something in the order of 200 – 300 extra tourist beds may be needed by 2025. This needs a strategy in the DCP.

Types of housing required for permanent residents

5410 permanent residents at 2025 at a density of 2.31 persons per dwelling would require 2342 dwellings. There is estimated to be currently 1500 dwellings as at 2005, so a further 842 may be required by 2025. Existing zones can readily supply this number.

Eden Cove can supply in excess of 400 lots. The remainder of Eden urban area could readily supply 200-300 medium density dwellings. There are vacant Crown Lands that might supply 200 lower cost lots and Boydton might have a capacity of up to 700 lots.

Demand is stronger for detached houses on separate lots but decreasing household size and perhaps a 15% increase in persons over 65, means Council needs to increase supply of accessible medium density housing, smaller, accessible detached housing and senior living opportunities covering independent living, and nursing care accommodation.

The Eden and Boydton DCP needs a supply strategy for these housing types.

Employment and labour market

The total labour force was approximately 1320 persons; a decrease of 49 or 4% since 1996. The unemployment rate on census night was 12.9%, compared with the Shire rate

of 9.3%. The male unemployment rate decreased from 12.9% to 11.9%. The female unemployment rate increased from 11% to 14.1%.

The key employers in the economy were the retail trade (210 people), agriculture, forestry and fishing (140 people), manufacturing (140 people) and accommodation, cafes, restaurants (130).

The fastest growing employers/industries were the retail trade, wholesale trade, transport and storage, property and business services. Those in decline included the manufacturing industry (-115 jobs) and the agriculture, forestry and fishing industry (-13 jobs). Restructuring in the forest and fishing industries has impacted severely on Eden.

The current employment projections to 2025 suggest no further decline in employment in the primary industries (fishing, agriculture and forestry). There are small markets emerging for aquaculture and value adding to primary production.

There is likely to be some small growth in direct employment associated with the multi-purpose wharf and for the regional significance of the wharf to increase beyond the 20 year horizon.

There are unknowns such as future needs of the Navy which could have marked impacts if, for example, there were moves to increase the scale of operations at Twofold Bay. Currently there seem to be no formal proposals.

Other projects such as the Sapphire Coast Marine Discovery Centre could boost jobs in education / research and tourism.

Growth of employment in the tourist, retirement and retail sectors is seen as being the largest proportion of new jobs.

Other significant areas could be in home based employment – especially using computer technology.

Land use requirements for Eden's employment and economy:

- The commercial centre review will address commercial space requirements and provide higher density living close to / in the commercial area.
- There is major capacity for growth in tourist accommodation in Boydtown, Snug Cove and Cattle Bay – more than is likely to be fully developed in the 20 year period. It will be important to ensure an adequate amount of tourist accommodation if Boydtown's tourist (2(c)) zone is to be opened to permanent living. The Towamba Inlet area has potential for lower cost ecotourism opportunities that are otherwise becoming limited in the study area. Four-plus star resort / hotel facilities are not provided currently in the area and Council should facilitate these options at Cattle Bay, Snug Cove or possibly Boydtown.

- There is little land currently available for industry. Land Council properties and Crown Lands are the only sites of potential in Eden, a business park might be accommodated at Boydtown and wharf-related industries can possibly be accommodated on 1(a) zoned lands near the multi-purpose wharf.
- A range of home scale businesses are permissible in residential and rural zones and Council will review the provisions and make as flexible as possible while protecting residential amenity.

Social analysis

The key social issues highlighted for the Eden and Boydtown communities, through the Twofold Bay and Hinterland Strategy process and the Charrette discussions are recognised as follows.

Transport

- Lack of public transport options and inadequate private and community transport services.
- High costs of fuel and power.
- One car households which can increase social isolation and loneliness.
- Extended travelling times and high incidence of road accidents.

Affordable housing

- The cost of housing in coastal towns is increasing.
- The supply of land, tourism and the migration of older people to coastal areas is decreasing the supply of low-cost housing available.
- Low-income households are being priced out of the coastal housing market.
- Many low-income households are forced inland.

7. Outcomes of the Charette process

In March 2004 Bega Valley Shire Council conducted a Charrette, or intensive planning workshop, with major landowners within the study area and key government departments.

The three day workshop focused Councils attention on the strategic planning needs of the Eden community and the proposed development potential of the Boydtown locality.

The outcomes of the Charrette process were the recognition of key precincts within the study area and identification of the target issues and actions associated with each precinct. The identification of these precincts included consideration of the desired future land use that may be appropriate in each settlement. By identifying the development

potential of these key precincts, further analysis of constraints and opportunities can be undertaken.

This section of the report should be read in conjunction with Maps A and B.

Eden settlement

1. Eden Cove precinct

Detached housing, low-density residential precinct.

- 150 residential allotments approved in existing development consents.
- Master planning of residue currently being prepared by landowner. Hypothetical potential for an additional 200-300 allotments.

Target issues:

- a) Set guidelines for the built form and landscaping concept for Eden Cove.
- b) Stormwater quality and water reuse is critical due to the location of the site within the Curalo Lake catchment.
- c) Asset protection zones adjacent to National Park are critical.
- d) Pedestrian access to adjoining natural areas desirable.

2. Industrial lands

Existing industrial precincts have an approximate additional capacity of 15-20 lots.

2A. Hopkins Street industrial precinct

Existing land use sector classification under DCP 34 is appropriate.

Target issues:

- a) Resolve land tenure/land grant issues.
- b) Explore the potential for a joint venture with BVSC to develop remaining industrial lands within this precinct.

2B. Wirriga Street industrial precinct

Existing land use sector classification under DCP 34 appropriate.

