COASTAL DESIGN GUIDELINES FOR NSW





THIS DOCUMENT ILLUSTRATES HOW AN URBAN DESIGN APPROACH INFORMS DEVELOPMENTS SENSITIVE TO THE UNIQUE NATURAL AND URBAN CHARACTERISTICS OF COASTAL PLACES IN NSW.

Coastal Council of NSW • urban design ADVISORY SERVICE • Tourism New South Wales

Sandon River, NSW 2002	Smiths Lake, NSW 2002	Manly, Sydney, NSW 2002	Narooma, NSW 2002	Sandon River, NSW 2002

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FOREWORD

Over many years the NSW coast has been subject to waves of settlement. In the 19th century farming and fishing communities established towns and villages along waterways with convenient access to the sea. During the 20th century, as shipping declined and road and rail access increased, new settlements grew on headlands and behind beaches. Increasingly the coast became a mecca for holidays. Fibro shacks, caravan parks and tourist lodges gave many Australians the opportunity to enjoy the beach, the sea, the estuaries and lagoons, and the wonderful scenic beauty of our coast. Progressively as more and more people left the cities and migrated to these settlements, the traditional coastal "shack" has been replaced by larger and larger dwellings reflecting the potential for increased investment and the need for a new lifestyle, sometimes with little attention to the character of individual places.

The NSW Government is committed to providing opportunities for all Australians and international visitors to enjoy the coast whilst maintaining and enhancing the environmental values we cherish. That commitment is manifest in the NSW Coastal Policy 1997 and the NSW Coastal Protection Package 2001. The bar has been significantly raised in terms of the need for better planning and management standards to overcome or prevent many of the problems which have arisen as population has grown and settlements expanded. It is no longer appropriate to build coastal houses and unit blocks at locations where they dominate the landscape without any appreciation of scale and sense of place.

The Coastal Design Guidelines, developed jointly by the NSW Coastal Council, Planning NSW's Urban Design Advisory Service and Tourism NSW, represent a turning point in providing clear direction for the sustainable future of the NSW coast. This direction gives importance to the special qualities of each and every place. It recognises what these qualities are and offers design solutions which maintain a rich and diverse coast for everyone. The Guidelines provide a best-practice framework for ensuring that design reflects the character of different places.

The Guidelines are structured so that all communities can identify with what practices are desirable and what are undesirable. Diversity of design is to be encouraged consistent with the statutory planning framework. The Guidelines distinguish between types of settlements so that no single design solution is preferred. Coastal urban design is not about transplanting city suburbia. It is about working with communities and investors to design streetscapes and buildings in ways which reflect the sensitivities of a location's topography, ecology and cultural history.

The way is now set for all local councils along the NSW coast, their communities and developers, to use the Guidelines to create urban design solutions that capture the economic and social needs of our growing population, while protecting our unique coastal environment. The NSW coastline is a spectacular natural resource for all of us to enjoy but it is also a precious gift entrusted to our care - we each have a responsibility to play our part in finding a sustainable balance that ensures its ongoing protection.

The Hon Dr Andrew Refshauge MP

Deputy Premier | Minister for Planning | Minister for Aboriginal Affairs | Minister for Housing

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PREFACE

Anyone travelling the length of the NSW coast will be struck by the variety and increase in development. Over the past 10 years many holiday shacks or homes have been demolished and replaced by housing forms too large for the landscape. New subdivisions, canal estates and apartment complexes have been built, along with a number of major tourist developments. There has been limited guidance on urban form for decision makers to use in assessing the thousands of development applications that reach local councils in any given year. The NSW Coastal Policy 1997 provides limited information on building heights, setbacks, overshadowing and footprints on headlands.

Following a number of visits to coastal locations since 1998, the Coastal Council, in collaboration with Tourism NSW, commissioned the Urban Design Advisory Service (UDAS) within PlanningNSW, to prepare these guidelines on coastal urban design.

The Council saw the need to recognise the uniqueness of both cultural and natural landscapes along the coast, and that there should be an opportunity to protect and enhance diversity rather than by default encourage uniformity in design and urban form. Whilst appreciating that population growth over the next decade will stimulate new buildings within and alongside current urban areas, it was considered important that communities be given the opportunity to think about urban design in a systematic and strategic context.

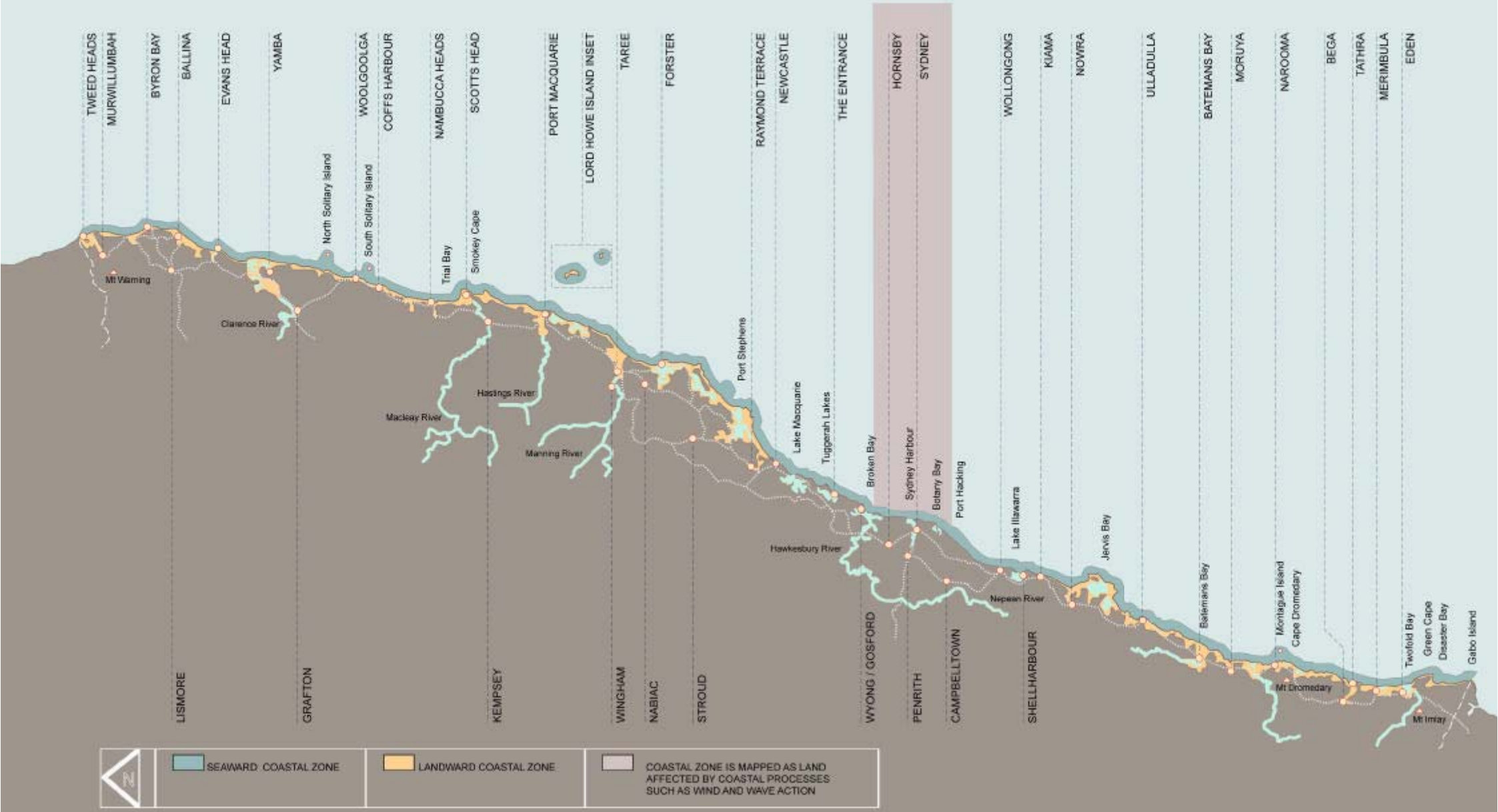
To achieve this end, UDAS has developed a classification of settlement types. This is a valuable reference point for discussion and comment and raises the important question of where individual communities see themselves and their futures. Design principles, which are important as a context for future planning and decision making, are also articulated in the document. Unless we take a more strategic, place-specific approach to urban planning, we will continue down the path of incremental, ad hoc decisions with no sense of preserving or enhancing urban areas which are linked to those natural features of significance to coastal dwellers and visitors.

The NSW Government is commitment to protecting the coast, we have a choice at this point of time and we are in a position to reinforce the planning process by adopting an approach that values the unique characteristics of each place. A discussion paper released by the Coastal Council in late 2001 stimulated considerable comment on outcomes relevant to design and protecting the immense beauty and amenity of the NSW coastline. We are very grateful to all who made contributions, many of the comments are incorporated into the guidelines.

The Coastal Council is of the view that ideas contained in the document will greatly improve urban form along the NSW coast. We recommend it to all communities, developers and decision makers.

Bruce Thom
Chair
COASTAL COUNCIL OF NSW

COASTAL ZONE OF NSW



INTRODUCTION

CONTEXT

The Coastal Council of NSW is the NSW Government's advisory body on coastal planning and management. It was established in February 1999, replacing the Coastal Committee. The functions of the Coastal Council are set out under Part 2 of the Coastal Protection Act 1979 (amended 1998), which is administered by the Minister for Planning.

The coastal design guidelines have been prepared with reference to the NSW Government's Coastal Policy 1997 and complement the Government's Coastal Protection Package released on the 26th June 2001 and SEPP 71 which came into effect in November of 2002. The coastal design guidelines are based on the principles of ecologically sustainable development (ESD).

WHY DO WE NEED COASTAL DESIGN GUIDELINES?

The NSW coast is undergoing significant change because of increased pressure from tourism and population movement. Statistics show that between now and 2027 coastal towns and cities will experience the greatest population increases in NSW, with the population and tourism increasing as much as 60 per cent. Coastal areas will be under pressure to provide residential and tourism-related development as well as expanding infrastructure and services, particularly for health, welfare and recreation.

The community is aware that the qualities making the NSW coast attractive are being eroded by poor development in many places. Managing the growth of settlements is a key factor in protecting the uniqueness and fragility of the natural coastal environment and protecting the character of existing settlements.

There is a danger that the beauty of the coast will be further degraded by planning controls that do not respond to the characteristics of a place. Instead they respond to the demands of proposals on individual lots with little regard for the context of the proposal within a settlement or its surrounding area's natural condition.

This document shows how best practice urban design helps new development to be more responsive to community expectations and local conditions.

Urban design plays an important role in protecting the environment and is fundamentally based on the principles of ESD. It also improves the economic viability of communities by protecting the unique natural and cultural characteristics of a place, thereby attracting investment and tourism. Good urban design creates safer environments with a stronger sense of community identity and long-term benefit for residents and visitors.

The Coastal Design Guidelines Discussion Paper on exhibition in late 2001 raised a number of questions about the location and type of new urban development. Following consideration of more than 80 submissions on the Discussion Paper, it is important to confirm that these guidelines aim to stimulate debate on:

- *how to protect and plan for the diversity of settlement types along the coast*
- *how to avoid continuous strip-type urban development along the coast*
- *where to encourage new settlements or large residential and rural residential subdivisions, particularly in relation to existing settlements*
- *which places are able to grow larger sustainably*
- *which types of settlement are to be protected from major developments*
- *how to protect publicly and privately owned non-urban lands along the coast that have high scenic or ecological values.*

The guidelines are also intended to raise questions to be addressed at a local level in consultation with communities, including:

- *how do we protect and strengthen the identity of individual settlements while allowing sustainable levels of development?*
- *what are the public benefits of consolidation and infill development?*
- *how do we avoid situations where ad hoc development creates settlements that grow at a rate outstripping the provision of infrastructure and services?*
- *how do we avoid a situation where large residential subdivisions damage the character of the town that attracted people in the first place?*
- *how do we avoid the situation where smaller settlements grow and join so that the identities of the former settlements are lost?*

The Coastal Council of NSW believes that planners, developers, local councils and communities need to rethink conventional planning practice in light of increasing pressure for development. The often ad hoc approach to decision making, on a site-by-site basis, can be replaced by an urban design process that is responsive to the character of a place.

A PLACE-BASED PLANNING APPROACH

The coastal design guidelines support a place-based planning approach, in line with PlanFirst, the NSW State Government's plan making reform package released in 2002. The guidelines contribute to defining appropriate settlement types and developing place-specific development control plans. Under PlanFirst the coastal design guidelines are able to be incorporated into the part of a locality plan that deals with settlements. In the absence of place-based planning instruments the guideline document is an important resource for testing settlement strategies and development control plans. It may be integrated with master plans and development control plans as they are currently formulated and enacted.

DEVELOPMENT ASSESSMENT

The design guidelines support pre-development application discussions between potential applicants and the local council. The emphasis of these meetings should be on understanding the local context in relation to the proposed development site as well as proposed building design. The intent of the discussion is to agree to site and context issues that need to be addressed in the development application submission. The Residential Flat Design Code published by PlanningNSW in 2002 provides a list of suggested documentation items required for pre-DA discussion for residential flat buildings as well as guidance on building design.

WHO ARE THESE GUIDELINES FOR?

These guidelines are designed to assist decision makers in government, development applicants (including their planners and designers) and local communities.

The document is designed to provide a framework for discussion and decision making involving coastal planning, design and development proposals between all stakeholders in the context of caring for the natural beauty and amenity of coastal beaches, headlands, waterways and ecologies upstream.

HOW THIS DOCUMENT SUPPLEMENTS THE EXISTING PLANNING PROCESS

The ideas outlined in this document are relevant to a number of different scales of planning within the planning process.

PART 1 Determining a hierarchy of settlements and the identification of settlement types is applicable at both regional and local levels within:

- *State policies*
- *regional strategies and local plans*
- *settlement strategies.*

PART 2 Design principles for coastal settlements are relevant to:

- *regional and local plans*
- *settlement strategies*
- *structure plans for new development areas*
- *master plans*
- *urban design development control plans*
- *revitalisation plans for urban areas*
- *plans for new infrastructure*
- *plans of management*
- *public domain plans*
- *streetscape improvement plans.*

PART 3 Concludes the document by making reference to planning practices within which the design guidelines can be applied.

HOW TO USE THIS DOCUMENT

The document is divided into three parts:

PART 1 DETERMINING A LOCAL HIERARCHY OF SETTLEMENTS

Part 1 describes the concept of determining a hierarchy of coastal settlements and how this relates to planning within a local area. It also defines seven coastal settlement types, which can be used to analyse and understand urban development along the NSW coast.

Part 1 describes each settlement type in terms of:

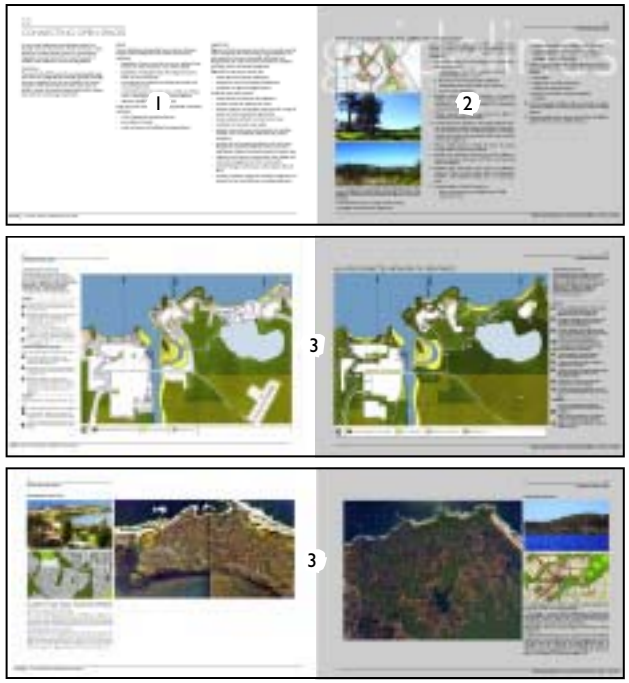
1. a general **description** - explaining what the settlement looks like today
2. **issues** - discussing the major issues each settlement type faces
3. present and future **opportunities** - focusing on the strengths of each settlement type and identifying positive aspects of a place to be addressed in future plans
4. desired **future character** - describing the link between the future built and natural character of a place.

PART 2 DESIGN PRINCIPLES FOR COASTAL SETTLEMENTS

This part illustrates the key components of coastal settlements, best practice urban design and built form outcomes. The principles can be used to manage development within a settlement to ensure both the urban and natural character is considered in order to protect the character of coastal places. Best practice outcomes are contrasted with illustrations of undesirable practice to highlight common coastal planning problems.

Part 2 explains components of a settlement's structure in the form of design principles. Each design principle has:

1. **an introduction** - defines and describes the topic
2. **design guidelines** - can be applied to a range of different situations and guide the detailed design of any proposed development
3. **case studies-** describe the outcomes of desirable and undesirable practice through illustrated examples of a coastal hamlet, a coastal town and a new coastal settlement the size of a village.



PART 3 CONCLUSION AND NEXT STEPS

Describes the steps that need to be taken. It is a general discussion on the future of the guidelines.

Part ONE

DETERMINING A LOCAL

DETERMINING A LOCAL HIERARCHY OF SETTLEMENTS

HIERARCHY OF SETTLEMENTS

INTRODUCTION

The NSW coast features a diversity of places. It is a rich mixture of the natural and the urban, of large and small settlements, and of the remote and the well connected. As population and development pressures increase and these places change in size and scale, their functions may change and their relationship to each other may shift.

For the purpose of managing and planning for the future of the coast, it is important to consider what change may mean for all settlements within a local area.

These guidelines consider the NSW coast in terms of a hierarchy of settlements. This provides a framework for analysing and understanding the important relationships between settlements and the local, urban and natural areas, and between neighbouring settlements and reserves (eg. national parks).

It is recognised that all settlements are different in terms of size, servicing, infrastructure, employment opportunities, and the potential to grow, as well as urban and natural characteristics. Settlements are under differing levels of development pressure independent of urban and natural characteristics.