Target issues:

- c) Redesign of vehicular access required. Some road closures required.
- d) Two owners – Land Council and Lands Department.
- e) Development strategy required.
- f) Renegotiate Land Assessment with Department of Lands.

3A. Cattle Bay precinct

- Employment generation from future uses critical.
- Desire for reasonable provision of tourist based development.
- Residential/tourist development balance critical.
- Explore option of marine based business as an alternative.

Target issues:

To be resolved through a Master plan for Cattle Bay.

3B Snug Cove precinct

Explore a range of scenarios that are possible for the future use and development of this precinct.

- Scenario 1 – Fuel tank site being investigated. Consider the possibility that the precinct may remain a fuel depot. Strengthen Snug Cove fishing precinct.
- Scenario 2 – Removal of fuel tanks and rehabilitation of the site. Redevelopment potential for:
 - tourism
 - permanent residential accommodation with suitable buffer zone.
 - marine centres/aquaculture etc
 - potential use of crown land for tourist/commercial uses
 - improve function of wharf facilities.

Target issues:

To be resolved through Snug Cove and Environs Master plan.

4. Business and higher density living precinct

Strengthen/reconfirm importance of the existing core business precinct.

Target issues:

- a) Beautify main business precinct (being progressed through Action on Imlay process).
- b) Explore desire for more intensive residential development in business precinct.
- c) Abandon FSR requirements (as apply for residential components). Objective is to facilitate mixed commercial and usable apartment living. This will require an intensive design plan.
- d) Investigate potential of key development sites in business precinct.

- e) Improve vehicle connectivity. Rear access preferred (laneways etc).
- f) Investigate potential for improvement of public transport network.
- g) Investigate and encourage development of pedestrian precincts and connections.

5. Barclay Street precinct

Vacant land with development potential.

Target issues:

- a) Resolve significant drainage issues, including water management.
- b) Review business land use sector currently applying to the land.
- c) Potential for medium density residential precinct.

6. Review of entire 2(e) urban zone

Target issues:

- a) Provide realistic zone boundaries. There is a need for zone surety and continuity with the remainder of the Shire.
- b) Explore several urban zones, industrial, residential and resource protection.

7. Vacant Crown land – Cook Drive / Botany Street extension

- Broadly concur with Crown Land Assessment undertaken by Lands Department.
- Retain as possible extension of Cook Drive/Botany Street housing precinct.

8. Vacant land – Semi-circle / Island Timms / Crown land precinct

- 8a. Subdivision potential for detached urban land use (approximately 30 allotments).
- 8b. Retain as open space as per existing controls.

Concur with recommendations of Crown Land Assessment.

Target issues:

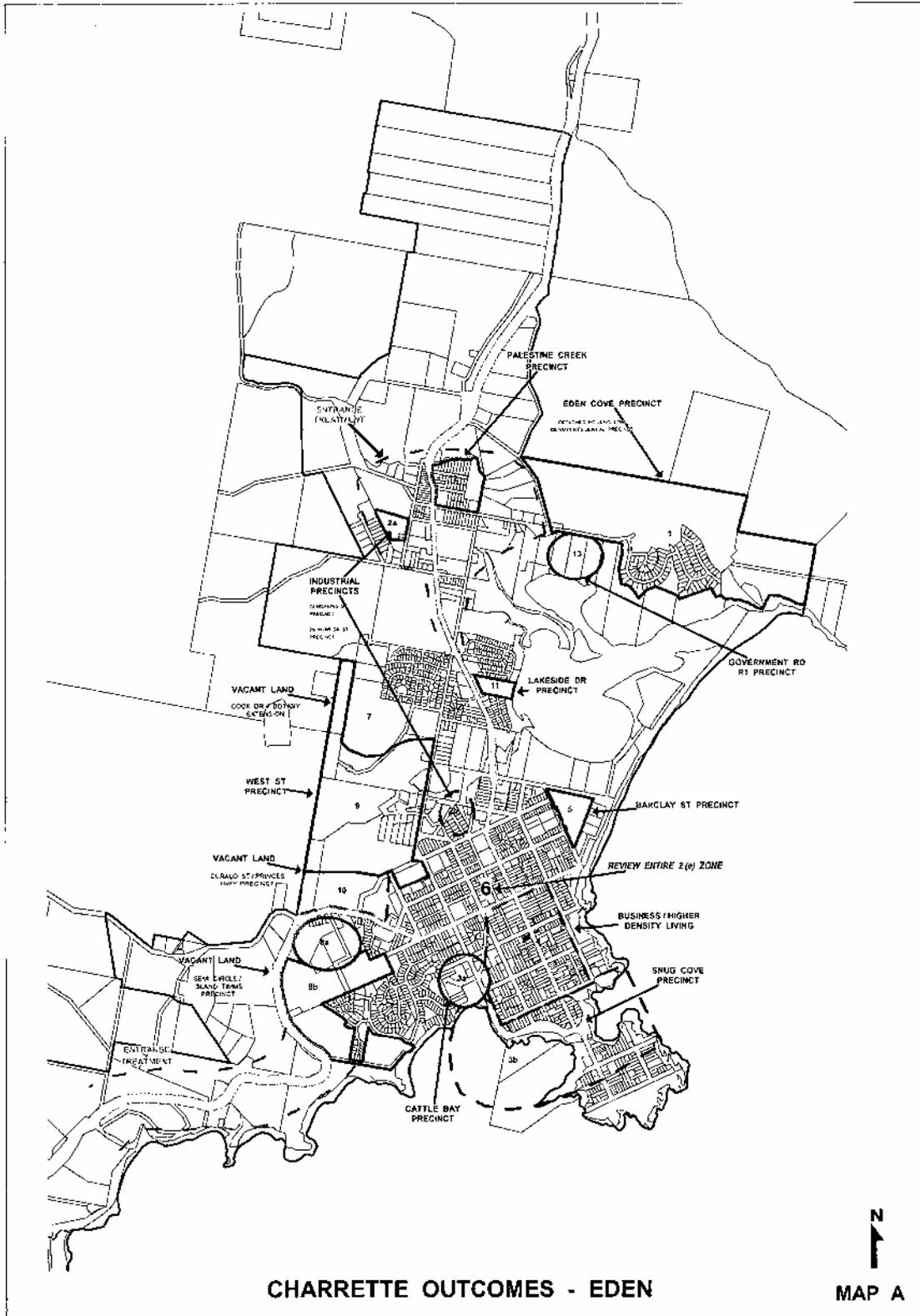
Need to 'fire plan' edges of the precinct. Implement a perimeter road as a fire break.