Despite their differences, considering the coast as a hierarchy of places recognises that all settlements are interconnected and interdependent. The success of one settlement may be supported by another. It is therefore important to consider a hierarchy of settlements in order to understand the interdependence between settlements and reflect this in state-wide, regional and local strategic plans.

At a **regional** scale, a hierarchy of settlements will:

- ***establish the current and future importance or role of each place within the region and the local area.***
- ***provide a framework for planning the distribution of population and infrastructure***

At a **local** scale, working within the settlement hierarchy supports the following key objectives.

To protect and enhance the cultural, ecological and visual characteristics of a locality.

Ecosystems, such as coastal lakes and habitat corridors, often cross between settlements and across public and private boundaries. Land use buffers and setback requirements are necessary to protect these systems.

To limit coastal sprawl by establishing separation and greenbelts between settlements.

This is a key objective at both regional and local scales. Coastal settlements have a boundary or footprint that is defined by the edge between urban and non-urban lands, such as rural lands and natural areas. A clear boundary to a settlement is important in coastal areas because it limits impacts on the surrounding environment and ensures settlements do not sprawl or form strip and ribbon development along the coastal edge and between coastal catchments. In this way the diversity of character in coastal settlements can be protected and enhanced.

To integrate new development with surrounding land uses.

By appropriately locating major new developments, settlements within a region will not be competing to provide the same services and attractions.

Larger settlement types, such as cities and towns, are ideal locations for major new commercial, retail and employment-generating developments because they have economic, service and social infrastructure which can support increased activity.

To integrate land use with transport.

The more compact the settlement, the better the opportunities to establish, upgrade and enable access to transport services because more people will have access to more services, in a smaller area. This allows for cost efficiencies and the provision of a range of transport options. Residential, commercial, retail and community land uses all benefit from good transport provision. In turn, higher usage of public transport promotes more activity in town centres and at associated transport nodes.

To protect local character.

Local character can be protected or eroded by different kinds of development. At the same time, it is important to acknowledge that each settlement has particular qualities, whether they are environmental, social, economic or urban, which make it different from its neighbours. The guidelines promote diversity consistent with identity and enhance local cultural and natural values.

To encourage new coastal settlements to be appropriately located.

In general, large new residential and tourist developments are being located on a site-by-site basis controlled by a variety of local and regional plans of differing age and contemporary relevance. Their location often has little regard for how the area will grow in the future or how the development will affect the economic viability of the settlement, its environmental quality, or its character. New development and subdivisions should be located and planned in the context of revised settlement strategies and consistent with provisions in SEPP 71.

To create neighbourhoods centred around services and facilities.

It is important to encourage facilities and services which are appropriate to the settlement type and which can be accessed by walking and cycling. In larger settlements co-locating public transport services with, for example, neighbourhood centres, will strengthen the viability of the centre because it allows for better access and greater use.

PLANNING COASTAL SETTLEMENTS

Seven settlement types are identified:

1. coastal cities
2. coastal towns
3. coastal villages
4. coastal hamlets
5. inland coastal centres: cities, towns and villages
6. new coastal neighbourhoods: hamlets and villages
7. isolated coastal dwellings.

The discussion of broad characteristics for each settlement type offers a framework for future planning. A detailed process of analysing, debating, planning and designing for each and every settlement along the coast is necessary in conjunction with the use and application of these guidelines and local communities.

Larger settlements, such as cities and large towns, require more complex and detailed urban design plans that may relate to precincts or distinctive geographic locations within the settlement. These precinct plans sit within the overall plan for the settlement. Use of place-specific, urban design-based development control plans to apply the principles defined in this document will be important.

Smaller settlements, such as hamlets and small villages, are simpler and contain studies that photographically detail key views and vistas. Plans that detail three dimensional building form for key sites and streets and resolve design options for infill development will also be important.

Currently many of the existing settlements along the NSW coast fall easily within a particular settlement type. However, there are some settlements that require more discussion, consultation and analysis in order to understand where the settlement falls within the hierarchy. The settlement types, as outlined in this document, can be used as a broad planning framework.

1.1

COASTAL CITIES

Settlements that may be considered as coastal cities include Tweed Heads, Coffs Harbour and Port Macquarie.

>Aerial photograph of Port Macquarie, 1997.

DESCRIPTION

Coastal cities are large centres with more than 20,000 people. The population of these centres is generally increasing because they provide easy access to the ocean, rivers, beaches and other natural areas. Access to jobs, services, employment and housing choice is also available.

Because coastal cities have diverse populations with a range of socio-economic and cultural groups they offer the expectation of growth and opportunities for economic prosperity and development.

Coastal cities offer a range of services and facilities including:

- a central activity area with a range of large retail outlets, including department stores
- transport infrastructure, including regular air or rail services and good access to the State road system
- large employment-generating uses
- schools and higher education, sporting facilities, hospitals and other health services
- State government agency offices
- tourist accommodation, including caravan parks
- extensive housing choice.

In general the urban characteristics of coastal cities have:

- a street pattern related to the landform and the surrounding natural features
- a direct relationship to the foreshore and a wide choice of uses associated with the coastal edge
- an extensive range of edge conditions, such as parks, beaches and waterfront promenades
- a range of smaller suburbs and suburban centres surrounding the city centre
- a full range of residential building types
- a full range of building heights from low scale to tall.

ISSUES

The challenge for coastal cities is to balance the requirement to achieve growth with the need to retain the existing character. This includes consideration for scale of development relative to the existing environmental context, views, access, transport and amenity. Currently many larger development applications before coastal councils do not consider their likely impact on the surrounding natural and urban context, infrastructure and sense of place. This leads to a number of issues including:

- development inappropriate to the settlement's present and future demographic mix
- a lack of housing and business accommodation choice
- inadequate services and provision for older people retiring to the coast
- limiting the city's long-term economic opportunities
- erasing the qualities that give the place its beauty, liveability, lifestyle choices and make it a desirable place to visit
- impacts on water quality
- poor infrastructure integration and planning
- unsafe and degraded pedestrian environments
- privatisation of streets, open spaces and the foreshores
- lack of quality building construction and design
- building inappropriate in scale, bulk and character with the city's streets, open spaces and existing buildings
- buildings that are not energy efficient
- locating buildings and infrastructure in areas subject to natural hazards.

PRESENT AND FUTURE OPPORTUNITIES

Cities should offer a diversity of opportunities for growth and best practice, place-based planning that considers:

- protecting the qualities that attract people to coastal cities and set them apart from other locations along the coast
- economic growth without compromising the city's amenity
- revitalising city centres
- optimising the efficient use of land and improving lifestyle choices
- improving public access and a diversity of uses along the coastal edge
- encouraging development in the main centres and suburban centres where it provides economic stimulus and allows for the efficient use of public transport, services and social infrastructure and cycle networks
- consolidating public facilities within the city centre
- complementing uses within neighbouring settlements
- protecting and enhancing natural areas within the city
- improving building design and construction
- designing energy efficient and environmentally sound buildings
- providing a wide range of tourist accommodation types.

DESIRED FUTURE CHARACTER

Coastal cities grow and accommodate a larger working, residential and retirement population whilst maintaining the coastal virtues that make the place sought after. Coastal cities plan for urban opportunities whilst not creating continuous linear development along the coast. Coastal cities optimise the efficient use of land, services and infrastructure to minimise impacts on the surrounding environment. As coastal cities develop they reduce the pressure for expansion in more sensitive locations.

1. Relationship to the environment

a. The relationship of a city to the coast is improved by:
   - planning to minimise expansion of city edges
   - extending, connecting and improving the open-space network and the public domain throughout the whole city for conservation, recreation, access and water management
   - protecting Aboriginal and European cultural places and relics and allowing interpretation, where appropriate
   - maintaining the pattern of settlement relating to the original geography, the foreshore and other natural features
   - ecological links between the coast and the hinterland
   - negligible impacts on water quality in water bodies and sustainable water and waste water systems
   - ensuring soil areas on sites and within public land are maintained for water percolation and mature tree growth
   - protecting existing areas of indigenous vegetation within the city for environmental, education and recreational purposes
   - enhancing micro-climatic conditions through landscaping and street trees.

2. Visual sensitivity

a. The visual character of cities is protected and consists of:
   - views of public reserves and conservation areas
   - views and vistas from and to the coast, rivers and other water bodies and coastal vegetation
   - views and vistas of headlands, escarpments and mountains and other natural features
   - vistas of the surrounding scenic rural and natural lands.

b. Views from public places are retained and reinstated, where they have been lost through inappropriately located development. The visual quality of the settlement is designed as part of an overall desired future outcome or vision.

c. The retention of private views is not to the detriment of native vegetation.

3. Edges to the water and natural areas

a. A variety of edge conditions exist between the city and the coastline.

b. Access to and along the coast and the foreshore is optimised and designed to allow cultural and social opportunities.

4. Streets

a. Coastal cities have a full range of street types including:
   - cultural and urban streets connecting to public places
   - main social, retail and commercial streets
   - streets that reveal important vistas of and through the settlement to the coast, and focus on natural features

- the original and historic subdivision street pattern
- streets that define public open spaces, such as parks, squares, conservation areas and the flood line
- streets located to manage bush fires
- major roads (arterial, sub-arterial and collector)
- residential street and laneways
- pedestrian and cycle routes.

b. Adequate services are provided for older people retiring to the coast, such as public transport and medical facilities.

c. Sustainable transport options are provided.

d. Emphasis is given to increasing use and provision of public transport.

e. Public streets or pedestrian pathways mark the boundary between urban development and all open spaces, dunes, beaches, rivers, wetlands and coastal foreshores.

5. Buildings

a. New development avoids urban sprawl and ribbon development.

b. Gated developments are rejected in favour of neighbourhood-oriented development.

c. Higher density development reinforces the city centre.

d. Industrial areas are located appropriately within the urban, environmental and visual context.

e. Industrial, commercial and retail areas are located and integrated with the transport network and housing.

f. Development builds upon the original historic street pattern.

g. Within the city building types may include: residential flats; mixed-use commercial; retail and residential; commercial office or retail buildings; heritage buildings and townhouses.

h. Suburban areas include shop-top housing, detached, semi-detached and terrace housing and small apartment buildings.

i. Suburban centres may include all the building types in city centres but smaller in scale and height.

6. Heights

a. Locations close to the foreshore or sites visible from beaches and important public areas are not appropriate for tall buildings.

b. Taller buildings are best located closer to the city centre.

c. Generally buildings in city centres are up to seven storeys.

d. Generally buildings in suburban centres are up to three storeys.

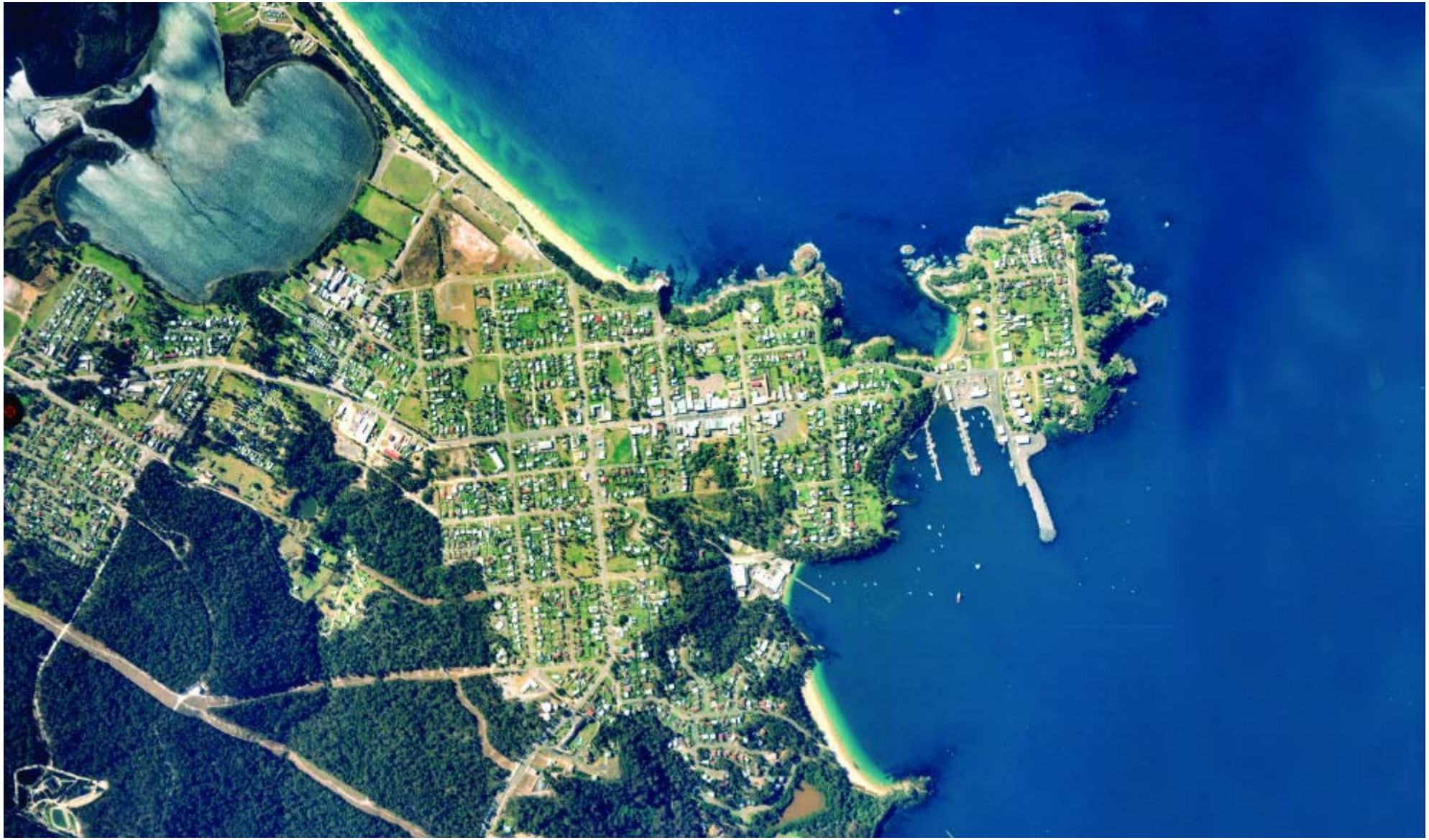
e. Generally buildings close to foreshore edges are up to three storeys.

f. Heights are subject to place-specific urban design. New development is appropriate to the predominant form and scale of surrounding development (either present or future), surrounding landforms and the visual setting of the settlement. Buildings avoid overshadowing of public open spaces, the foreshore and beaches in city centres before 3pm midwinter and 6.30pm Summer Daylight Saving Time. Elsewhere buildings avoid overshadowing of public open spaces, the foreshore and beaches before 4pm midwinter and 7pm Summer Daylight Saving Time.

1.2

COASTAL TOWNS

Settlements that may be considered as coastal towns include Kiama, Ulladulla, Batemans Bay and Eden.



>Aerial photograph of Eden, 1996.

DESCRIPTION

Coastal towns are small centres that vary in size and have a population ranging from 3,000 to 20,000 people. Coastal towns offer a range of services and facilities which may include:

- a commercial, retail town centre and suburbs
- parks, playing fields and caravan parks
- a main street
- churches and education institutions
- medical facilities.

While each coastal town has a unique character based on its setting they are in general identified by:

- visual connections to the landscape and the coast
- being located directly adjacent to the foreshore
- centrally and conveniently located community facilities and public spaces
- an original historic, intact, grided subdivision pattern
- low, small-scale buildings.

Coastal town centres may be surrounded by older style grid subdivisions, new subdivisions or a combination of both.

ISSUES

Like cities, towns are under pressure to grow. However, towns are more at risk from the impact of increased traffic and the potential loss of identity created by surrounding subdivisions. Towns are less likely to benefit from public transport and are less able to accommodate large-scale new buildings than cities. The existing character of towns can easily be lost to suburban sprawl or tall buildings.

The key challenges for coastal towns to address are:

- degradation of the economic viability of the town centre by new commercial and retail uses, development located remote from the town or its commercial centre
- impact on the environment and reduction of the existing town's character and viability, caused by new settlements and major commercial, retail and tourist developments
- ribbon development reducing the natural and rural lands that separate settlements because of the location of new release areas
- degradation of water quality in waterways and coastal lakes
- protection of heritage values
- placing buildings and infrastructure in areas subject to natural hazards
- strip development along roads and highways.

PRESENT AND FUTURE OPPORTUNITIES

Towns offer opportunities for:

- creating functional urban areas in close proximity to areas of natural beauty
- the consolidation of future growth where infrastructure, quality buildings and pedestrian friendly streets may be at present under utilised
- using the town as a model for new neighbourhoods and infill developments
- upgrading public transport, cycle and pedestrian systems
- regeneration of degraded natural assets.

DESIRED FUTURE CHARACTER

Coastal towns accommodate growth predominantly within their boundaries without compromising ecosystem functions and biodiversity values. Town centres are reinforced, strengthening the main street so that social, cultural and employment benefits are provided for the community and vibrant centres are created. Infill development enhances the town centre whilst reducing the need for urban expansion and environmental impacts of large residential subdivisions on the outskirts of the town.

Where new development is accommodated outside the town boundaries it reinforces the town and adheres to the principles for new settlements. Development does not occur outside town boundaries where it will lead to ribbon settlements and the loss of ecosystem function and the town's identity.

1. Relationship to the environment

a. The relationship of the town to the coast is protected and enhanced to provide:

- visual links and views of the coast
- a clear relationship to the original landform, the foreshore and other unique natural features
- protection of significant natural areas for environmental, educational and recreational purposes
- ecological links between the coast and the hinterland as well as the surrounding coastal floodplain and wetlands
- significant areas of native vegetation
- access to foreshores whilst protecting dunes, lakes and beaches
- water quality in wetlands, estuaries, coastal lakes and beaches
- protection for Aboriginal and European relics and items
- for the maintenance of significant areas of native v vegetation and trees whilst managing for bush fire protection
- for the utilisation of sustainable water and waste water systems, where appropriate.

2. Visual sensitivity

a. Areas of visual sensitivity include:

- views to and from the coast, rivers, lakes and other water bodies
- views to and from the hinterland
- views of headlands
- night and daytime views
- the urban settlement as it sits within the landscape
- public views which are retained and reinstated, including views from the streets and public areas to the water
- providing clear boundaries between each town and adjacent rural and natural land uses
- providing clear separation between adjacent settlements by maintaining rural and natural land
- enhancing and upgrading the open-space network for conservation, recreation, views and public access.

3. Edges to the water and natural areas

a. A variety of edge conditions exist between the town and the coastline. Access to the coastal foreshore and waterways is optimised and adds cultural and social opportunities.

4. Streets

a. The street hierarchy of a coastal town includes:
   - key cultural and urban streets that connect to landmarks, vistas, public buildings and focal points, monuments and places of Aboriginal importance within the settlement
   - key streets that reveal important vistas of and through the settlement, the coast and the surrounding environment
   - streets that focus on natural and topographic features such as valleys, escarpments, vegetation, headlands and beaches, the sky or mountains
   - streets of the original and historic subdivision and topographic pattern of the settlement
   - streets with development on only one side that define public open spaces, such as parks, squares, the edges of conservation areas or the flood line
   - streets or pathways separating conservation areas from urban development
   - main social, retail and commercial streets
   - a major access road passing through the centre of the town with a secondary arterial road bypassing the town
   - residential streets or laneways
   - pedestrian and cycle pathways and routes.

b. Public streets or public pathways provide the boundary between development and open spaces and the foreshore reserves.

c. The street pattern of new development builds upon the historical and original urban structure of the settlement.

d. Streets and public places provide quality pedestrian environments.

5. Buildings

a. Predominant building types in town centres are small apartment buildings, mixed-use, shop-top housing, town houses, terraces, detached houses/commercial/retail, education and civic buildings.

b. Predominant building types in suburban areas include small apartment buildings, town houses, semi-detached and detached dwellings.

c. Development is predominantly low scale.

d. Heritage buildings are retained and revitalised to tell the story of the town's growth through cycles of re-use, adaptation.

e. Housing, employment and transport are integrated into the town centre as well as in surrounding suburban centres.

f. Industrial areas are located within the urban, environmental and visual constraints of the settlement.

6. Height

a. Generally heights of up to four storeys in town centres.

b. Generally heights of up to two storeys in suburban areas.

c. Heights are subject to place-specific urban design studies. New development is appropriate to the predominant form and scale of surrounding development (either present or future), surrounding landforms and the visual setting of the settlement. Buildings avoid overshadowing of public open spaces, the foreshore and beaches in town centres before 3pm midwinter and 6.30pm Summer Daylight Saving Time. Elsewhere avoid overshadowing of public open spaces, the foreshore and beaches before 4pm midwinter and 7pm Summer Daylight Saving Time.

1.3

COASTAL VILLAGES

Settlements that may be considered as coastal villages include Tathra, Broulee, Scotts Head, Lennox Head, Tura Beach, Malua Bay and Suffolk Park.

>Aerial photo of Scotts Head, 1997.

DESCRIPTION

Coastal villages are small centres with a population of up to 3,000 people. Villages are located remote from other settlements or may be the outlaying suburbs of larger settlements where they have a similar population and comparable present issues and future opportunities.

In coastal villages the natural environment dominates in terms of views, environmental systems and vegetation types. Ecological systems surrounding and penetrating the settlement are intact. Informal boundaries exist between urban and natural areas within the village. Extensive and well established landscaping is a feature of both public and private land.

Villages are differentiated from other settlement types by having a small vibrant centre set within a distinctive and intact natural environment.

Villages are also characterised by:

- a surrounding environment with high ecological integrity
- a geographic location with distinctive and unique features
- views and vistas to the surrounding environment
- a distinctive access road characterised by a rural or natural setting leading to and through the settlement's main street
- a cohesive small-scale building context
- a main street with mixed-use commercial, retail and residential buildings
- small-scale residential development surrounding the main street
- built form established over a number of years through small-scale, incremental and infill development, rather than one-off large-scale development.

ISSUES

The key issues currently facing coastal villages include:

- development pressure on land that separates villages from neighbouring settlements
- incremental lot-by-lot development resulting in ribbon settlement stretching along the coastal edge and along the main access road
- larger scale tourist developments located on the outskirts of the settlement eroding its compact footprint
- new subdivisions surrounding the settlement that erase the natural setting of the village
- new buildings eroding the settlement's relationship to the geographic location, views and vistas of the surrounding natural environment
- dispersal of commercial, retail and public buildings throughout the settlement
- erosion of the vitality of the main street and the village centre by locating new commercial and retail development remote from the centre
- degradation of water bodies from urban development run off
- degradation of the ecological values of the foreshore wetlands and littoral rainforest from encroachment of development, extension of backyards into public areas and introduced exotic plant species
- insufficient water and waste services brought about by exponential growth
- uncontrolled vehicular and pedestrian access degrading foreshore vegetation and dunes
- reduction of the visual and ecological integrity of surrounding bushland through clearing for bushfire protection.

PRESENT AND FUTURE OPPORTUNITIES

The present and future challenges for coastal villages are to:

- ensure settlements maintain their identity and physical distance from each other
- ensure development builds on the settlement's existing structure
- strengthen the original structure of the settlement and its relationship to the surrounding natural features
- enhance and focus retail and commercial development within the village centre
- gain mutual benefits and develop economic and cultural synergies with neighbouring villages, towns and cities
- retain close visual and physical boundaries between natural and built environments
- encourage tourist accommodation that fits within the small-scale, built form context
- protect the areas surrounding ecological integrity

  improve and protect water quality in lakes and waterways
- maintain vegetation whilst providing asset protection zones around urban areas
- reduce the encroachment of urban development on defined buffer zones and setbacks to conservation areas
- protect and reinstate indigenous ecological systems and control non-indigenous landscaping
- provide logical, clear visual and physical access for the public to and along the coastal edge.

DESIRED FUTURE CHARACTER

The future approach for villages along the NSW coast is to reinforce scenic and tourist values by maintaining and improving the distinctive way in which the settlement sits within the landscape. Protection of natural and rural lands is a priority.

The village centre is reinforced with a mix of uses that supports tourism and local activities to ensure the long-term viability of the settlement's main street. Surrounding the centre, small-scale, sympathetic infill development builds on the original structure of the settlement and existing street character. The system of open spaces for separation, conservation, recreation and water management is recognised as vital for protecting the natural environment and retaining the essential village character.

1. Relationship to the environment

a. The relationship between the village and the coast reinforces:
   - the way in which the settlement sits within the landscape
   - the visual and environmental dominance of the landscape and surrounding ecological systems
   - the ecological corridors that surround the settlement.

b. Separation between settlements is maintained by excluding urban development from surrounding rural and natural lands.

c. Clear boundaries around the settlement are established.

d. New buildings and other urban development are located within the boundaries of the village.

e. Land with high ecological, agricultural and visual integrity surrounding the village is protected.

f. Aboriginal and European places and relics are protected.

g. Total water cycle management and water sensitive, urban design initiatives are implemented.

h. The settlement's micro-climatic conditions are improved through landscaping and mature trees.

i. Development is set well back from areas affected by coastal processes, flooding, erosion and sea level rise.

j. Waste and water services match seasonal tourism influxes.

k. Invasive plant species are removed from ecological areas.

l. Bush fire protection and vegetation clearance are balanced to maintain ecological integrity and visual quality.

2. Visual sensitivity

a. Visual character is critical in coastal villages. New development responds sensitively in form and character to the village and to the existing proportions and materials of existing buildings.

3. Edges to the water and natural areas

a. Foreshore access in proximity to primary streets and public places within the village are reinforced.

b. Connection between the village park, other public open spaces, the main street and the foreshore edge is strengthened.

c. Pathways to the foreshore are aligned with existing streets.

d. Along the foreshore reserve and other public open spaces the boundary between public and private land is defined with public streets or pedestrian pathways.

e. Walking tracks and vehicular access points (where appropriate) to the beach and through the dunes are defined.

4. Streets

a. Coastal villages have a range of street types including:
   - an access road leading from the freeway or highway and passing through the village
   - a mixed-use main street which is the key economic and social street linking important places in the settlement
   - streets revealing important views and vistas of and through the settlement to natural features
   - streets defining public open spaces; parks, squares, conservation areas and the 1:100 year flood line
   - streets separating natural areas from urban development
   - streets following the original subdivision pattern
   - residential streets and laneways
   - pedestrian and cycle pathways and routes.

b. The original street pattern of the village is reinforced.

c. The layout of new streets responds to geographic features.

d. The settlement has an interconnected and permeable system of streets; the central main street is linked to residential blocks and connects places of importance within the settlement.

e. All streets within the settlement are walkable and safe.

f. Pedestrian and cycle access ways follow the streets.

5. Buildings

a. Development within the village comprises:
   - small-scale development within the natural setting
   - buildings defining public open spaces within the centre
   - public buildings within the village centre
   - small-scale tourism and eco-tourism facilities, residential and tourist/residential development.

b. Within the village main street and centre an appropriate mix may contain community, education, retail, commercial buildings, shop-top housing, town houses, detached housing for either residential or tourist uses. These buildings:
   - are oriented towards and address the street
   - have on-grade, active street level uses on the main street.

c. Areas surrounding the village centre may have coastal cottages and outhouses, detached houses and project homes. These buildings:
   - address the street and respond to the streetscape in terms of building setbacks, landscaping and parking
   - have materials, forms and colours that produce cohesion throughout the village as a whole
   - have adequate and amenable private open space.

6. Height

a. The village centre and the main street have a maximum of up to three storeys.

b. Some elements of important public buildings within the centre may be marginally higher than surrounding buildings.

c. Residential buildings surrounding the centre have a maximum of two storeys.

d. Heights are subject to place-specific urban design studies. New development is appropriate to the predominant form and scale of surrounding development (either present or future), surrounding landforms and the visual setting of the settlement. Buildings avoid overshadowing of public open spaces, the foreshore and beaches in centres before 3pm midwinter and 6.30pm Summer Daylight Saving Time. Elsewhere avoid overshadowing of public open spaces, the foreshore and beaches before 4pm midwinter and 7pm Summer Daylight Saving Time.

1.4

COASTAL HAMLETS

Settlements that may be considered as coastal hamlets include Angourie, Crowdy Head, Sandon River, Seal Rocks, Merry Beach, Pretty Beach and South Durras.

>Aerial photograph of Angourie, 1998.

DESCRIPTION

Coastal hamlets are the smallest settlement type with populations generally less than 500 people. Hamlets are isolated settlements often accessible by one road only, which may be unsealed. Hamlets contain few dwellings and offer fewer facilities, possibly only one or two shops.

Hamlets are characterised by:

- a location very close to the beach or a river, reflecting their past association with small-scale employment, such as fishing, or as a setting for holiday houses or camping grounds and caravan parks
- intact local indigenous ecological systems surrounding the settlement and abutting its boundaries with substantial areas of native vegetation
- constraints on growth because of the surrounding natural environment
- strong visual links and views to the coast and the natural environment
- reserves separating the hamlet from the foreshore
- a distinctive access road set within rural and natural land or through a national park
- an organic urban structure that relates to the topography, the foreshore and other unique natural features
- informal, sometimes unmade, streets
- residences often scattered and small scale with a consistent coastal architecture
- no large-scale tourist, commercial, residential or retail developments
- slow and incremental growth so that no distinct subdivision pattern may be readily identifiable.

ISSUES

Hamlets are under pressure from larger scale development to accommodate holiday makers looking for quieter areas away from the main tourist routes.

The key issues are:

- encroachment into the surrounding hinterland by new development
- increasing population impacts on sewerage plants and the water supply
- new houses and infill development out of scale with existing buildings and the size of lots
- exotic landscape species in private gardens and public parks replacing native vegetation in bushland areas
- clearing of large areas of native vegetation when establishing bushfire protection areas
- additional traffic related to increased population and visitation
- degraded water quality in streams and wetlands arising from increased urban run off
- uncontrolled access to natural areas.

PRESENT AND FUTURE OPPORTUNITIES

Although large-scale development opportunities in hamlets are limited, there is the potential to develop:

- small-scale, eco-tourism developments within the hamlet boundaries focused on the passive enjoyment of and education about the environment
- development of employment uses, related to the natural environment
- tourist experiences enhanced by the direct visual and physical connection with the surrounding environment.

DESIRED FUTURE CHARACTER

Coastal hamlets offer an authentic and informal coastal lifestyle experience within a small collection of coastal dwellings and a few basic urban amenities. The natural environment dominates individual buildings and the settlement as a whole. Visual and physical connection to the surrounding environment is effortless and within walking distance. New development is within the settlement boundaries and the scale and architectural character of new buildings allows the setting to predominate.

1. Relationship to the environment

a. There are clear boundaries between urban areas and the surrounding environment.

b. The surrounding ecological systems are intact and large areas of indigenous vegetation and mature trees visually dominate the settlement's scenery.

c. Aboriginal and European places and relics are retained as an integral part of the settlement's history, where appropriate.

d. Indigenous vegetation separates development from nearby settlements.

e. Rain water is captured on site, stormwater infiltrates within the street reserve and local parks may serve as detention basins for urban run off and permeation, contributing to a total water cycle management system.

f. Waterways are protected through planning for peak visitor demands on water and waste services.

g. Micro-climatic conditions are managed by established mature landscaping and trees throughout the settlement.

h. Invasive plant species are removed. Indigenous vegetation in bushland, reserves and setback areas is reinstated.

i. Demands for bushfire protection and natural asset protection are managed respecting competing values.

2. Visual sensitivity

a. Vegetation and landform visually dominate development and buildings.

b. Development is set well back from the foreshore, not dominating vistas from and to the coast.

3. Edges to the water and natural areas

a. Foreshore and settlement edges are controlled and readily accessible to pedestrians.

b. Boundaries between public and private land are informal but well defined.

c. Vehicle access to the beach is restricted.

d. Properties are protected from coastal processes and flooding by setting private and public properties and buildings well back from the edge of the coast, lakes and other waterways.

e. Pedestrian pathways to the beach and foreshore reserves, lakes and other waterways are informal.

4. Streets

a. The street hierarchy within a hamlet contains streets of a similar size and design. They have been originally laid out in response to the topography and natural features.

b. The street hierarchy for a hamlet contains:

- an entry road leading from the freeway to the settlement; often an unsealed rustic road, providing the only road connection into and out of the settlement

- streets revealing important vistas of the coast and the surrounding natural environment
- streets defining the edge of public areas and the foreshore
- streets providing cycle routes throughout the settlement
- unmade roads or pedestrian pathways on the boundary between developed and natural areas.

d. Internal pedestrian and bike connections are along streets within the settlement.

5. Buildings

a. Large-scale residential, retail, commercial and tourist developments are avoided.

b. Large developments in prominent locations in or surrounding the settlement or along the main access road are avoided.

c. Buildings are sensitive in scale to existing buildings and include detached and semi-detached residential dwellings, coastal cottages and bed and breakfast accommodation.

d. Buildings are consistent in scale and landscaping treatment throughout the settlement is achieved through consideration for:

- carparking, front garden landscaping and side setbacks and site coverage
- the streetscape and setbacks from the street
- the appropriate proportion, bulk and scale of new buildings, which do not dominate the natural setting
- building materials and colour.

6. Height

a. Heights of up to two storeys are maintained throughout the settlement.

b. Heights are subject to place-specific urban design studies. New development is appropriate to the predominant form and scale of surrounding development (either present or future), surrounding landforms and the visual setting of the settlement particularly when viewed from the foreshore. Buildings avoid overshadowing of public open spaces, the foreshore and beaches in centres before 3pm midwinter and 6.30pm Summer Daylight Saving Time. Elsewhere avoid overshadowing of public open spaces, the foreshore and beaches before 4pm midwinter and 7pm Summer Daylight Saving Time.

1.5

INLAND COASTAL CENTRES: CITIES, TOWNS AND VILLAGES

Settlements that may be considered as inland coastal centres include Murwillumbah, Macksville, Nowra/Bomaderry, Moruya and Bega.

>Aerial photograph of Moruya, 1996.

DESCRIPTION

Inland coastal centres are generally typified by their location on a flat site often with the centre backing onto a river.

Many heritage buildings remain intact and in some cases entire streets, blocks and precincts retain their original buildings and parks.

The street pattern is most often on a large grid with wide streets and mid-block laneways. The large streets have mature trees and wide parking bays that also perform storm water detention and percolation functions. This helps mitigate flooding in settlements located on the river floodplain. There is a main street with a high level of pedestrian amenity and active street level uses. Buildings are consistent in height and architecture.

Inland coastal centres have an important role to play as the commercial and retail hub for surrounding rural lands and smaller settlements located on the coast that cannot readily access a city or a town.

The catchment of an inland coastal centre covers a significant area and people may be travelling large distances to access its services. The range of services varies with the settlement's size but as a minimum includes:

- educational
- retail and commercial
- service industries
- medical
- tourist.

ISSUES

Many inland coastal centres are under less pressure to grow than centres on the coast and, in some cases, may require revitalisation to stimulate economic stability or growth. Other issues facing inland centres include:

- flooding at regular intervals affecting servicing, infrastructure and properties
- clearing of riparian ecologies and degradation by boating activities and new residential development
- no classification, protection or recognition for the settlement's heritage
- privatisation of the river frontage
- no connection of the settlement to the river
- erosion of the settlement centre's economic base as a result of large new retail developments remotely located
- new commercial and retail development is not compatible with the scale, design and architecture of existing buildings
- the beauty of the settlement is degraded with carparking, signage and large retail and commercial developments that do not respect the quality of the streets or the settlement's open spaces
- large new developments erode the quality pedestrian environment throughout the settlement.

PRESENT AND FUTURE OPPORTUNITIES

Inland coastal centres are located close enough to the coast to reduce the pressure to develop more sensitive locations on the coastal edge. This is beneficial to stimulating growth in inland centres and protecting natural areas.