9. Vacant land – West Street precinct

Retain as vegetation conservation area.

Concur with Crown Lands Assessment

Map A Charette Outcomes – Eden



10. Vacant land –Curalo Street / Princes Highway precinct

Some option for development.

Target issues:

- a) Consideration of aesthetics, bushfire hazard and water quality essential.
- b) Possible extension of existing retirement village to be explored.
- c) Potential use for sports facilities or other public uses (eg cemetery) with the dual role for town fire protection (fire break).

11. Lakeside Drive precinct

Detached residential or lake side apartments.

Target issues:

- a) Flooding analysis required.
- b) Hypothetical potential for 30 allotments.

12. Palestine Creek precinct

To remain as per the existing Development Control Plan controls.

13. Government Road R1 precinct

To be rezoned to Rural Residential (private land component) and Open Space (Crown land component).

Boydton settlement

The preliminary analysis of the Boydton settlement acknowledged the differences in the type of planning required for the future development of this settlement. Unlike Eden with its defined street pattern and established settlement style, Boydton is very much a 'green field' site, with the exception of some key landmark sites, such as the historic Sea Horse Inn and church site and several existing residential dwellings and caravan park. The planning principles involved in recognised the development potential of Boydton therefore identified two core areas, the existing settlement east of the Princes Highway and the future potential west of the Princes Highway.

East of Princes Highway

- Encourage a mixed-use employment generating precinct close to any future wharf facilities.
- Identification of permanent residential accommodation precincts, incorporating affordable housing precincts and complimentary holiday accommodation precincts.
- Maintain vegetation and open space network along the coastal strip, river and ridgelines.

- Explore wharf access industries.
- Recognise environmental sensitive areas and limit development to low impact 'eco-tourism' type developments.
- Ensure access to beaches and foreshore is maintained and improved for the public.

Target issues

- a) Flora and fauna analysis, coastal hazards analysis, bushfire analysis required.
- b) Heritage significant study required and possible conservation management plan prepared.
- c) Identification of desired future character statements for each precinct.
- d) Rezoning required identifying more appropriate land use controls than is reflected in the existing zones.
- e) Explore potential for wharf support industries located with good access to wharf.

Most of these issues would be addressed and resolved through a Master plan for the Boydtown holding.

West of Princes Highway

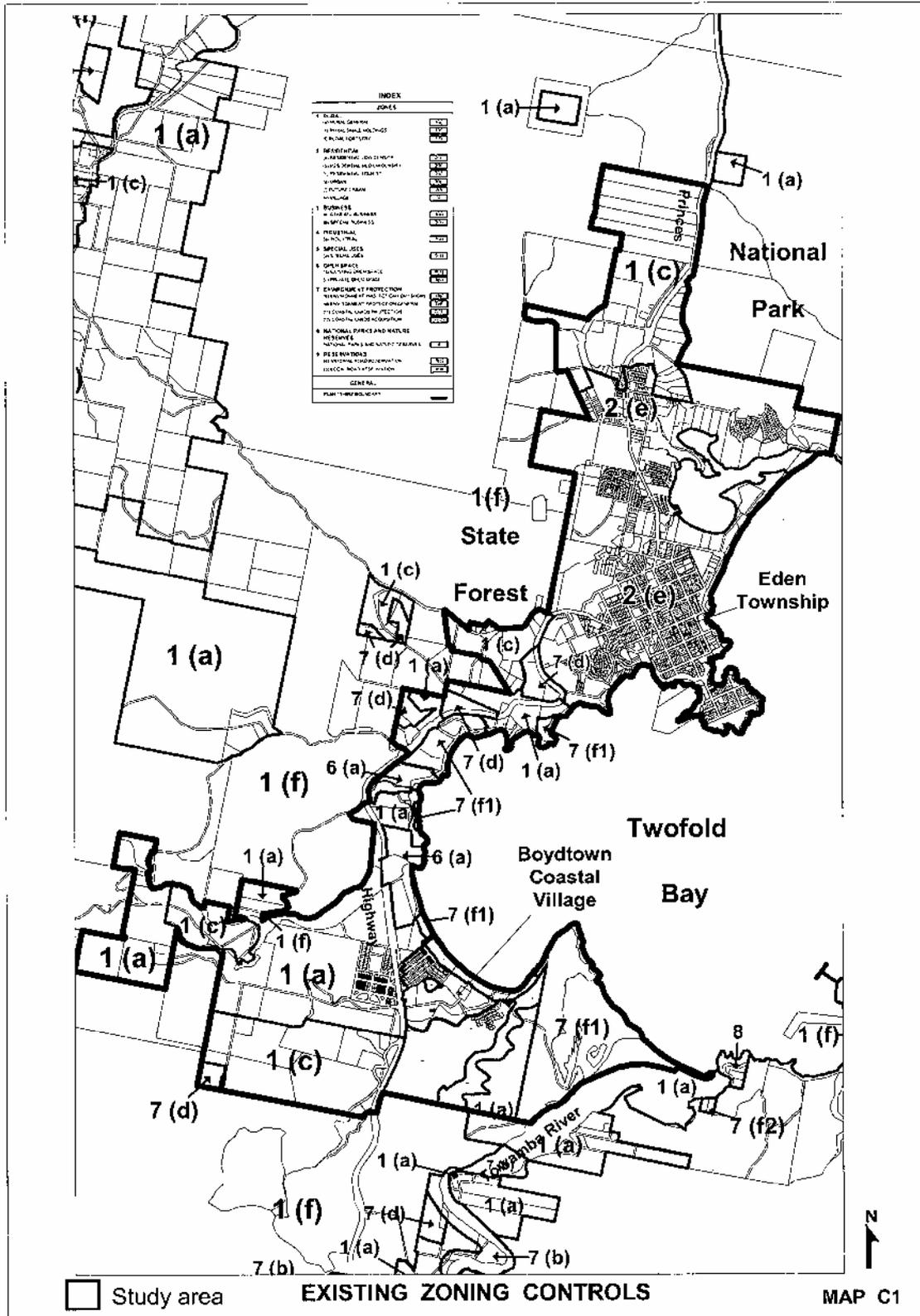
- Explore potential for an industrial precinct to supplement the study area and hinterland.
- Explore possibilities of 'working villages' precincts with residential accommodation and compatible business uses.
- Maintain riparian buffers to river system.
- Minimise impacts on functionality of Princes Highway as an arterial road.

Target issues

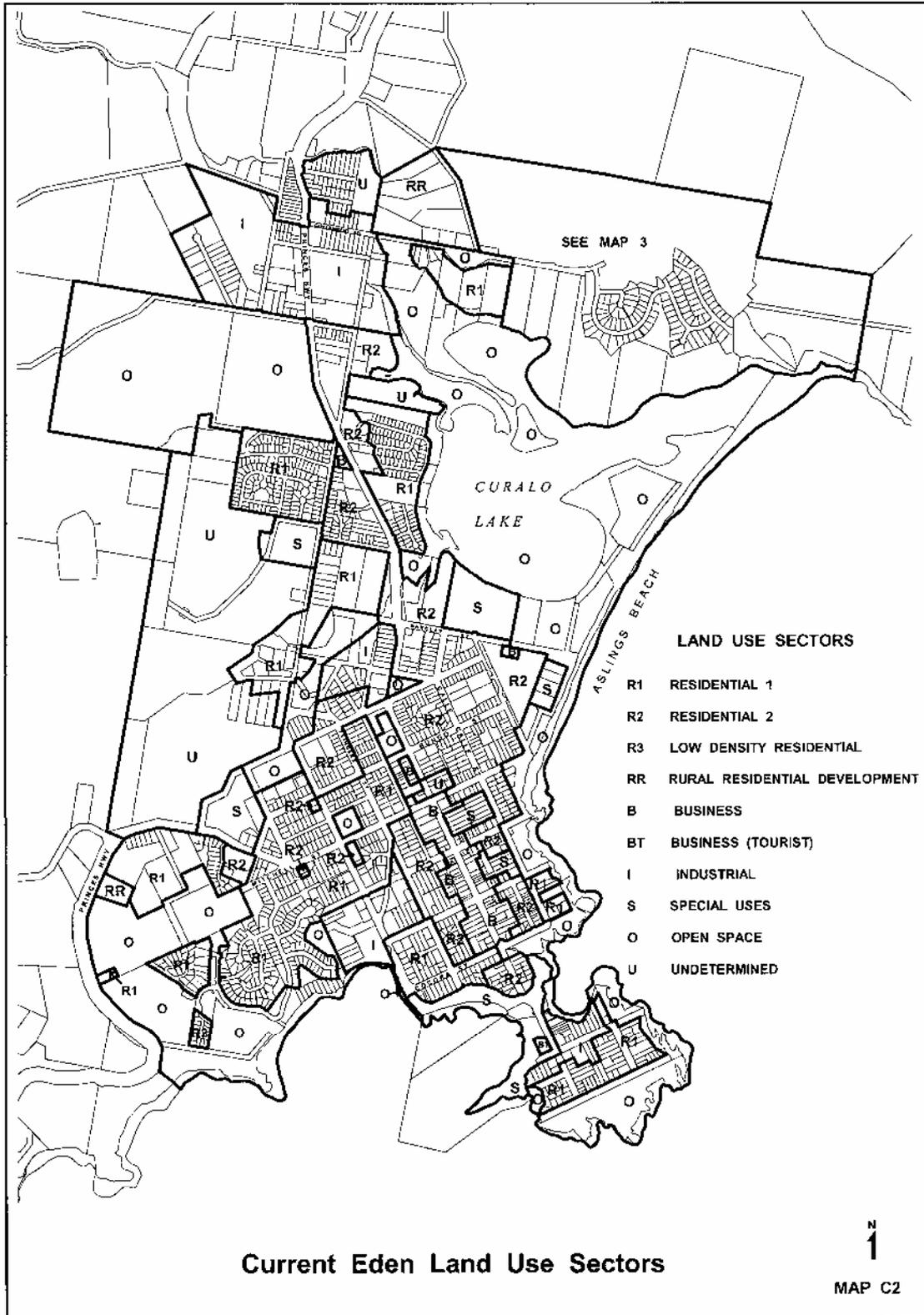
- a) Flora and fauna analysis, flooding analysis, bushfire analysis required.
- b) Identification of desired future character statements for each precinct.
- c) Rezoning required identifying more appropriate land use controls than is reflected in the existing zones. Justification of the demand, viability and impact of developing land west of the Princes Highway would be required.
- d) Develop an industrial estate with good access to the wharf.