Other opportunities include:

- forming complementary uses with neighbouring towns to develop economic, tourist and environmental benefits
- developing ecological, social and tourist benefits by extending and reinstating native indigenous vegetation along rivers to provide habitat for native fauna
- maintaining and developing the historical characteristics of the centre to encourage tourism and maintain and promote the centre's historic context
- strengthening links with the waterways to provide an appropriate focus for the cultural and tourist life of the settlement
- encouraging development within the town to assist its economic and social viability
- providing public transport and better links to coastal settlements.

DESIRED FUTURE CHARACTER

Inland coastal centres range in structure and urban form from cities to villages. The waterway (whether a river or a lake) is central to the character of an inland centre. This is the positive defining feature with strong visual and physical links between town and waterfront. Development of an inland coastal centre is contained within the settlement, minimising visual and environmental impacts on the waterway. It relates to the historic character of the settlement. Inland coastal centres provide sustainable growth by accommodating growth impacts on the coast. They act as a centre for commercial, retail and industrial uses taking the pressure off more sensitive coastal locations closer to beaches and headlands.

1. Relationship to the environment

The relationship of the centre to the environment ensures:

a. A clear relationship with the original landform and topography, the waterfront and other natural features is maintained.

b. Aboriginal and European sites and relics are protected.

c. Emergencies are planned for during flood events.

d. The river frontage remains in public ownership.

e. Water-based transport options are implemented, where possible.

f. A positive role for the river and open space is created by refocussing redevelopment within the settlement to the river.

g. Ecological links along the river from the hinterland to the coast are established.

h. Boating and marina facilities are designed to limit impact on aquatic vegetation and discourage anchorage over these sensitive areas.

i. Mangroves and in-stream habitats are protected.

j. Setbacks are to protect the river bank from erosion and rehabilitate riparian areas and restrict vegetation clearance along the river.

k. Micro-climatic conditions are enhanced through landscaping.

l. Impacts on water quality in downstream wetlands, estuaries, coastal lakes, creeks and beaches are reduced through implementing sustainable water and waste water systems.

2. Visual sensitivity

a. Links between major open spaces within the centre to the river or lake provides visual connections.

3. Edges to the water and natural areas

The relationship of the settlement to the river is improved.

a. Public boat launching and fishing facilities in preference to private facilities.

b. Visual and physical links between open spaces within the town centre to the river.

c. Access to the river foreshore and open space, walks and recreation areas whilst protecting the riverbanks and maintaining access from the town centre to the river or waterfront.

4. Streets

a. The original historic street pattern and character of streets is retained and enhanced and public transport is optimised within the town and links to nearby coastal settlement.

b. The street pattern is a traditional grid and contains a hierarchy of streets including:

- streets of the original and historic subdivision and topographic pattern of the settlement, whether within the centre or in residential areas, which reveal vistas through the settlement
- a main social, retail and commercial street
- a main access road passing through the centre of the settlement with a secondary arterial road bypassing the settlement
- key cultural and urban streets that connect to landmarks, vistas, public buildings, focal points, monuments and places of Aboriginal importance within the settlement
- streets with development on only one side that define public open spaces, such as parks, squares, the edges of conservation areas and the 1:100 year flood line
- streets located to manage bush fires
- laneways to offer ready access between streets
- pedestrian and cycle pathways and networks.

5. Buildings

a. Development is sensitive to the heritage character of the centres, responding to the existing scale and proportion of original buildings in the town centre.

b. Building type and form is based on whether the settlement is a village, town or a city. The heart of the centre has high quality and intact heritage buildings and streets, this is maintained and enhanced. c. The main street has a mix of building types, including heritage buildings, residential flat buildings, shop-top housing, retail, commercial and educational buildings. Surrounding the centre are heritage buildings, town houses, terraces, small houses together with retail and educational buildings.

d. Large industrial, commercial and tourist developments are located to respect the environmental, urban and visual constraints of the settlement.

e. Development in the centre is encouraged.

6. Height

a. Heights respond to the scale of the settlement, street widths and the relationship to heritage buildings and view corridors.

b. Heights correspond with the settlement size, whether a village, a town or a city. Heights adjacent to or surrounding heritage and original buildings address the principles as outlined in the Burra Charter.

c. Heights are subject to place-specific urban design studies that consider a response to the local context. New development is appropriate to the predominant form and scale of surrounding development (either present or future), surrounding landforms and the visual setting of the settlement particularly when viewed from the foreshore. Buildings avoid overshadowing of public open spaces, the foreshore and beaches in centres before 3pm midwinter and 6.30pm Summer Daylight Saving Time. Elsewhere avoid overshadowing of public open spaces, the foreshore and beaches before 4pm midwinter and 7pm Summer Daylight Saving Time.




NEW COASTAL SETTLEMENTS: VILLAGES AND HAMLETS

Settlements that may be considered include subdivisions with 25 lots or over, new residential release areas.

> Estella, Wagga Wagga, proposed subdivision. Although not in a cosatal location, this example is designed to respond to the site.

DESCRIPTION

New coastal settlements may range in size from villages to hamlets and include any new subdivisions over 25 lots. They may be located remote from existing settlements or, preferably, related to coastal cities and towns.

New coastal settlements are predominantly residential areas. Some settlements also have tourist, retail and commercial uses, such as larger settlements that have a neighbourhood centre with the potential to expand.

They are located and designed with reference to strategic plans for the local area that respond to the location and size of other adjacent settlements, the environmental constraints of the site and its suitability for urban development.

These new settlements offer the opportunity for best practice planning on a neighbourhood and place-based approach that minimises impacts on vegetation clearance, water quality and ecological integrity.

ISSUES

There are significant challenges to be addressed to ensure quality subdivisions are planned, designed and constructed. These issues include:

- removal of the unique topographic and natural features of the location, the site and the local area
- new development that is not planned to respond to the local context in terms of open space, access and existing centres or main streets
- privatisation of the coastal and natural edges
- a lack of public open space for recreation, water management, ecological protection and social functions
- subdivisions designed merely for efficient traffic movement
- development too close to fragile coastal environments, particularly dunes, beaches, lakes, riverine and stream corridors
- development located on flood prone land involving land fill
- development that disturbs acid sulphate soils
- indiscriminate expansion on the edges of existing coastal hamlets and villages
- development creating strip or ribbon development along the coast including major arterial roads
- locating new settlements within the greenbelts of existing settlements
- residential development without neighbourhood centres or a main street
- development on land likely to be affected by coastal hazards, now or in the future
- privatised enclaves and gated communities that restrict public access and connection to the local area
- a street pattern that forces residents to drive rather than walk or cycle
- building design and materials inappropriate for the local climate
- high site coverage and no private open space
- no diversity in housing choice
- degraded ground and surface water quality resulting from urban pollutants and sedimentation
- poorly maintained, unsafe and under utilised public lands.

PRESENT AND FUTURE OPPORTUNITIES

New coastal settlements offer opportunities for:

- best practice, place-based planning that works with the unique qualities of the site and the local area
- responding to the existing built, urban and natural character of the area
- environmental and ecological protection on private land
- a publicly owned, accessible and locally connected coastal edge
- setting back properties to ensure their long-term protection from coastal erosion and sea level rise
- making the place attractive to holiday makers and investors that sets it apart from other locations along the coast
- neighbourhoods that improve the liveability and maintain the beauty of an area
- housing choice for all sections of the community
- opportunities to change the demographic mix of an area
- innovative, best practice, environmentally sustainable energy, waste and water design for lots and the settlement as a whole
- building design to accommodate working from home
- housing for a wide cross section of people and lifestyles.

DESIRED FUTURE CHARACTER

New settlements are located according to a regional and local strategy, that avoids creating ribbon development along the coast and considers ecological qualities, settlement types, separation between settlements, transportation, employment opportunities and population capacity.

New settlements:

- respect the ecological limits of the site and its context
- are developed with careful consideration for landform and views from public areas
- provide alternative transport option from private car use
- have a public domain.

Part of the key to the success of new settlements is the way the public domain relates to the geographic location and topography. The components of the public domain include:

- a pattern of development based on the unique natural, urban, historic, visual and environmental features of the location
- reserves for nature conservation and flood processes
- open space and public places for the recreation and social needs of residents and visitors
- an interconnected street pattern providing long-term access and social and economic opportunities for the settlement
- areas for total water cycle management.

1. Relationship to the environment

a. New development avoids areas of ecological value and respects setbacks between natural areas.

b. Wildlife corridors, existing mature trees, rivers, streams, lakes and natural features are incorporated into green space networks, reserve areas, riverine and foreshore corridors.

c. Aboriginal and European places, relics and items are protected.

d. Foreshore and estuarine vegetation is protected.

e. The potential disturbance to acid sulphate soils is managed.

f. Original native landscape is maintained and reinstated.

g. Waterways and coastal lakes are protected through water sensitive urban design and total cycle water management.

h. Degraded natural areas are rehabilitated.

i. Vegetation is maintained whilst managing asset protection areas for bushfire protection.

j. Land swaps, community stewardship programs, transferable development rights and voluntary conservation agreements provide opportunities to sensitively locate development and protect ecosystems and views

k. Native vegetation is preferred on public and private land.

l. Land is revegetated with species native to the local area.

2. Visual sensitivity

a. Views to and along the foreshore align with streets.

b. Views and vistas of the foreshore and natural features in or surrounding the site are aligned with public streets.

3. Edges to the water and natural areas

a. In new coastal settlements the centre and surrounding residential areas are separated from the foreshore by a parkland or roadway or nature reserve.

b. Setbacks from the coastal edge and other surrounding natural areas, such as reserves and lakes, respect environmental





constraints and protect properties from coastal hazards.

c. Public access along the foreshore is generally located on the boundary between public and private land and along streets.

d. Pathways through foreshore vegetation are restricted to ensure the ecological integrity is not degraded.

e. Foreshore vegetation is not removed to create views.

f. Land is not filled to promote views.

4. Streets

a. New coastal settlements have a street pattern similar to coastal hamlets or coastal villages. They present an ideal opportunity to provide a street pattern responding to the landform, views and permitting a high level of visual, pedestrian, cycle and vehicular permeability.

b. The street pattern also:

- creates public neighbourhood centres and a main street
- avoids privatised enclaves by providing direct access to the foreshore
- provides an interconnected and permeable street pattern
- responds to pedestrian and cycle distances and connects to a local and regional network.

5. Buildings

a. The pattern of land development within the settlement is designed to provide amenity.

b. The settlement has a compact footprint to reduce land take.

c. Blocks and streets are walkable and safe.

d. The neighbourhood centre has commercial, retail, education and civic buildings and some shop-top housing.

e. Buildings address the street.

f. Tourist developments integrate into the settlement's street pattern and define the edge between public and private land.

g. Lot sizes and configurations are designed to support a range of housing types that integrate into the street pattern and the location of functions throughout the settlement.

h. Residential areas consist of coastal cottages, detached and semi-detached houses, town houses and terraces.

i. A diversity of lot and housing types are developed to accommodate various household sizes and types.

j. Buildings are designed to suit the climate and use environmentally sustainable building design and materials.

k. Housing types optimise visual and acoustic privacy, integrate passive solar design principles, minimise water use, and seek to achieve architectural distinction and excellence.

6. Height

a. Residential buildings are one to two storeys.

b. The neighbourhood centre or the main street has buildings up to two storeys.

c. Where visual prominence is not apparent three storey buildings may be appropriate.

d. Heights are subject to place-specific urban design studies. New development is appropriate to the predominant form and scale of surrounding development (either present or future), surrounding landforms and the visual setting of the settlement. Buildings avoid overshadowing of public open spaces, the foreshore and beaches in centres before 3pm midwinter and 6.30pm Summer Daylight Saving Time. Elsewhere avoid overshadowing of public open spaces, the foreshore and beaches before 4pm midwinter and 7pm Summer Daylight Saving Time.

1.7

ISOLATED COASTAL DWELLINGS

Examples may include single houses along the coast generally

>This aerial shows a group of isolated dwellings on the wedge of land between Boolambayte Lake and Bombah Broadwater. Aerial photograph 1983.

DESCRIPTION

Typically isolated coastal dwellings are remotely located from settlements. Dwellings are single residences, tourism lodges or farmhouses set on rural land. In some instances these dwellings may be located in reserves or national parks and may be leasehold or occur as small freehold pockets. They are not connected or located close to urban amenities and often rely on autonomous systems for water and waste servicing.

ISSUES

Isolated coastal dwellings have the potential to pollute land and water resources resulting from their location within ecologically and visually sensitive places and the autonomous water, waste water, energy and solid waste systems used to service buildings.

Key issues to address are:

- pollution to lakes, streams, rivers and other water bodies from on-site and autonomous waste water treatment systems
- removal of vegetation and disturbance to soil causing erosion during construction and maintenance of roads and pathways to and through the site
- building design, materials and colours are visually intrusive to the landscape setting
- invasion of exotic landscaping and plant species into native bushland areas
- clearance of large areas of native vegetation for fire protection
- dwellings located in visually prominent places
- dwellings located on sites affected by coastal processes and erosion
- overdevelopment on small lots.

PRESENT AND FUTURE OPPORTUNITIES

Key opportunities are to:

- convert to eco-tourism, farm-stay and bed and breakfast uses
- develop uses that encourage protection of Aboriginal and European sites
- develop uses that encourage ecological and biodiversity interpretation and education
- employ best practice environmentally sustainable methods and technologies for servicing in terms of water, waste, energy and transport
- protect ecologically important land in private ownership
- revegetate land with species native to the local area.

DESIRED FUTURE CHARACTER

The remote location of many isolated coastal dwellings provides the most pristine and pure coastal experience. In the case of tourism lodges, their potential educative role for residents and visitors in interpreting and understanding the natural environment is enhanced by the extensive ecological systems that surround and penetrate the site. The way in which development displays best practice architectural and infrastructure design that protects the environment contributes to understanding environmental impacts and solutions.

1. Relationship to the environment

a. Isolated coastal dwellings are located and constructed so that:
   - Aboriginal and European places, relics and items are protected
   - vegetation is protected during construction
   - vegetation communities are left relatively undisturbed.

b. Conflicts between native vegetation protection and clearing for bushfire management are managed.

c. Impacts on the fragile ecosystems of riparian sites and waterways are reduced by careful evaluation of the location of dwellings on the valley floors. Potential impacts on water quality are reduced by locating buildings away from rather than adjacent to waterways.

d. Appropriate setbacks from waterways are provided.

e. Waste water systems are designed to avoid pollution to lakes, streams, rivers and other water bodies.

f. Roads are designed to reduce cut and fill and soil erosion and maintain existing vegetation and mature trees.

2. Visual sensitivity

a. Dwellings in sensitive coastal or rural landscapes are designed to minimise visual impacts, particularly when viewed from the foreshore, entry roads to settlements and from key public viewing points. Groups of smaller buildings are designed in preference to one large building to reduce visual impacts.

b. Dwellings on headlands and prominent ridge lines are avoided because of the high visual exposure.

c. Dwellings are located on the edges of valleys or side slopes in the landscape to minimise visual impacts.

3. Edges to the water and natural areas

a. Generally pedestrian only access to the coastal edge, via defined and identifiable pathways.

4. Access

a. Isolated coastal dwellings generally have a private access road off a public laneway or road, which may be unmade.

b. There may be a series of interconnected pedestrian pathways connecting buildings within the development aiming to limit access to more sensitive natural areas, some may be raised off the ground over wetter or fragile ecosystems.

5. Buildings

a. Isolated dwellings strongly respond to their natural setting. The design relates and responds to the environmental, climatic and siting conditions. Some buildings may be raised off the ground to avoid disturbance to vegetation, rock outcrops and soil.

b. New dwellings are located to ensure the coastline retains its natural character.

c. The bulk, scale and footprint of dwellings is minimised.

d. Building design, materials and colours of the dwellings are chosen to respond to the landscape setting.

e. Buildings and infrastructure are located, designed, constructed and managed to achieve environmental sustainability and ecological sensitivity for water and land resources on site and within the surrounding environment with particular regard for:

- procurement and storage of potable water
- treatment and disposal of waste water
- generation of power
- management of solid waste
- location and design of roads and vehicular movement areas
- site selection and site management to minimise environmental disturbances during construction
- colour and materials sensitive to the surrounding natural environment.

6. Height

a. Buildings are no taller than two storeys.

ANALYSING THE LOCAL AREA

Analysis leads to an understanding of place. It identifies land suitable or unsuitable for development. Analysis of a particular area considers the characteristics of the area being studied and as a minimum:

- includes areas of ecological sensitivity
- includes an evaluation and understanding of issues, and present and future investment opportunities
- includes a determination of the types of settlements
- includes an examination of where the settlement's boundary may be positioned
- ascertains areas suitable for new settlements
- informs the settlement's desired future character.

DESIRED FUTURE CHARACTER

A vision for the desired future character for an area provides a rationale for determining the appropriateness of new developments. This contextual approach ensures that wider issues are resolved, such as overshadowing, water management, ecological health, equity, amenity and protection of the public domain. Establishing the desired future character of the settlement, or an area within a settlement, provides the framework for building guidelines and controls.

Determining a desired future character includes, as a basis, understanding and responding to:

- the key natural and built features in the area
- the desirable elements of the location (present and future)
- the identity of the area (present and future)
- sustainable densities in response to the regional and local context
- the social context
- the needs of the local area and local community in terms of lifestyles, affordability, the social mix and needs of the neighbourhood (present and future).

The basis for determining a location's desired future character is an analysis of the characteristics of the area being studied and as a minimum includes:

- social - population growth and demographic features, community services, availability and importance of adjoining agricultural land
- economic - development pressures, land release strategies, investment opportunities
- environment - hydrology, catchment areas of all waterways, lakes, riverine corridors and stream networks and their capability and limitations, biodiversity, coastal hazards, bush fire hazards, sea level rise, landform, vegetation, trees, topography, key natural features and soil types
- infrastructure - sewerage, drinking water supplies, stormwater drainage and disposal, energy structures including powerlines, satellite antennae and wind farms
- transport - cycle and pedestrian networks, public transport links, major regional and local roads
- views and vistas - throughout and around the settlement, distant views, local context views (from 100m - 500m away) and streetscape views. Other important views around settlements include:
  - geographic features and the way in which the settlement sits within the landscape
  - the visual character of key natural features
  - the visual character of places and buildings of public, social and cultural importance
  - vegetation, especially mature trees
  - views to heritage items
- heritage - Aboriginal and European places, relics and items
- urban - the street pattern, the historic/original street, block and subdivision pattern, open spaces, lots and blocks, buildings and for specific locations; centres, edges to the foreshore, edges to the settlement, prominent coastal sites, density.