Most of these issues would be addressed and resolved through a Master plan for the Boydtown holding.

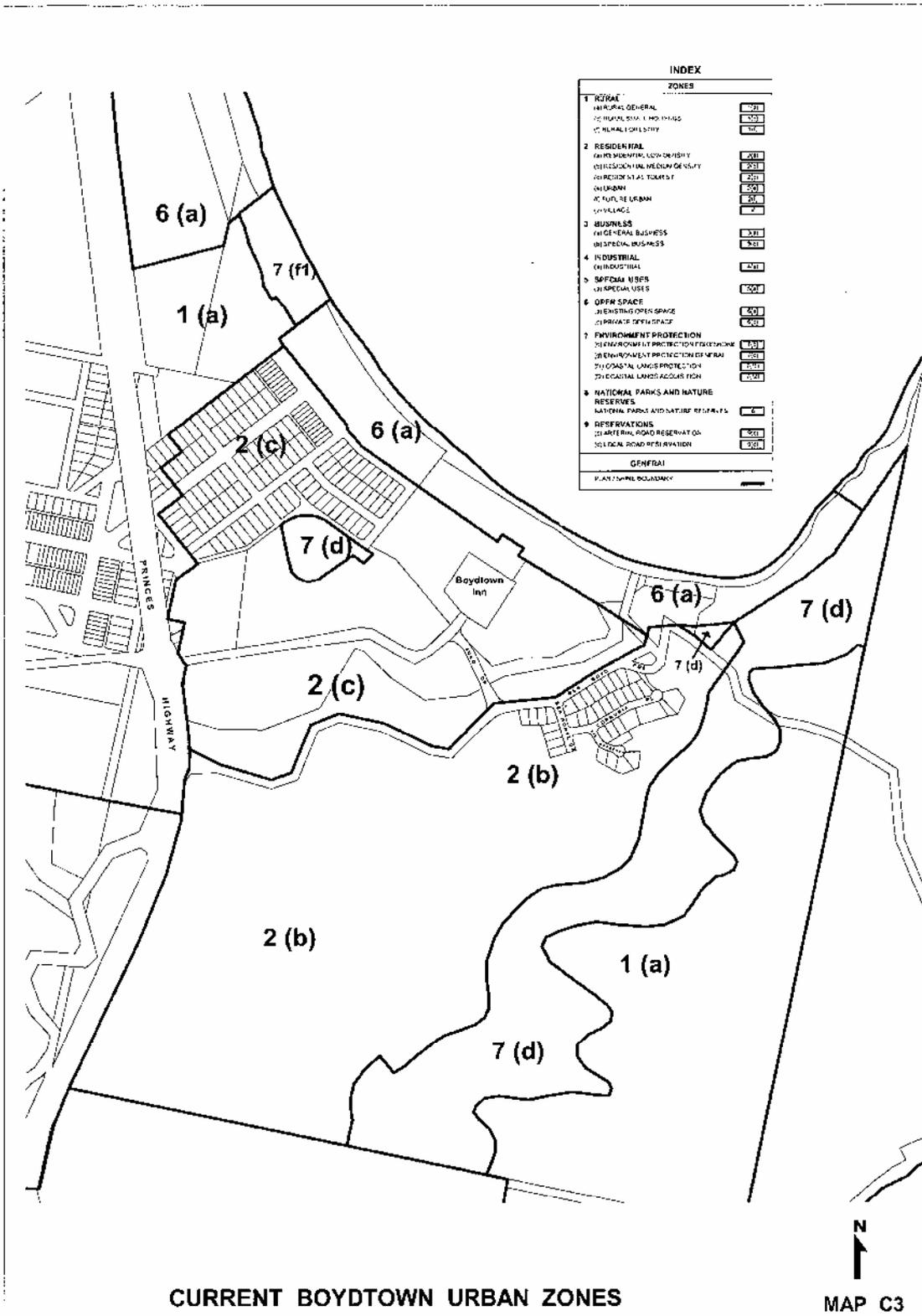
Map C1 Existing Zoning Controls – Study Area



Map C2 Current Eden DCP Sectors



Map C3 Current Boydtown Urban Zones



CURRENT BOYDTOWN URBAN ZONES

MAP C3

8. Preferred land use elements and actions

As a result of the opportunities and constraints analysis undertaken at the Charrette and subsequent planning work, the following preferred land use elements and actions were identified as priority matters.

1. Eden township

- Main retail commercial centre of the study area and one of the four main retailing and tourism commercial areas of the shire.
- Cattle Bay and Snug Cove have potential for urban based tourism accommodation and facilities and could benefit from four plus star accommodation.
- Concepts for Land Council and Crown Lands need to be finalised for supply of industrial land.
- Seniors living accommodation requires significant expansion including provision of additional nursing / hostel care.
- Increased accessibility needed for seniors and persons of restricted mobility in both public and private infrastructure.
- Commercial area to be targeted for precincts of higher buildings (up to four storeys) including residential and tourism accommodation. Architectural guidelines are needed (under preparation).
- Finalise master plan of Eden Cove and negotiate developer agreement to improve foreshore recreation and conservation opportunities in this area.
- Improve bushfire protection at urban / bushland interfaces.
- Marine science education and tourism opportunities need a home in the area (provide a site for the Sapphire Coast Marine Centre).

2. Boydtown

- Boydtown commercial area is limited to local service and tourism. Eden commercial area to provide broader services.
- Strong tourism focus with a range of accommodation from high value tourist apartments to camping and cabin experiences. It is anticipated low cost options will shift from the coastal edge of Boydtown to Towamba Inlet and further inland from Boydtown coastal strip.