LOCATIONAL CONSIDERATIONS

Analysis underpins the understanding of place. It develops an appreciation of opportunities and constraints of an area by answering the following questions.

What are the valuable natural and urban aspects of a settlement and its surroundings?

What are the capabilities and limitations and how much change can occur beyond which the natural and urban systems are irrevocably changed?

The fundamental question arises:

Where can development occur and where can it not in order to meet the natural and urban limitations of the settlement, its surroundings and its regional context?

At a regional level this is expected to be answered through settlement strategies and with new regional plans under PlanFirst supported by the Comprehensive Coastal Assessment, a component of the Coastal Protection Package 2001.

On a local and site level the answers are derived via settlement plans, structure and master plans and urban design-based development control plans, as appropriate.

Locate new development:

- where the ecology, heritage, visual and urban values of the settlement and the surrounding context are not compromised
- within the determined boundaries of a settlement
- where the use of existing infrastructure, water and waste water systems, roads, public transport, shops and community facilities, can support new development.

It is advisable not to locate development on lands:

- affected by coastal processes, coastal erosion and sea level rise
- reserved or gazetted under the National Parks and Wildlife Act 1974 or identified for environmental protection by other mechanisms
- in close proximity to estuarine waterways and water bodies, creeks, lagoons, intermittently closed and open coastal lakes, river and lake mouths, coastal wetlands, intertidal communities, natural drainage lines and basins, mangroves and seagrass beds
- supporting the habitat of threatened, rare or regionally significant flora and fauna species and endangered ecological communities
- supporting littoral rainforests and koala habitat
- subject to frequent flood hazard
- where cut and fill is required to overcome flood hazard or coastal processes
- where Aboriginal and European cultural heritage is to be conservation and interpreted
- utilised for rural purposes with high productivity, generally class 1 and 2 agricultural land
- land affected by acid sulphate soil
- within setback zones for coastal erosion hazards, including beaches, foreshores and dune systems
- within setbacks to all high conservation value land and corridors linking natural areas.

Areas that may not currently have statutory protection but are vital and intrinsic to the health of ecological systems and the maintenance of settlement character including:

- greenbelts between settlements
- urban bushland parks, playing fields and urban parks
- the historic subdivision, street and block pattern
- visually prominent areas of land within the scenic catchment of the settlement, such as headlands, hills, ridges, mountains and escarpments
- rural land with high scenic or agricultural values
- key view corridors within settlements
- the sequence of views and visual character along main access roads into settlements
- local vistas looking into, out of and around the settlement typically of the surrounding mountains, hills and escarpments and across waterways and the ocean.

Part TWO

DESIGN PRINCIPLES

DESIGN PRINCIPLES FOR COASTAL SETTLEMENTS

S FOR COASTAL SETTLEMENTS

INTRODUCTION

Part 1 of these guidelines focused on the different types of settlements along the NSW coast. It sets out the future desired character for each type. This section builds on Part 1 by providing tools, in the form of design guidelines, to help achieve the desired future character for coastal settlements.

To determine the desired future character of a place, it is necessary to understand its unique qualities. These guidelines stress the importance of understanding a settlement's physical setting and provide place-specific studies. This means undertaking a thorough analysis of a settlement's past, current and future cultural and economic characteristics. It also means recognising and working with the expectations of the community and other stakeholders and understanding pressures for growth.

The unique character of a coastal settlement is established primarily through the **settlement structure**. The structure is formed by a combination of urban and natural elements. Urban elements include the streets, open spaces, blocks, lots within blocks and buildings. Environmental elements include water, landform, topography, aspect and vegetation. Together, these elements make up a three-dimensional spatial system with a range of spaces of different shapes and sizes, particular views and vistas and buildings of varying height and bulk.

A robust, clear and logical settlement structure will ensure continued amenity, serviceability and economic viability over time. It can also support a high quality public domain even though land uses, building types and urban densities change. Reinforcing the positive aspects of a settlement's identity sets it apart from other locations along the coast. This contributes not only to regional variety, but also can have a positive impact on investment and tourism.

It is important that the settlement structure is understood and documented and that future plans and subsequent development strengthens and reinforces the structure via design, which reinforces the character of a place.

Generic planning and incremental ad hoc development practices having no regard for the structure of a settlement often have negative impacts on the overall identity and character of coastal areas. All coastal settlements, particularly smaller ones such as villages and hamlets, are vulnerable to this type of planning. In some circumstances even one large development located and designed without regard for the existing structure, may impact adversely on these coastal values which provide for a region's character and attractiveness.

An important function of the settlement structure is to establish or reinforce a network of public spaces and streets (the public domain) which are well connected, usable, safe and attractive. A well designed and structured public domain is critical to a settlement's character. Public domain supports how well the settlement functions and contributes to the settlement's long-term economic viability and attractiveness.

Five principles for coastal settlement structure describe elements of the public domain and the built form that reinforces it. They are presented as best practice outcomes and form the basis for understanding, debating and designing the present and future form of coastal settlements in NSW. The five principles are:

1. **Defining the footprint and boundary of the settlement** describes how to establish the outer limits of a settlement to protect the important visual and natural setting.
2. **Connecting open spaces** illustrates how open space creates recreation, conservation, public access, cultural and heritage opportunities in and around the settlement.
3. **Protecting the natural edges** of the settlement shows how the coastal edge is protected and understood as a public place, with public access and ecological values including mitigating the impacts of natural hazards.

4. **Reinforcing the street pattern** highlights how streets enliven centres, connect important places within and around the settlement, allow for improved choice when moving from place to place, and provide commercial and social benefits.
5. **Appropriate buildings in a coastal context** shows how specific development relates to the site's natural features and to its location within the settlement.

Each principle is discussed in terms of:

- **an introduction** describing the topic
- **design guidelines** setting out benchmarks for best practice planning and design, and offering positive design solutions
- **undesirable practice** using an illustrated case study to show poor planning and design practice
- **desirable practice** using an illustrated case study to demonstrate where an optimum solution has been reached
- **real examples** using aerial photographs to show the outcomes of both types of practices.

APPLYING THE PRINCIPLES FOR COASTAL DESIGN

The design principles for coastal settlements present guidelines within which place-specific issues can be analysed, explored and designed. This process is underpinned by community stakeholder, social and economic studies and consultation.

The guidelines for each principle are relevant to all seven settlement types and are designed to be applied in:

- *settlement strategies*
- *structure plans for new release areas*
- *subdivision plans*
- *revitalisation plans for urban areas*
- *master plans for subdivisions*
- *place-specific development control plans*
- *public domain plans*
- *streetscape improvement plans.*

The guidelines can also be used when planning, designing and assessing new buildings and when planning infrastructure.

2.1

DEFINING THE FOOTPRINT AND BOUNDARY

The NSW coast is a balance between urban settlements and natural and rural areas. How a settlement touches such areas as the foreshore, rural lands or natural bushland is extremely important in maintaining existing ecologies, limiting urban sprawl, and in maintaining greenbelts between settlements. Settlement footprints should form part of an overall structure plan that considers the vision for the future of an area and its existing context.

THE VISION

Settlements have clearly defined and contained boundaries with separation between other settlements formed by aquatic and bushland reserves which protect coastal ecosystems, local character and visual settings.

ISSUES

Many coastal settlements encroach in an ad hoc way on surrounding foreshore and bushland without any clearly designated boundaries. This has a number of detrimental effects including:

- the potential for continuous ribbon development along the coast
- spread of weeds with consequent destruction of natural ecosystems
- loss of natural settings and local character
- inefficiencies in the use of existing services, infrastructure and town centres
- negative competition between new and existing centres
- increased car use.

OBJECTIVES

Objectives for defining the boundary or footprint of settlements are to:

- determine the location and type of edge as part of an overall structure plan based on existing context and the location and setting of adjoining settlements
- maintain coastal ecosystems and greenbelts
- provide separation between settlements via greenbelts or rural lands
- protect local character
- protect visual settings
- maximise the use of existing services and infrastructure
- revitalize existing urban centres by concentrating new development to support them.

When determining the boundary and footprint of a settlement there are key questions to be answered.

What type is the settlement and is it likely to change in the near future?

What is the existing and the projected population?

Does the settlement have the potential for expanding/growing beyond the existing footprint?

Does a settlement have the capacity for increasing densities within the settlement?

Broadly the objective is to limit and control coastal sprawl by planning for compact settlement footprints. To meet this objective there are four ways in which coastal settlements can accommodate development:

1. No or limited development.
2. Maintaining a compact settlement footprint.
3. Expanding the boundary of a settlement.
4. Creating a new settlement.

1. NO OR LIMITED DEVELOPMENT

This scenario is most likely to occur in smaller settlements such as villages and hamlets where middle- to large-scale development would irrevocably compromise the natural environment and substantially change the existing character of the settlement.

Some settlements have a predefined footprint and boundary limited by features such as national parks, setbacks from water bodies, setbacks from the coastal foreshore and coastal erosion zones, agricultural land, or scenic qualities surrounding the settlement.

They may also have significant constraints within the settlement that limit the potential for infill or redevelopment such as heritage or built character, or land may not be available for redevelopment.

In this scenario, the objective is to allow small-scale development appropriate to the constraints of the settlement. This scenario would allow the potential for renovations or redevelopment of existing dwellings on individual sites within the constraints of existing building types, street character, urban structure, built form and the natural character of the area.

2. MAINTAINING A COMPACT SETTLEMENT FOOTPRINT

The objective of this scenario is to allow growth of a settlement by consolidating within the existing boundary of the settlement whilst protecting the urban character. Typically this scenario involves a settlement where there is demand for growth, however, there are also strong natural/cultural constraints limiting the expansion of the settlement footprint.

Compact settlement footprint can be managed by developing a strategy for built form which details appropriate pattern of subdivision, scale, footprint and height. This is necessary to achieve a high level of residential, commercial and public domain amenity within the existing town fabric.

In smaller centres and residential areas, built form controls detailing examples of suitable infill development, which has been developed to fit the specific character of the area, would ensure amenity is maintained.

The benefits of following this option include opportunities to:

- provide housing choice for a diverse cross section of society
- revitalise existing urban centres
- support densities for efficient public transport systems and other infrastructure provision.

3. EXPANDING THE BOUNDARY OF A SETTLEMENT

The objective here is to allow a settlement area to grow beyond the existing boundary of the settlement whilst protecting and enhancing the ecological, urban form and visual characteristics of a locality. In this scenario, the existing settlement may have a low population for its type, with pressure to grow. For example, a small village of 800 people may be able to grow to a large village of up to 3000. The settlement adjoins land that has been identified in a settlement strategy as having potential for urban development.

New development will reinforce and extend the existing urban structure of the settlement by expanding only on land that can respond to and reinforce the settlement's key characteristics. A predefined structure plan informs and dictates the location of new development based on a thorough analysis of the settlement and its context.

4. CREATING A NEW SETTLEMENT

In some situations it may not be possible to continue to expand or consolidate an existing settlement, however, there remains strong demand for growth in the area. In this scenario, it is important to recognise when a settlement has reached capacity and it is not desirable for the settlement to grow into another settlement type, for example from a hamlet to a village or a village to a town, or where this additional development would result in ribbon development along the coast.

The objective is to discourage new development, such as large tourist developments or residential subdivisions, on the outskirts that will create sprawling urban development and loss of a clear settlement type. When this situation occurs an alternative location for a new settlement may be determined separated from existing settlements by substantial greenbelts consisting of natural or semi-natural lands or rural lands.

New settlements are not just residential land subdivisions. They are designed to provide a mix of housing types with a hierarchical street pattern. Larger new settlements comprise a commercial and retail centre either a main street or a village centre. New settlements will be generally the size of hamlets or villages (under 3,000 people) and should establish a public domain that achieves the design principles corresponding to the coastal settlement type.

Location of new settlements are to be determined through processes of a settlement strategy involving local and regional contextual studies and are consistent with regional plans and state policies.

DESIGN GUIDELINES FOR DEFINING THE SETTLEMENT FOOTPRINT

1> A settlement bounded by waterways, the ocean, and surrounding original vegetation sets a distinctive boundary edge and a clear footprint.

2> Natural barriers such as the river mouth, the ocean and the natural setting give limits to growth along the settlement edges.

NO OR LIMITED DEVELOPMENT

1. Because this scenario is based on limited development of existing sites only, any new development needs to be designed to respond to the existing local context linked to place-specific urban design plans and development controls.
2. As a minimum this would result in reinforcing the existing settlement character and the location of sites within the settlement in terms of:
   a. the street pattern and character
   b. bulk, scale and height of buildings
   c. extent and location of private open spaces
   d. car parking configuration
   e. setbacks from the street and from side and rear boundaries
   f. landscaping
   g. materials and detailing of buildings.

EXPANDING THE BOUNDARY OF A SETTLEMENT

1. Where a settlement structure plan is needed to identify sites for development and subdivision both within the existing settlement and on its edges, it is essential to:
   a. enhance natural and heritage features and views
   b. retain existing vegetation and ecology
   c. reinforce and continue existing open-space networks and greenbelts, through and between settlements
   d. reinforce and continue the urban structure of the existing settlement and its centre or main street
   e. utilise existing services, infrastructure and co-locate facilities
   f. optimise under-utilised infrastructure, such as public transport, shops and community facilities, and retail and commercial areas
   g. provide a permeable block and lot pattern in sympathy with the topography and land uses
   h. relate higher density housing to the pattern of built form within the existing settlement
   i. design blocks, lots and buildings together to ensure the efficient use of land
   j. provide or retrofit to achieve water-sensitive urban design initiatives locally and on sites
   k. achieve walking and cycling distance to places of importance within the settlement or provide new local centres within the catchment of residential areas.

guidelines

MAINTAINING A COMPACT DEVELOPMENT FOOTPRINT

1. Centres are the primary candidates for accommodating new development. Where this occurs the objectives are to promote:
   a. mixed-use, block-edge development with active street frontages and basement car parking
   b. shop-top housing along main streets.
2. Strategies for development within a settlement centre occur through place-specific urban design plans and development controls. As a minimum this results in working with the existing settlement character to have regard for:
   a. the public domain, open spaces, streets and heritage
   b. the subdivision, block, lot and street pattern and character
   c. views and visual setting
   d. bulk, scale, height and building type
   e. extent and location of private open spaces
   f. configuration of car parking and driveways
   g. setbacks from the street and from side and rear boundaries
   h. landscaping
   i. materials and detailing of buildings.

CREATING A NEW SETTLEMENT

1. A new settlement will be the size and configuration of either a hamlet or a village. New settlements contain:
   a. substantial surrounding greenbelts
   b. substantial and continuous foreshore reserves, where - relevant
   c. maximum setback distances required to protect natural areas
   d. provisions so as not to impact on the visual character or vistas of existing settlements or agricultural land.
2. Design criteria for new settlements involve:
   a. responding to the environmental constraints of the location
   b. maintaining the water quality of lakes, rivers and coastal waters at pre-development levels
   c. retaining existing trees and vegetation
   d. providing facilities and services appropriate to scale and type of settlement
   e. including a town/neighbourhood centre or a main street
   f. requiring a permeable, hierarchical street subdivision pattern that relates to the original topography.
3. Design that relates to quality building types and allows the possibility for more compact building types in the future.
4. Making provision for more dense development, such as semi-detached houses and small apartment buildings with higher density housing located within close to the centre.
5. Ensuring the efficient use of land by designing blocks, lots and buildings together.

UNDESIRABLE PRACTICE

In this example development has occurred incrementally without regard for the impact of individual developments on the overall ecological processes, visual character and the existing pattern of settlement. Over a period of time settlements join to form continuous development along the coastal edge.

TOWN

1 Rural land along the main access road between the highway and the settlement has been developed, creating a sprawling character and diminishing the scenic qualities of the town. The developments are remote from the town centre and services.

2 New industrial development at the intersection with the highway detracts from the quality of the entrance to the village and impacts on the town's future tourism potential.