- Boydtown 2(c) zone to retain a significant proportion of its total accommodation for tourism. The focus for medium density and low density permanent accommodation to be in the 2(b) zone.
- Twofold Beach Resort should have the option of a sewer service and of being included in the 2(c) zone.
- Land use west of the highway should be banked for longer term urban excluding any area needed for a business park.
- The historic Boydtown Inn needs to be the pivotal focus of the tourism precinct, with adequate curtilage to protect its setting yet an adequate range of sympathetically designed accommodation located in close proximity to give it economic viability as a resort and conference centre.

3. Maintain and enhance access and usability of natural resources throughout the study area

- Increase public access to the foreshore, bay and hinterland particularly pedestrians and cyclists. Attempt to provide a network of public access around as much of the foreshore as is practical.
- Implement the findings of the Lake Curralo Estuary Management Plan.
- Ensure usability of reserves and parks for all user groups.
- Protect foreshore environments.
- Improve interpretation of facilities and services available (directional signage etc)
- View corridors to be identified, preserved and enhanced where possible.
- Enhance reserve connectivity to improve pedestrian access opportunities and where practical, strengthen wildlife corridors.
- Improve fire hazard identification and management, including strategically located Asset Protection Zones between perimeter of natural resources and urban development.
- Identify future open space and recreation facility requirements.
- Development of visual analysis and guidelines for development for Eden and Boydtown areas.

4. Assess the built environment of the town centre of Eden and its surrounding precincts.

- Develop desired future character statements for each precinct.

- Develop and implement design guidelines for development to promote appropriate and sensitive development outcomes.
- Develop built form principles (materials, form, colour etc) to promote appropriate and sensitive development outcomes.
- Provide opportunities for appropriate residential development as part of redevelopment of Eden business/town centre area. Reward good design with higher density allowances and develop specific design guidelines across the town centre precinct.
- Assess heritage significance of Eden town centre and surrounds. Develop design principles and promote conservation of significant items. Encourage appropriate infill development within heritage curtilages.
- Reinforce/define entrances to Eden urban area and town centre.

5. Social impact analysis

- Achieve a greater understanding of the existing demographic and the projected changes to such.
- Identification of service needs and capabilities of existing services.
- Provision of aged care, affordable housing and youth services.

9. Recommendations regarding zoning and structural land use controls

Preliminary findings indicate that some greater surety of zoning controls is needed in Eden and Boydtown. The Eden 2(e) zone has performed relatively well to date and gives flexibility for development of a small centre however more surety is needed with regard to the location of industrial and commercial areas and areas of Crown land proposed as open space in the long term. Similarly at Boydtown, some specific zonings are necessary for environmental protection, future urban and to define the major open space networks of this settlement.

This section of the report should now be read in conjunction with Map D “Preliminary Recommendations regarding Zoning and Structural Land Use”.

Boydtown zone review

Area 1 - 7(f1) zoning proposal

This area comprises lands currently zoned a mixture of 7(f1) and 1(a). The proposal would be for all of the mapped area to be zoned 7(f1) however for up to 3 ecotourism/resort

clusters to be identified within this area with the potential to provide a mix of nature based tourism style accommodation and camping opportunities.

The exact boundaries of such a zone would form part of a Local Environmental Study and/or Master plan.

Area 2 - 6(a) or future 6(a) zones at Boydtown

Areas shown on the map as 2 comprise both existing and potential open space areas. It is considered important that there would be a highway buffer in the southern part of Boydtown and that adequate foreshore reserve provided along the Nullica River, Boydtown Beach, Torarago Point and the Towamba River frontages. These areas would be retained for passive recreation and environmental protection of foreshores with the one exception of some more intensive "European" garden reserve fronting the historic Seahorse Inn. (This European garden would need to be the subject of a Plan of Management).

The exact boundaries would be resolved as part of a Local Environmental Study and/or Master plan process.

This will help offset the loss of the low key / affordable tourism accommodation at Boydtown as it becomes more focused on urban tourism and permanent living.

Area 3 - 2(c) and 2(b) zones (tourism and permanent living)

It is proposed to retain the areas currently zoned 2(c) and 2(b) at Boydtown and rezone a small area currently zoned 1(a) to urban. A special use clause would be applied to the 2(c) zone to ensure a true mixture of tourism and residential development throughout this area. Buildings would generally be limited to two storeys except for perhaps some clusters of higher multi unit housing against the base of the church hill area. A detailed concept plan would apply to the whole of the 2(b) and 2(c) zone including specific protection measures for the heritage precinct around the Boydtown Inn. This concept plan would include 2 options - one containing the approved marina and one based on the option of the marina not proceeding but with artificial water bodies being provided over part of the proposed marina area.

The concept plan would become a Development Control Plan linked to the Local Environmental Plan.

The area marked 3b is the curtilage of the historic Boydtown Inn and development would be restricted in this precinct to works that compliment the Inn. The Inn needs quality accommodation in close proximity to give it commercial viability. However design and setting needs to complement this significant heritage item.

Area 4 - proposed 2(f) future urban zone

The final extent of this future urban zone will be subject to more detailed mapping as part of the draft amending Local Environmental Plan and accompanying Local Environmental

Study and/or Master plan. This area however is considered to have merit for retention for long term urban uses and it is critical that the planning of the 2(c) area allow for at least one major highway access point in the northwest corner of the 2(c) zone through to the proposed 2(f) zone.

Area 5 - 1(c) zone (rural small holdings)

This area appears considerably constrained by bushfire hazard and other risks however some further minor development to rural residential standards may be accommodated subject to detailed bushfire planning and improvements to access roads. No zone change is required to achieve this land use outcome.

Area 6 - proposed 7(d) zone (scenic environmental protection areas)

The proposed 7(d) zone in the south of the Boydtown area comprises mostly steep, environmentally sensitive lands draining to a substantial creek (Reedy Creek). Ecotourism facilities are permissible in this zone and it is possible that some minor developments of this nature may be accommodated in this area.

With regard to the areas numbered 6 north of the Nullica River, these areas currently comprise a mixture of 7(f1), 7(d) and 1(a) zones and it is felt a simpler single zone of Environmental Protection 7(d) is more suitable and will largely constrain any future developments of these areas beyond existing use rights to that of minor ecotourism facilities and the like.

Area 7 - proposed 4(a) zone at Boydtown (business park)

Council research indicates a long term shortage of potential land for industrial purposes in the Eden/Boydtown area and this section of land appears suitable for industrial land use subject to the provision of adequate bushfire hazard buffers and/or a perimeter road, servicing and screening from the proposed urban areas. The area includes a number of gravel pits and these could be rehabilitated for industrial purposes as the gravel material is exhausted.

The exact zone boundaries would be resolved as part of the Local Environmental Plan/ Local Environmental Study/Master plan process.

Eden 2(e) zone review

Area 8

It is proposed to rezone sections of the current 2(e) zone to reflect areas of industrial zone (proposed 4(a) zone).

Area 9

Definition of the commercial area in a proposed 3(a) zone is warranted. The final boundaries and uses of this zone and detailed master planning will follow from the commercial centre review and completion of the Town Centre DCP.

Area 10

Confirmation of open space/recreation areas is required (mixture of 6(a) and 7(d) zones).

Area 11

Curalo Lagoon and surrounding estuary is proposed to be part of a new zoning category of 7(e) Environment Protection Coastal Estuaries to provide specific protection to this sensitive coastal lake.

Area 12 - Eden Golf Club

It is proposed to delineate current and future expansion of Eden Golf Club recreational areas as 6(c) zone (12a) and distinguish the operational lands at the Golf Club as 2(e) zoned land providing for a mixture of tourism and permanent accommodation associated with recreational facilities (12b).

The proposed extensions southward of the Golf Course (12c) present an opportunity to improve bushfire buffers for current and future urban lands.

Area 13 - Crown Land areas on the western boundary of Eden township

These Crown land areas are proposed to be divided into several cells as mapped for future reserve along the environmentally sensitive sections (13a), future urban in the northwest (13b) and an area for possible review for industrial purposes in the southwest (13c).

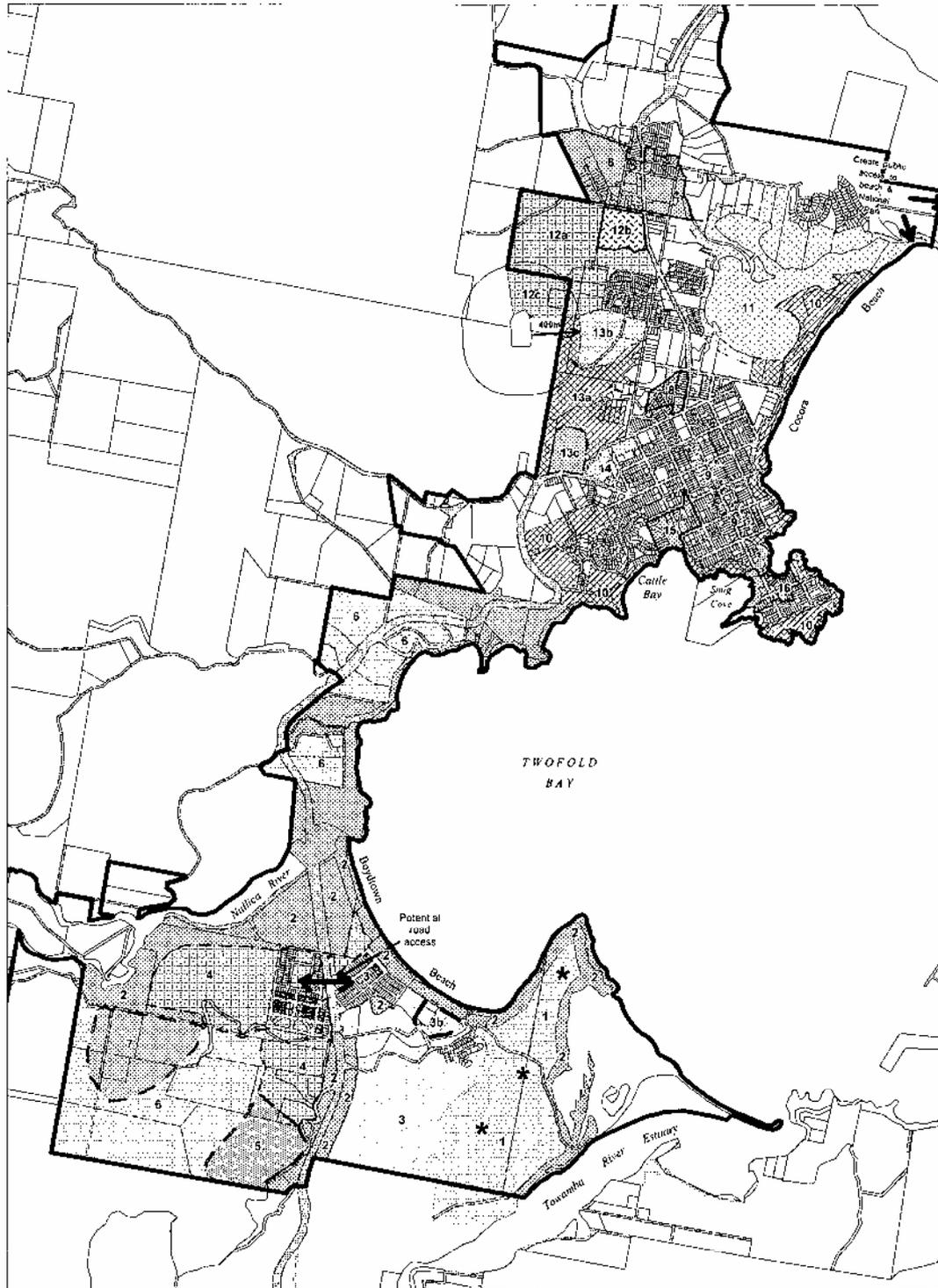
Area 14 - Nullica Lodge

Additional areas for the logical extension of senior living opportunities are recommended in the vicinity of Nullica Lodge.