3 New houses and roads on the hills behind the town impact on the town's scenic setting.

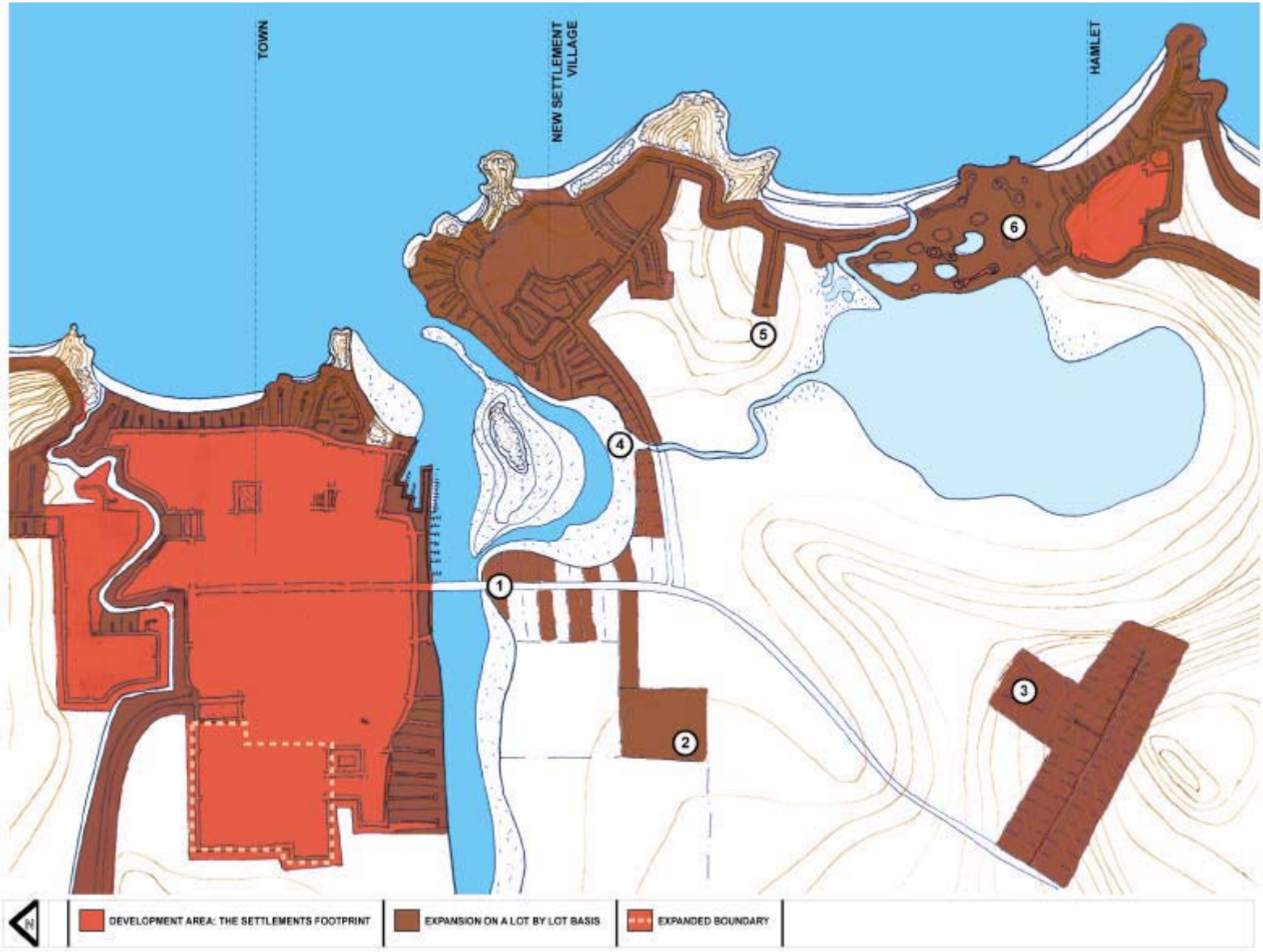
NEW SETTLEMENT (VILLAGE)

4 New development along the coastal road between the two settlements sets an undesirable precedent for future development. Low-lying land has been filled creating ribbon development between settlements.

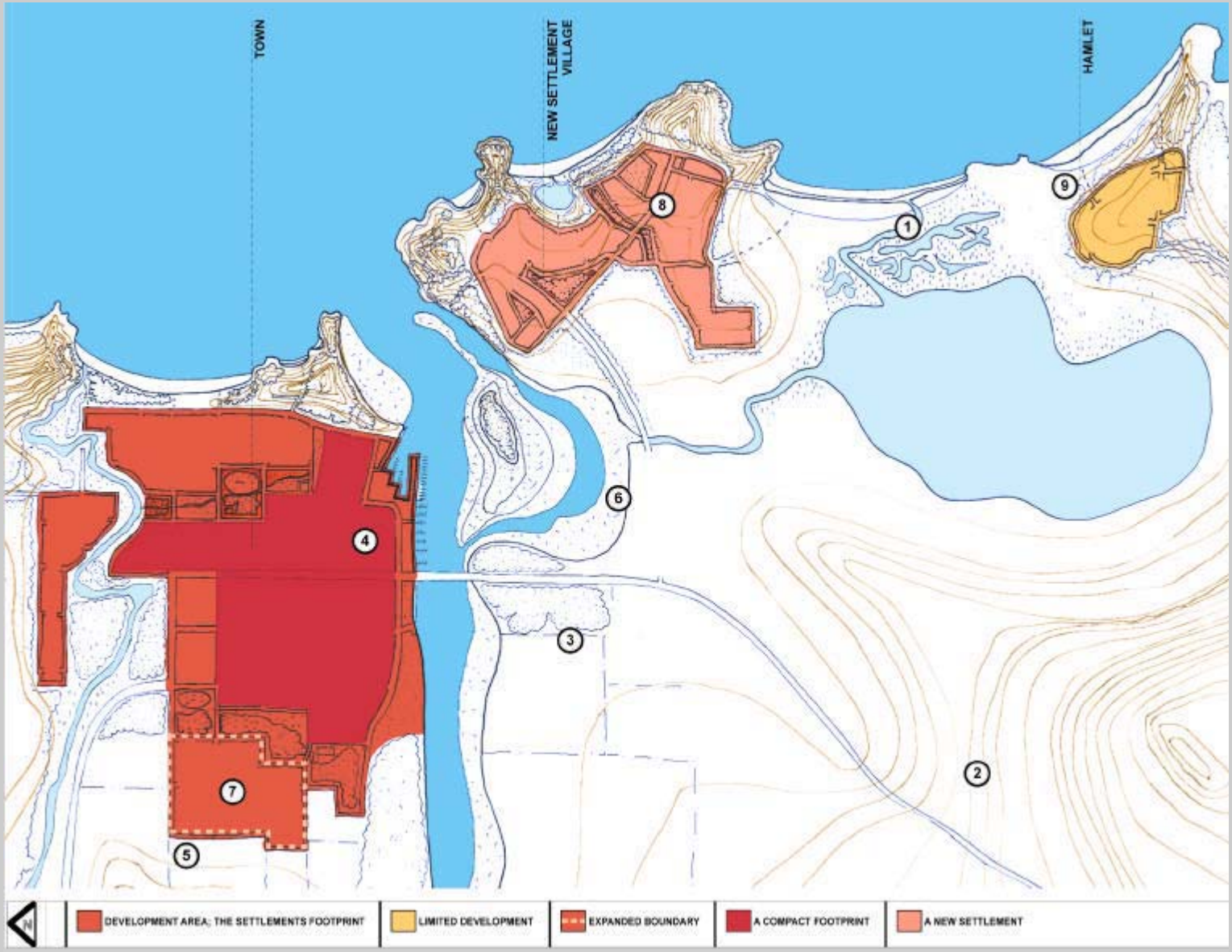
5 Isolated new development forces people to rely solely on private cars for transport even on short trips to the beach or local shops.

HAMLET

6 Wetlands and flood-prone land has been filled to overcome flood hazard and allow for large lot development. This has destroyed a unique and fragile coastal lake and encroached on the coastal edge.



SETTLEMENTS SEPARATED BY NATURAL AND RURAL LAND



DESIRABLE PRACTICE

In this example the location of new development does not destroy the natural, visual and urban characteristics of the local area. Individual settlements are contained within relatively compact footprints. They are separated from one another by rural and natural land.

1 The wetlands are protected by substantial landscaped setbacks.

2 The surrounding hills remain undeveloped to keep scenic qualities.

3 Fertile farmland is maintained for grazing and agricultural purposes and the town has an established greenbelt.

TOWN

4 Town centre development happens through a process of infill and consolidation.

5 Fertile farmland is maintained for grazing and agricultural purposes.

6 The greenbelt character between settlements is protected.

7 New subdivisions are located where they extend the existing street and block pattern.

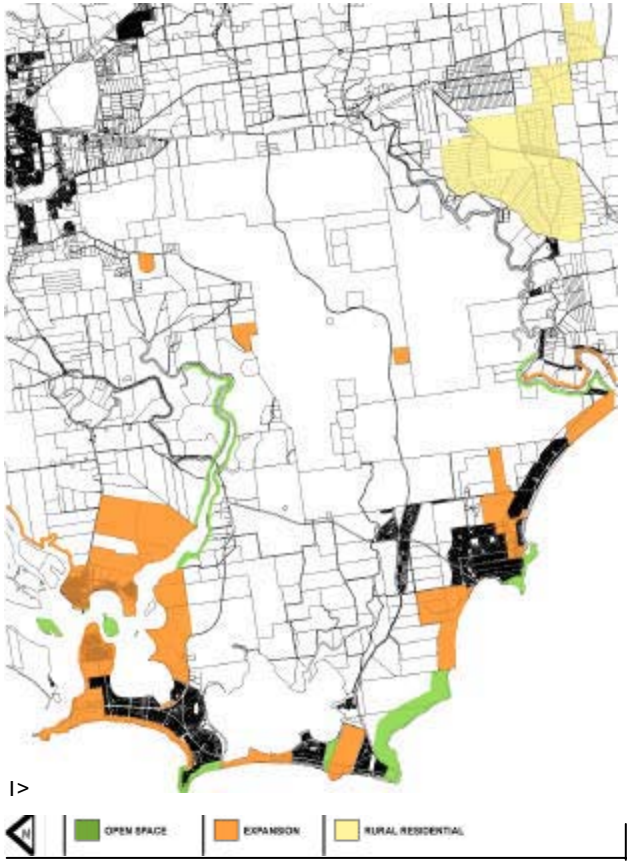
NEW SETTLEMENT (VILLAGE)

8 The village has an expected population of 800 people, growth boundaries are limited by a nature reserve, a coastal lake, scenic values and the foreshore reserve.

HAMLET

9 Development is constrained in terms of growth beyond existing boundaries by environmental constraints. It is not possible for the existing hamlet to consolidate because the heritage constraints within the settlement limit the potential for larger scale infill and redevelopment.

UNDESIRABLE PRACTICE



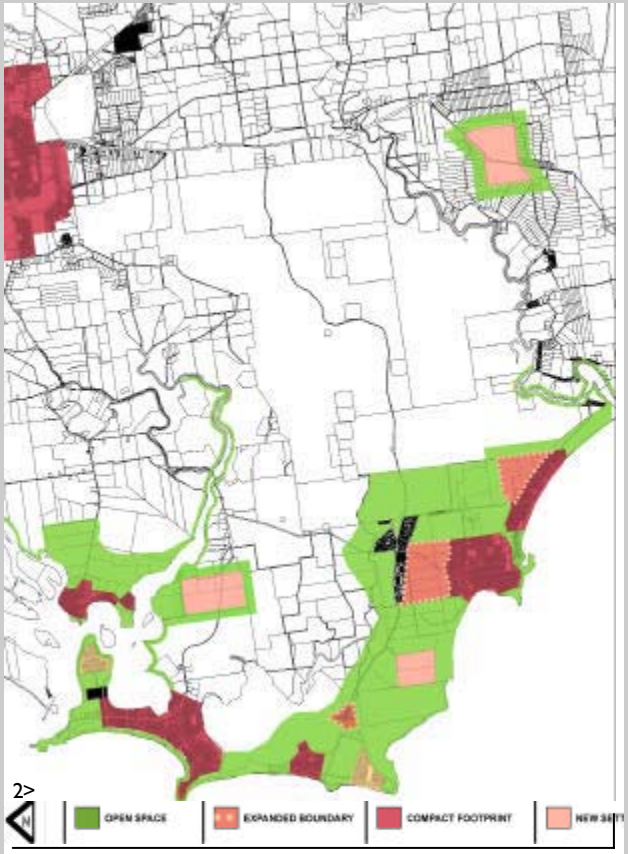
1>

2>

1> This illustration shows a fictitious local area subject to incremental, lot-by-lot development resulting in conflicts between urban and environmental uses and ribbon development down the coast.

2> This aerial photo shows the impacts of a large coastal rural residential subdivision in terms of high land take, low density, poorly connected streets, no public open space and degraded water quality in the surrounding wetlands. Brunswick Heads, NSW.

DESIRABLE PRACTICE



1> Confined by natural constraints this settlement has the opportunity to consider growth within defined settlement boundaries. Shoal Bay, NSW.

2> This illustration shows a fictitious local area that has considered options for settlements to grow in response to the environmental and urban characteristics of each place and the local area.

2.2

CONNECTING OPEN SPACES

In many coastal settlements past planning practices have focussed mainly on the provision of roads and houses. Open spaces form isolated pockets rather than constituting an integrated, connected network that meets the needs of residents of the settlement and surrounding habitats.

THE VISION

The vision for the NSW coast is for an interconnected open-space network strategically planned both regionally and locally to preserve significant areas of natural bushland and coastal ecosystems. The network also has urban open spaces to provide a variety of recreational opportunities and to address local catchment and drainage requirements.

ISSUES

Current subdivision planning often leaves minimum distances between urban development and sensitive environments, resulting in:

- degradation of reserve areas by over use or unplanned uses because of a lack of recreation areas within suburbs
- degradation of ecological values of low-lying land used to detain and treat stormwater
- encroachment into setback areas during construction and cut and fill operations
- uncontrolled access into natural areas and the use of these areas as dumping grounds leading to weed infestation
- alienation of public space for private uses.

Local open-space areas may also be poorly planned and located, resulting in:

- a lack of appropriate recreational spaces
- poor safety and security
- under use because of insufficient housing catchment.

OBJECTIVES

Regional and local open-space networks are to provide areas for water management, for incorporating a logical pedestrian and cycle system, and to ensure connected, well located and designed places for active and passive recreation for residents and visitors within and between settlements.

Regionally the open-space network also:

- creates separation between settlements
- protects the natural visual setting of settlements
- contributes to regional ecological systems.

Locally the open-space network:

- creates identity and character for settlements
- provides amenity for residents and visitors
- enhances, improves and provides open spaces for a range of passive and active recreational opportunities
- ensures adequate setbacks to protect natural areas
- contributes to improved water quality
- protects conservation areas and connection to corridors, transition areas and setbacks, which links and protects ecosystems
- provides safe and convenient pedestrian and cycle access through and around the settlement to the coast and to other places of cultural, commercial, scenic and natural value
- implements and improves water-sensitive urban design, total water cycle management and storm water quality
- protects Aboriginal and European cultural places, relics and items
- provides a landscape setting and outlook for settlements and protects the key natural features surrounding settlements.

DESIGN GUIDELINES FOR THE OPEN-SPACE NETWORK

1>

2>

3>

1> This master plan has incorporated parks, playing fields and wildlife corridors. (Stanhope Gardens, draft master plan by Landcom and designed by Annand Alcock Urban Design and Allen Jack and Cottier Architects)

2> This foreshore location is a popular and informal park.

3> Headlands are protected from development.

Locating and designing open spaces within a structure plan creates the character and identity for the settlement and its surrounding context. A number of principles need to be considered.

1. Locate and connect new and existing open spaces which protect and maintain:
   a. nature reserves, conservation areas, park lands and environmental protection areas
   b. the natural and rural setting of the settlement including the scenic values of the visual catchment
   c. remnant native vegetation.
2. Establish continuous ecological corridors to incorporate existing remnant vegetation by connecting reserves and conservation areas from the hinterland or surrounding mountains to the coastal edge.
3. Provide setbacks to protect property from the effects of coastal erosion, flooding and bushfire.
4. Locate open-spaces to build on the special attributes of an area for long-term public amenity and identity of the place. An open-space network may include hill tops, river frontage, mature trees, places with panoramic views, rocky outcrops and remnant vegetation.
5. Where feasible preserve settings for places of cultural heritage within the open-space network.
6. Provide areas within the open-space network sufficient to detain and cleanse stormwater runoff and avoid impacting sensitive ecologies.
7. Establish edge open-spaces with streets and pedestrian pathways. These are best located within the development footprint of the settlement, rather than in an open-space zone.
8. Provide pedestrian and cycle access that:
   a. does not compromise the ecological values of high conservation areas
   b. connects important places throughout the settlement
   c. connects residential areas to commercial and retail locations without compromising the visual, aesthetic or ecological values of the foreshore.
9. Provide a variety of large and smaller open spaces to serve a range of different active and passive recreational roles, for example:
   a. playing fields
   b. playgrounds and small pocket parks
   c. walking and cycling connections
   d. places and activities for people with physical disabilities.
10. Co-locate recreational facilities with shops, schools and other community facilities to reduce parking and minimise walking distances.
11. Landscape design of open spaces should reflect the different qualities of the location and their functions.

UNDESIRABLE PRACTICE

In this example, open space was not an important consideration during settlement grew. This has resulted in left-over land being designated for open space rather than a strategic system of reserving land for community and environmental purposes.

TOWN

The open-space network does not provide:

1 Enough parks and playing fields for the local community.

2 Adequate setbacks from the foreshore to ensure public access; development extends right up to the edge and privatises the foreshore.

3 Protection of the settlement's visual setting by limiting urban development on high ground surrounding the settlement.

4 Environmental setbacks around the lake or along the river.

NEW SETTLEMENT (VILLAGE)

The open-space network does not provide:

5 Adequate setbacks to protect an environmentally and visually sensitive headland and ridge lines.

6 Linkages between open-space areas and reserves; forms isolated pockets within the urban area.

7 Adequate setbacks to protect the ecology and water quality from urban pollutants around the lake or to protect property from the threat of coastal erosion.