Area 15 - Cattle Bay precinct

Future land uses to be resolved through Cattle Bay Master plan but with appropriate linkages to this structure report.

Map D Preliminary recommendations regarding zonings and structural controls



Eden Structure Report
Preliminary recommendations
regarding Zonings & Structural Controls

MAP D 

Area 16 - Snug Cove precinct

Future land uses to be resolved through Snug Cove and Environs Master plan but with appropriate linkages to this structure report.

10. Social / equity recommendations

Over the coming 20 years, the study area will:

- experience greater visitor numbers with greater diversity of socio/economic background
- experience greater numbers of senior people with limited mobility as both visitors and the resident population
- continue to have a significant proportion of lower income residents.

Council land use planning actions to address these changes need to include:

i) More senior housing and accessibility

- Facilitate expansion of Nullica Lodge.
- Identify land for a further facility with hostel / nursing care.
- Ensure a high proportion of the new permanent and tourist accommodation and all public places are access friendly for persons with limited accessibility.
- Intensify accommodation near and in the commercial centre.

ii) Public transport

- Work with clubs and tourist businesses to try to improve local public transport through pooling courtesy vehicles and possible grant funding.

iii) Employment

- Ensure there are land supply options for all business opportunities that model Eden's target areas which include:
 - tourism and tourism support
 - primary production from forests, marine and agriculture with emphasis on local value adding
 - wharf and shipping support
 - community service industry.
- As part of the shire wide Employment Lands Strategy, ensure non-offensive home based business opportunities are maximised.
- Ensure there is an adequate mix of employment to match the district demographics.

- Strive to make affordable business sites in Eden and a more targeted business park at Boydtown.
- Facilitate a business incubation site with facilities for supporting small business starts.

11. Recommendations for environment and recreation lands

- Finalise the Crown Lands studies and land use planning with Eden Local Aboriginal Lands Council to ensure all environmental and recreational lands are identified and well planned.
- Incorporate all public environmental and passive recreation lands in the Eden and Foreshores Plan of Management. Some targets for the plan to include:
 - a foreshore access track for all practical areas of the coastline from Eden Cove to Towamba River and including around Lake Curalo
 - maximise the conservation of all coastal vegetation and enhance degraded areas throughout the public lands
 - specify development targets and budget contributions to be negotiated with private developers
 - integrate plan of management with a comprehensive Bushfire Protection Strategy for the study area

12. Recommendations for Service infrastructure

Generally sewer and town water infrastructure are being planned to cope with the likely growth projections for the 20 year period.

Water

The issue of balancing Council's security of access to the Kiah and Bega borefields and the Tantawanglo weir with environmental flows, water sharing with other users and water conservation strategies is vital and is a shire wide policy issue beyond this structure report area.

This report is based on a premise that supply will be adequate but is very dependent on the above balance being resolved.

More storage will be required at Boydtown and is achievable and fundable from new development. Some storage improvement is needed in Eden and is factored into Development Servicing Plans.

Sewer

Boydton is a private sewer service. The current plant will be unsuitable in both location and capacity for growth beyond 800 equivalent persons. It needs to be planned for replacement within 10 years. Sufficient land west of the highway needs to be identified for the plant, its buffers and irrigation areas for effluent.

The Eden plant will require further augmentation within the 20 year period but should cope for 10 plus years' projected growth.

A fundamental issue for both the current and any future scale of the plant is effluent disposal. Suitable land for effluent irrigation is scarce and currently there is reliance on some ocean outfall. If this becomes unacceptable then Council and the Eden community could face significant costs in funding a land based irrigation solution. Options need to be resolved over the next five years.

Some upgrading of sewer pump stations and delivery systems throughout the town is needed to lessen the risk of storm surcharges of effluent escaping the system.

Stormwater

All receiving waters of the study area are very sensitive and all new development needs to conform to best practical soil and water management.

Council funds are very limited but priority needs to be given to attempting to improve the quality of current urban area stormwater discharges. Funds from the Environmental Levy are helping but the task is much greater than this funding source.

Roads

Generally road standards in the study area are reasonable and new roads and road improvements can likely be funded out of growth. Traffic and parking in the town centre might be exceptions but there is still funding potential from possible intensification of land use in the town centre.

13. Recommendations on Bushfire and flooding hazards

Bushfire

The planning investigations for extensions of urban areas will need to factor in improved bushfire planning of the forest / urban interfaces.

The Rural Fire Service / Council / Department of Environment and Conservation and Forestry could benefit from a more detailed fire management strategy for the study area that adds more coordination to the fire management works of these agencies and the community.

Flooding

Current flood risk areas are quite limited and proposed urban areas are located away from known ocean and river flood risks.

Some refined flood investigation work is needed around Lake Curalo, at Shadracks Creek and the Nullica River flood plain.

Flash / small catchment flooding needs a whole of catchment approach throughout the study area.