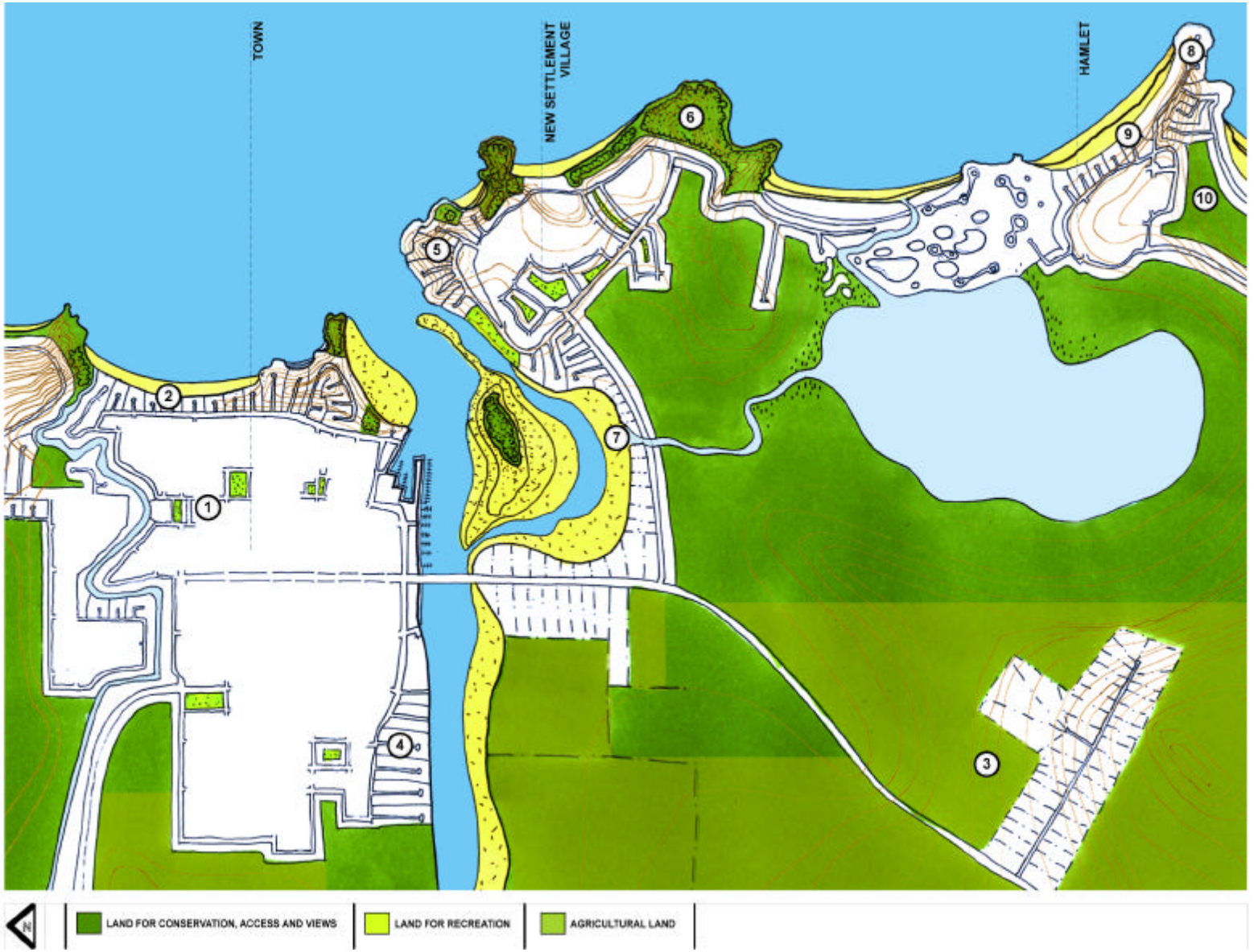
HAMLET

In the hamlet the open-space network does not:

8 Set development back from the headland.

9 Provide public edge roads around the settlement or along the foreshore edge.

10 Foreshore reserve is provided, limiting public access and privatising the coastal edge.



AN INTERCONNECTED NETWORK OF OPEN SPACES

DESIRABLE PRACTICE

This example shows the result of an open-space network being considered as the settlement developed. The network creates a quality coastal setting with easy access for residents to a range of recreational opportunities as well as long-term environmental protection.

TOWN

1 Parks and playing fields provide a variety of active recreational places and a pleasant outlook for residences.

2 Residential developments are limited on the hills surrounding the town and protect the natural setting.

3 Limiting development along the access road and the headland creates substantial greenbelts between settlements.

4 Farm land around the settlement is maintained for agricultural purposes.

NEW SETTLEMENT (VILLAGE)

5 The open-space network protects environmentally sensitive lands.

6 Continuous public access around the foreshore is provided.

7 Wildlife corridors along the creek system link the hinterland to the coastal foreshore reserve.

8 The riparian zone around the lake is protected by a 100m setback.

9 Foreshore reserves along the coast set back urban development from the coastal edge.

HAMLET

10 A network of pedestrian pathways connects streets to the beach and the headland.

11 Public roads and pathways around the settlement define the edge between urban and natural and provide access for bushfire control.

UNDESIRABLE PRACTICE

1> Development extends along the coastal edge without setbacks for conservation or coastal processes. Backyards face the foreshore effectively privatising the coastal edge.

2> A new subdivision plan provides no setbacks or corridors to conservation areas. Backyards facing onto all open spaces limit access and reduce the potential beauty of the location. Parks are created by land left over from a road and lot pattern bearing no relation to the topography; backyards face onto them.

3> This settlement has inadequate open space for the size of the developed area. The foreshore zones have not been protected as a result and have become privatised. A golf course is located on the beach front limiting public access and resulting in removal of some foreshore vegetation. Tuggerah Lakes, NSW. Aerial photograph, 1997.

DESIRABLE PRACTICE

1> A small settlement has sought to maintain foreshore vegetation and the natural character of the surrounding hills.

2> The design of a new residential neighbourhood is based around existing vegetation and creek corridors. Parks, playing fields and street tree planting combine to reinforce an open-space network throughout the settlement connecting with the regional system.

Elderslie draft master plan, Sydney. Designed by Annand Alcock Urban Design, 2001.

3> This example indicates how, over a period of time and with the establishment of new residential areas and the redevelopment of brown field sites, open space, waterways and existing significant stands of vegetation may be maintained and protected to create an interconnected open-space network from the hinterland to the coastal edge. Port Macquarie, NSW. Aerial photograph, 1997.

2.3
PROTECTING THE NATURAL EDGES

The edges surrounding settlements provide the transition from urban to natural or rural lands. Settlement edges adjacent to the coast and other water bodies commonly provide a variety of uses and offer a diversity of public open spaces in terms of character and function.

It is expected that as population and development pressures increase the importance of designing the foreshore sensitively will become paramount. The character of the edges can range from highly urban edges through to almost untouched natural environments.

Highly urban coastal locations, such as city and town centres, offer a diverse range of benefits to the public. In many instances the success of these places is due to the level of access and the careful design of the interface between public and private, built and open space. For these locations high quality public access and uses which balance the needs of cultural, social, commercial and environmental purposes is essential.

In other locations along the NSW coast, the foreshore is often defined by a sequence of significantly larger public open spaces with complementary characters and functions including native vegetation and habitat, parks, playing fields, recreation facilities (tennis courts or swimming pools) and caravan parks. These public spaces, although generous in size, may still be evolving towards their optimum configuration and will need to be subject to urban design studies and master plans in the future.

THE VISION

The coastal edge is ideally a publicly accessible system of foreshore and natural reserves extending along the NSW coast and around lakes and estuaries. There will be clearly defined boundaries for settlements that are close to these edges.

ISSUES

The following issues are reducing (or potentially will reduce) the quality of coastal edges and foreshores:

- private ownership or alienation of foreshore land precluding public access and degrading ecological systems
- loss of beach amenity resulting from coastal recession involving rock walls
- damage to mangroves and salt marsh resulting from encroachment of development
- removal of foreshore vegetation to create private views
- roads and stormwater detention areas located within setbacks to sensitive ecologies, reducing the level of environmental protection
- loss of property and damage to buildings caused by rising sea level and an associated increase in storm events
- private boat jetties damaging foreshore ecology and limiting public access
- changes to hydrology caused by cut and fill
- no buffers between waterways and development with pollutant loading directly into waterways.

OBJECTIVES

To achieve this vision for settlement edges new strategies for developments need to:

- provide improved access to the NSW coast
- retain the foreshore and headlands in public ownership for public uses
- protect buildings and properties from storm events and sea-level rise
- enhance the character and function of spaces along the foreshore and headlands
- enhance the beauty, ecological values and visual amenity of the NSW coast
- maintain a range of passive and active recreation areas along the coast
- manage bushfire risk.

For natural edges new strategies for development need to:

- maintain access to public land
- provide areas for managing bush fire asset protection
- reduce the encroachment of invasive plant species into natural areas
- protect sensitive ecological areas.

DESIGN GUIDELINES FOR THE NATURAL EDGES


1>


2>


3>

1> Coastal city edges are multi-functional, providing conservation, active and passive recreation and access.

2> Harbours consolidate intense uses in locations close to city and town centres where access is optimised.

3> The river edges are in some locations for conservation only.

In order to achieve the objectives for the settlement edges it is important to:

1. Define the key characteristics and functions of public spaces along the foreshore with particular regard for sites of significant social and cultural importance.
2. Maintain foreshore areas and setbacks in public ownership.
3. Ensure that existing and remnant native vegetation is protected through generous setbacks and defined points of access.
4. Provide pedestrian access to and along the foreshore with provision for those with less mobility.
5. Avoid the remodelling of foreshore areas to ameliorate coastal processes by buildings or other structures.
6. In new areas provide edge roads (or unformed pedestrian pathways) between all urban areas, foreshore reserves and orient streets to provide:
   a. direct pedestrian access to the foreshore
   b. views to the foreshore as well as distant views and vistas.
7. Define clear pedestrian and vehicular entry points and access routes through the foreshore reserve to reduce the impact of traffic through dunes, coastal vegetation and other fragile areas.
8. Design and locate foreshore facilities, such as carparks, toilet blocks and picnic areas, to reduce their visual intrusion on the foreshore, view corridors and vistas.
9. Encourage public rather than private jetties and boat facilities.
10. Ensure the ecological integrity of vegetation on the foreshores and headlands is not compromised by creating views and outlook from private properties and by encouraging filtered views.

Setbacks

11. Areas adjoining freshwater estuarine, coastal habitats and the coastal edge are managed to reduce land use impacts through setbacks that also supports the protection of properties from erosion, protection of sensitive ecologies, provision of public access along the foreshores and to natural areas, provision of visual amenity along the foreshore, protection of properties from the effects of sea-level rise, improvement of water quality.
12. Setbacks should also address coastal erosion hazards such as storm surge events and river flooding, long-term shoreline recession and sea-level rise, cliff retreat and catastrophic collapse, sand drift hazard, entrance stability, estuarine erosion and changes in tidal current position.
13. Setbacks are designed to protect ecosystems and reserves covered under SEPP 14 wetlands, SEPP 26 littoral rainforest, SEPP 53 koala habitat as well as salt-marsh and mangrove communities, riparian vegetation, frontal dunes and headlands, national parks, protected areas and reserves.
14. For new developments the foreshore setbacks should be at least 50m wide as a precautionary measure where possible.
15. Setbacks may need to be marked and their vegetation preserved. Setbacks should where possible be increased to 100m or more where they are adjacent to ecologically sensitive areas or in situations where the coastal erosion hazard requires greater distance.
16. Setbacks for redevelopment should consider a 100 year planning timeframe to address shore line retreat and sea-level rise.
17. Coastal estuary planning for local areas must detail the issues place-specifically and follow guidelines in the Coastal Zone Management Manual.
18. Development on frontal dunes is avoided.
19. Set new development back from the foreshore edges of the ocean, lakes and other waterways to protect visual amenity and create opportunities for public access.
20. The design of buildings and other structures on properties adjoining the foreshore complements the function and character of the foreshore.
21. Setbacks in public ownership where ever possible, allow opportunities for public access and have limited development including no roads, private allotments, infrastructure and retaining walls in these locations.

UNDESIRABLE PRACTICE

TOWN

1 Large commercial buildings in the town centre are located on the harbour's edge blocking public access to the foreshore.

2 Houses in the town back onto the foreshore, privatising the river edge.

3 Private boat ramps reduce vegetation and access along the water edge close to the town.

NEW SETTLEMENT (VILLAGE)

4 The design of the new settlement allows buildings too close to the edge, resulting in damage from processes such as flooding and dune erosion.

5 Backyards and houses dominate the foreshore edge.

6 A golf course encroaches on the dunes, eliminating access to the foreshore.

7 The lake's foreshore edge, located near a village, is extensively remodelled by private boat ramps, fencing, grassed backyards and walls constructed on private land.

HAMLET

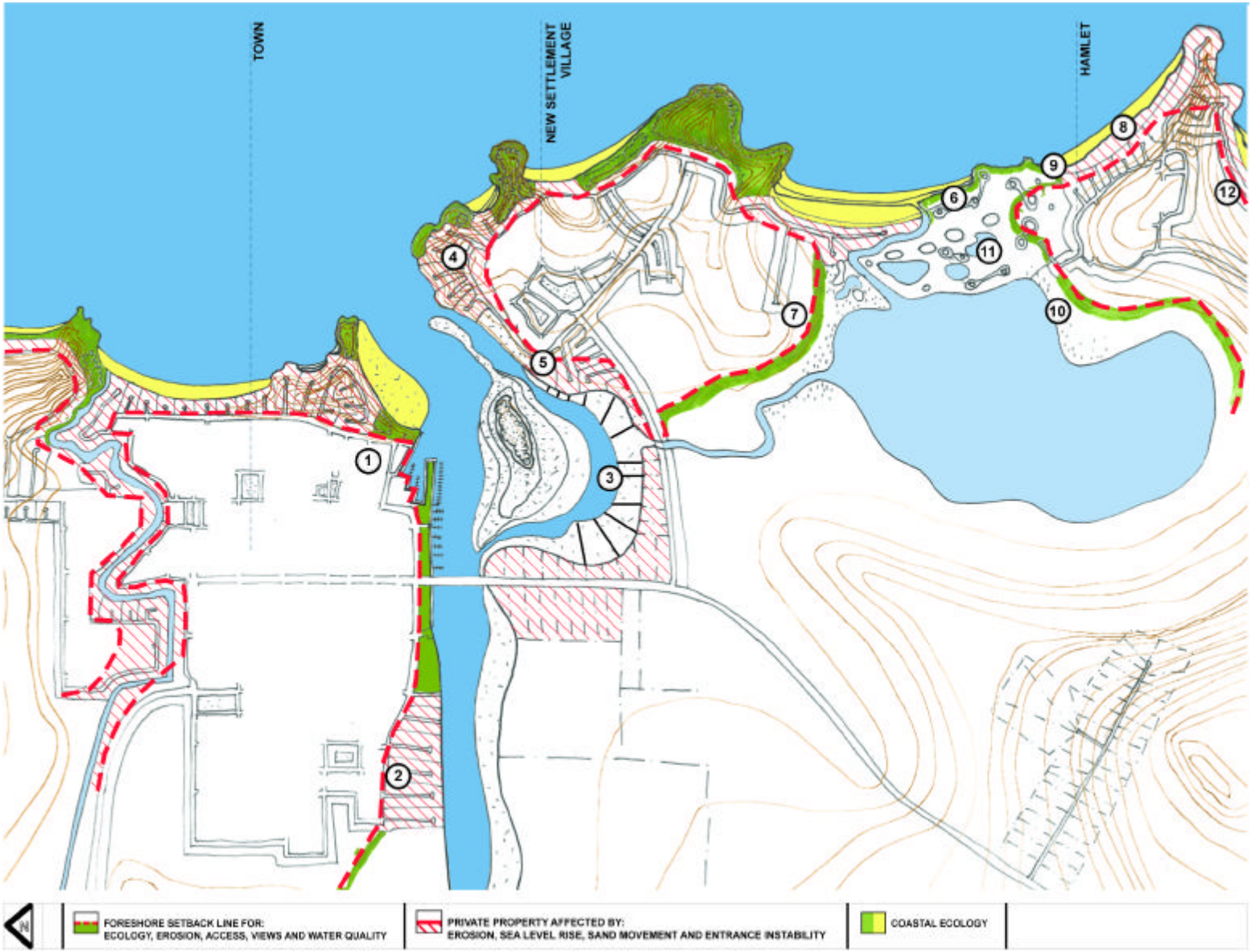
8 Streets do not lead to the water, limiting public access to the foreshore.

9 Backyards facing onto the beach and other natural areas effectively privatise public areas.

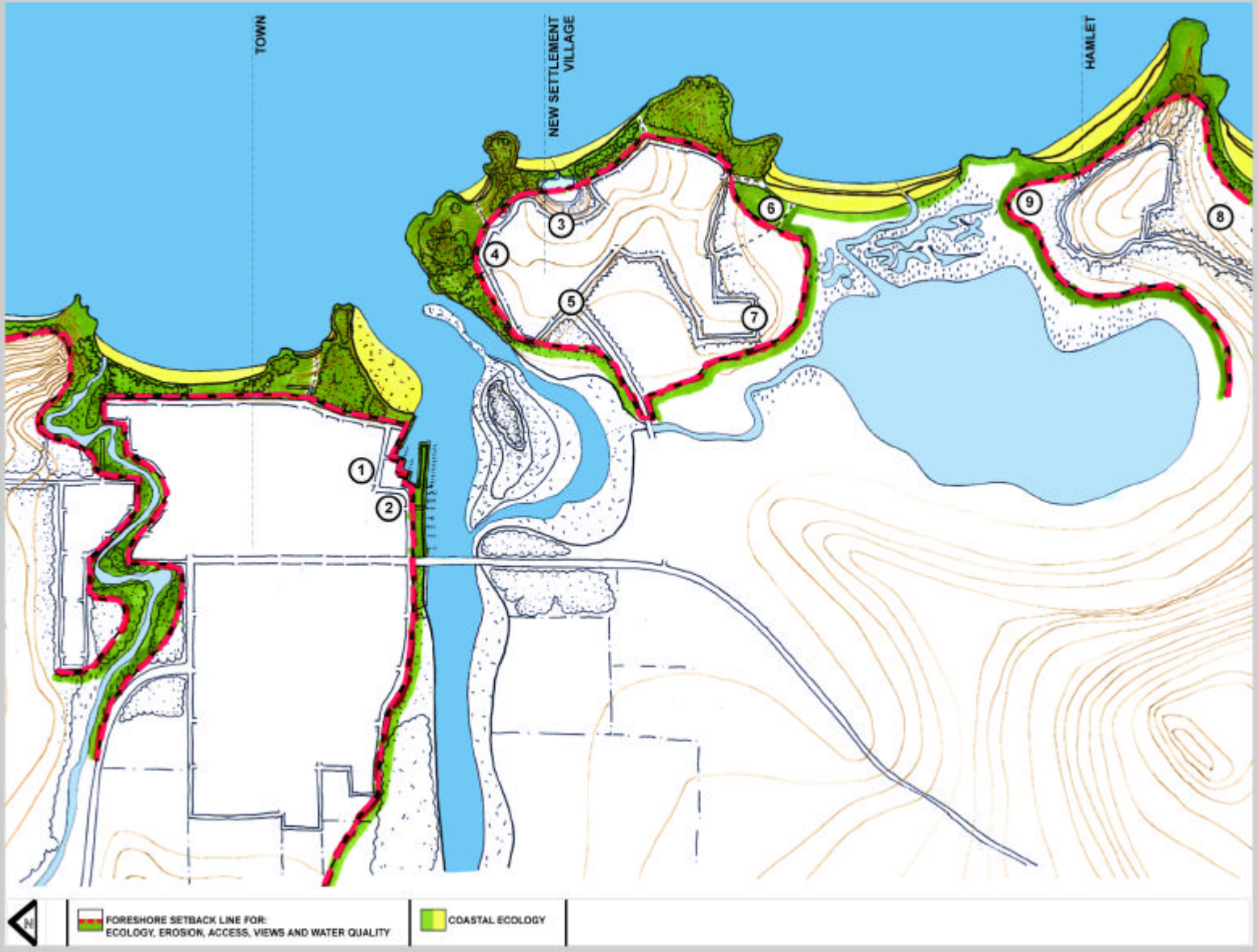
10 Foreshore access is not continuous and foreshore open space is limited.

11 Native vegetation surrounding the hamlet has been removed and replaced with grass.

12 There is no provision for fire service access to areas surrounding houses.



A PUBLIC AND ACCESSIBLE COASTAL EDGE



DESIRABLE PRACTICE

TOWN

1 Views and access to the foreshore are optimised at the town centre by a permeable street system.

2 The urban park is reinforced, adjoining the town centre, with access to the river and the harbour.

NEW SETTLEMENT (VILLAGE)

3 A single-fronted road defines the edge of the village area.

4 The interconnected street system links with the foreshore and allows people to walk or ride a bike to all parts of the settlement.

5 On-street carparking is provided in preference to large off-street parking areas.

6 Pedestrian access along sensitive waterways is set well back from the edge.

7 Edge roads are reinforced between urban development and coastal lakes and estuaries.

HAMLET

8 Original vegetation is maintained and protected in areas adjoining the hamlet.

9 The foreshore road around the hamlet has sufficient setback to ensure private land and buildings are not affected by foreshore erosion and dune movement.

UNDESIRABLE PRACTICE

1>

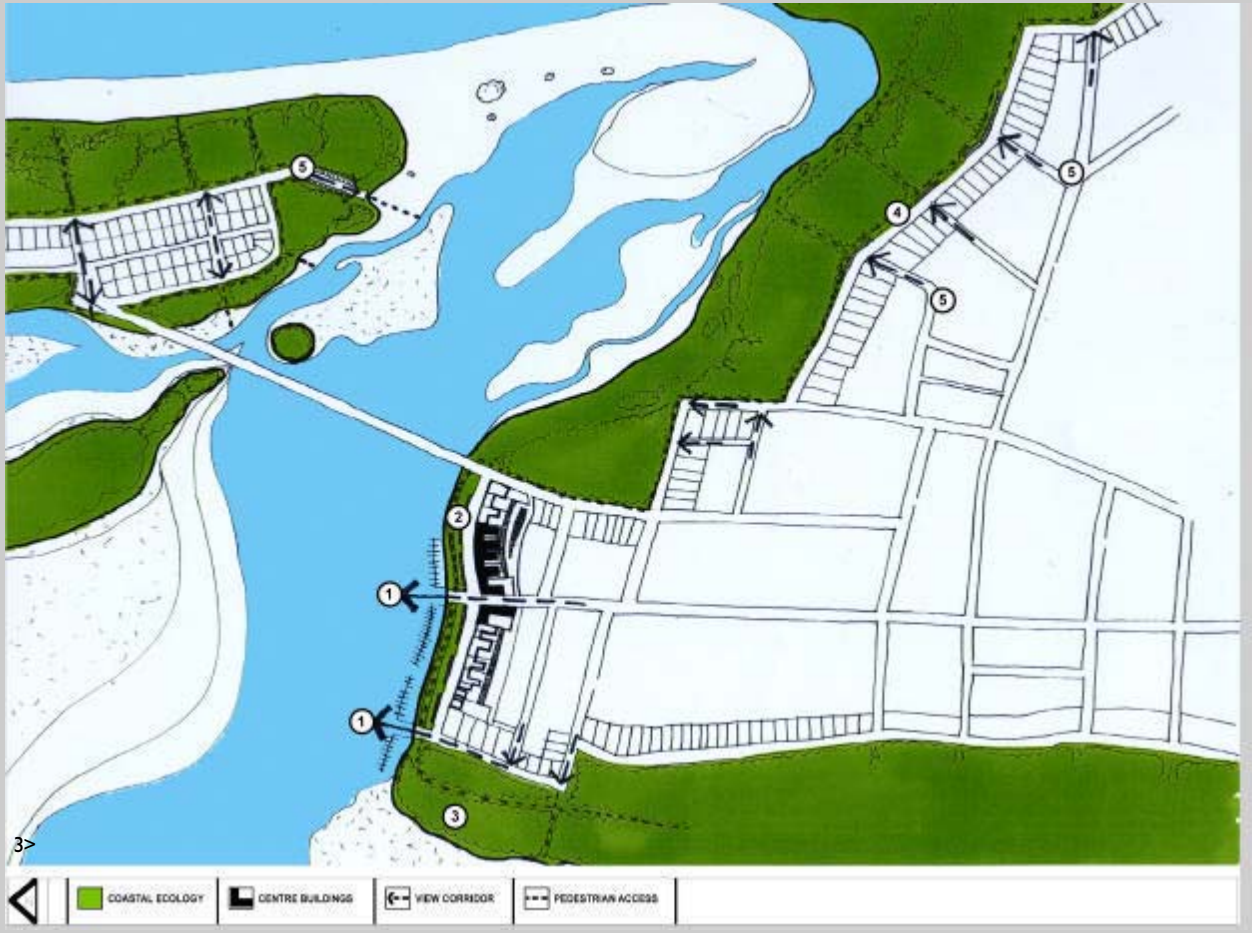
2>

3>

1+2> Planning in these locations did not account for coastal erosion when locating developments leading to a loss of the public beach and a loss of public access.

3>

1. Large commercial buildings block view corridors.
2. Carparking dominates the foreshore.
3. Native vegetation is replaced with grass.
4. Houses back onto the river, privatising the edge.
5. Streets do not lead to the water, limiting access.
6. A golf course encroaches on the foreshore, restricting access.



3>

DESIRABLE PRACTICE

1>

2>

1> Public uses, a wharf, and a fun park make this beautiful harbour location accessible, useable and memorable to all.

2> Buildings are located well back from the foreshore edges, have maintained native vegetation and public access along the beach.

3>
1. Town centre development respects view corridors.
2. An urban park maximises opportunities for public access and use.
3. Native vegetation is protected with generous setbacks.
4. Single fronted edge roads define the coastal edge.
5. Streets provide access and views of the coast.

UNDESIRABLE PRACTICE

1> Properties benefit from waterfront views and access but restrict public access and use of the waterway and degrade foreshore ecology.

2> A foreshore reserve has been cleared of all vegetation and semi-privatised by house backyards.

3> Property boundaries extend right up to the coast. A golf course on the foreshore has environmental impacts and limits public access to the beach. Tuggerah Lakes, NSW. Aerial photograph, 1997.

DESIRABLE PRACTICE

1> In a city centre the edge allows a high level of activity and use. Here a café and boardwalk create a unique urban and coastal experience for visitors and residents.

2> In a hamlet, development is set back behind the dunes and does not encroach on the surrounding hill sides thereby maintaining the natural visual setting of the settlement.

3> A variety of edge conditions allows a diversity of uses; public parks, playing fields, conservation, access, views and outlook for houses. Port Macquarie, NSW. Aerial photograph, 1997.

2.4

REINFORCING THE STREET PATTERN

Streets and public spaces are the permanent and unchanging features of a settlement over its life time. They are a major determinant of the potential sustainability of the urban area, its quality and amenity.

Buildings and land uses may change as a place grows, but the streets and public spaces form the sustaining spatial organisation of the place.

The majority of coastal settlements in NSW were originally designed in response to the natural surroundings to provide a unique setting for the settlement. This is evident in places such as Eden, Narooma, Port Macquarie, Sandon River and Moruya.

Build on the original street layout when carrying out planning. Whether it is for a new suburb, a city or town centre or improvements to streetscapes, the original street layout should be highlighted to reinforce the settlement's uniqueness.

THE VISION

Streets within coastal settlements reinforce and extend street pattern providing attractive, landscaped, legible and well-connected networks that encourage walking, passive recreation and deliver easy access to public places, activities and transport. Streets reinforce a settlement's character and its setting within the landscape in terms of views and vistas and topography.

ISSUES

New developments often fail to recognise the importance of public streets in providing social and economic benefits. In new release areas, where development is initially laid over the landscape and becomes the permanent urban configuration, streets and open spaces need to be located and designed with regard for more than just vehicular transport and economic building techniques.

Once constructed, the street and block layout within the suburb remains unchanged and where this has not been appropriately designed or tested the following problems can occur:

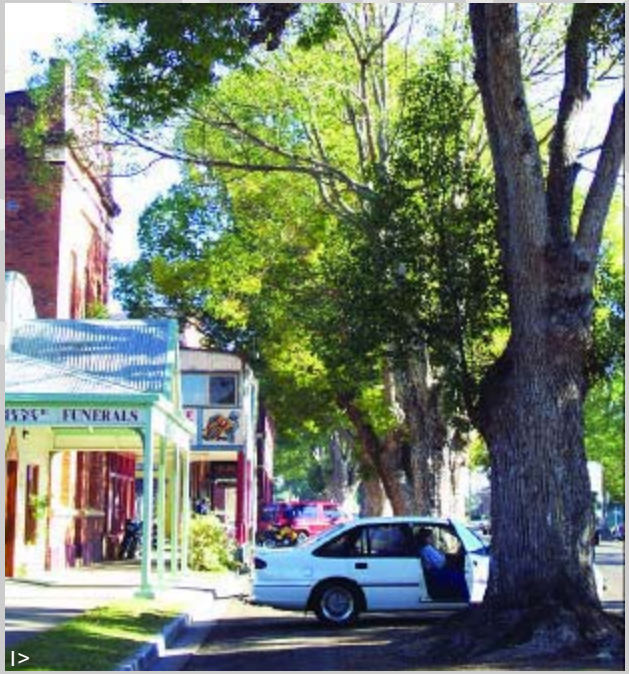
- streets not leading to or focusing on the social places or public spaces within the suburb
- privatised streets
- a disconnected street pattern resulting in excessive driving distances
- no choice of routes for either walking, cycling or driving
- only one way in and one way out
- streets designed for driving, not walking or cycling
- lots and blocks cannot sustain options for a variety of building types
- lots backing onto open spaces
- building into vistas and view corridors
- new streets disconnected from existing street pattern
- gated communities depriving public access to the coast.

OBJECTIVES

Maintain and continue the original street pattern and plan new streets and blocks to ensure that:

- the street pattern responds to the topography
- the street pattern provides views or vistas of important natural features within the surrounding landscape
- streets are aligned with and connect to places of civic and community importance
- important vistas and skylines are framed throughout the settlement
- a street hierarchy appropriate to the social, retail and residential requirements of the settlement
- high quality landscaping is included
- way-finding and legibility is promoted
- commercial activity is facilitated
- integrates land use and transport functions.

DESIGN GUIDELINES FOR REINFORCING THE STREET PATTERN



1>


2>

1> In this street heritage buildings, mature street trees, carparking, generous footpaths and on-grade shopfronts contribute to an active and functional town street.

2> Single sided edge roads around this hamlet separate private land from public land, maintain access for bushfire control and define the edges of the settlement.

A street pattern is unique to each settlement and as a broad framework should include:

- a **main access road** linking the settlement to the highway or freeway, providing entry to the settlement. Smaller settlements generally have a single one-way-in, one-way-out main road. This may be an unsealed or **rustic road**. Other larger settlements may have the highway passing through the main street bringing opportunities for increased economic and social benefits. Settlements with higher volumes of through traffic may have by-passes that completely circumvent the settlement
- a centrally located **main street** defining the commercial and social centre and acting as the main public transport route
- **edge streets** fronting reserves and open spaces, defining the boundary of the settlement and providing asset protection zones for bushfire management
- **residential streets** with limited traffic flows
- **laneways** serving residential and commercial lots
- **pedestrian pathways** on all streets except freeways, highways and cycleways.

Reinforce the street pattern can be achieved by:

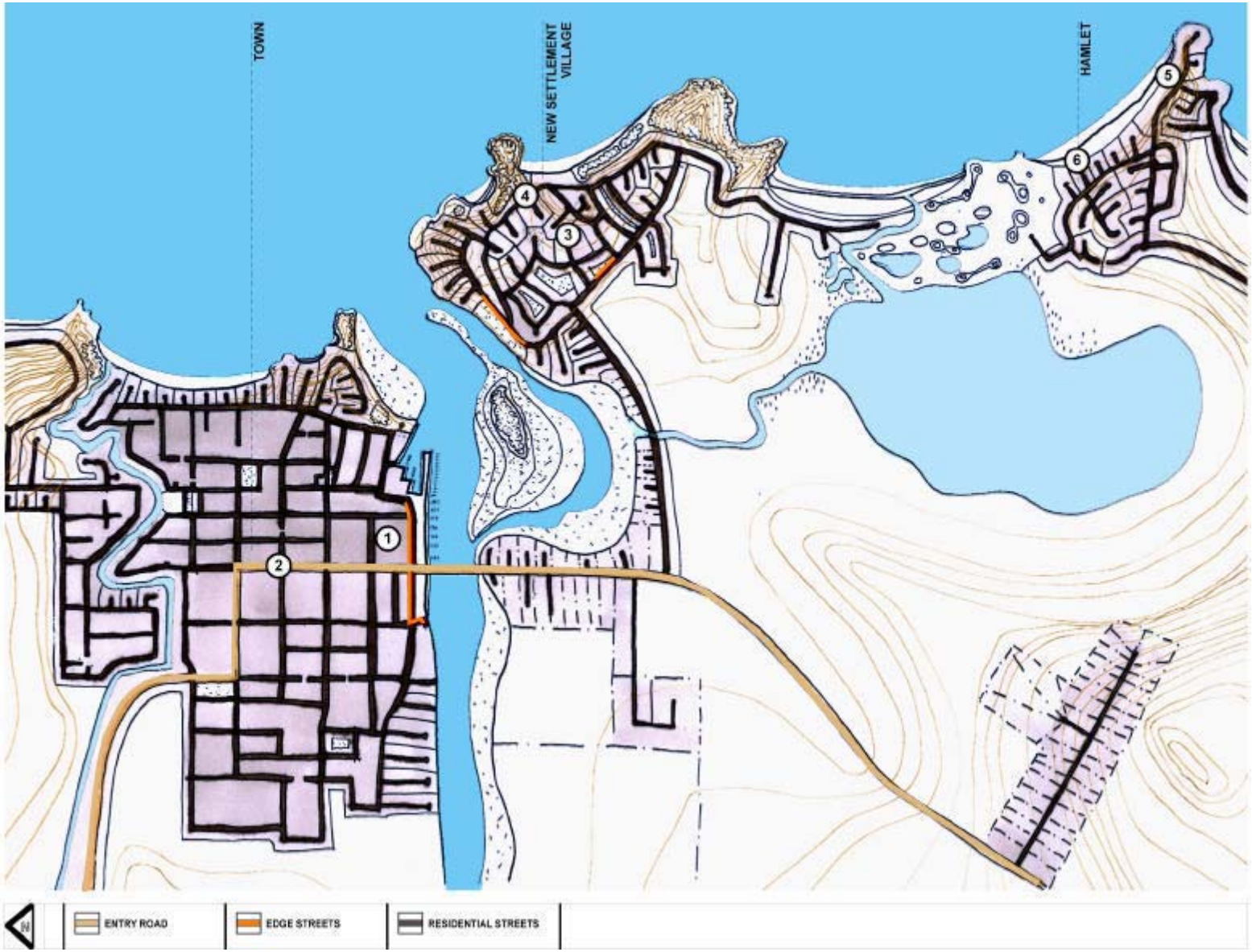
1. Building on the original and established street and block patterns in terms of the pattern of circulation, access to lots and uses.
2. Ensure the settlement is easily navigable and logical in terms of access and location of uses.
3. Optimise the number of connections within the street hierarchy. The traditional grid provides high accessibility and permeability for pedestrians and vehicles.
4. Recognise or design streets in response to the topography and other natural features by ensuring a predominance of streets that relate to the original landform.
5. Protect streets that provide access and views to the coast, foreshores and headlands, other significant natural features and places of public importance.
6. Allow for changes on private land whilst valuing the qualities of individual streets including:
   a. their order within the hierarchy
   b. access and street address
   c. carriageway, footpath and reserve alignments, building setbacks
   d. street trees which will offer filtered views of the coast
   e. vistas and view corridors.
7. Minimise road crossings over waterways and water bodies.
8. Encourage grass swales and pervious surfaces to increase stormwater infiltration.

The street hierarchy can be strengthened by:

9. Protecting the rural and natural character of the **main access roads** by restricting development fronting onto them.
10. Reinforcing **main streets** as the commercial and social heart of the settlement.
11. Developing public **edge roads** around the settlement to provide separation between urban areas and sensitive ecologies and open-space areas. This provides asset protection zones for bushfire management and access to open spaces, foreshores and headlands.
12. Limiting fast moving through traffic in **residential streets**.
13. Protecting **laneways** in residential and commercial areas from being built into or over.
14. Establishing a system of **pedestrian pathways** throughout the settlement and between settlements.
15. Reinforcing streets with appropriate street vegetation planting.

UNDESIRABLE PRACTICE

This new subdivision has streets designed to maximise the number of lots and the requirements of cars. There is no access to open space or relationship to the public domain.



TOWN

1 The long-term viability and potential for a mixed-use town centre is limited because the centre is linked with a single entry exit driveway to the freeway, unconnected to a surrounding street system.

2 The potential to revitalise the original main street is lost because of the street's change to a 80km per hour through road. This reduces pedestrian amenity and the ability to stop and park.

NEW SETTLEMENT (VILLAGE)

3 All the streets are the same width and similar lengths. It is difficult to navigate and understand where one is in the settlement.

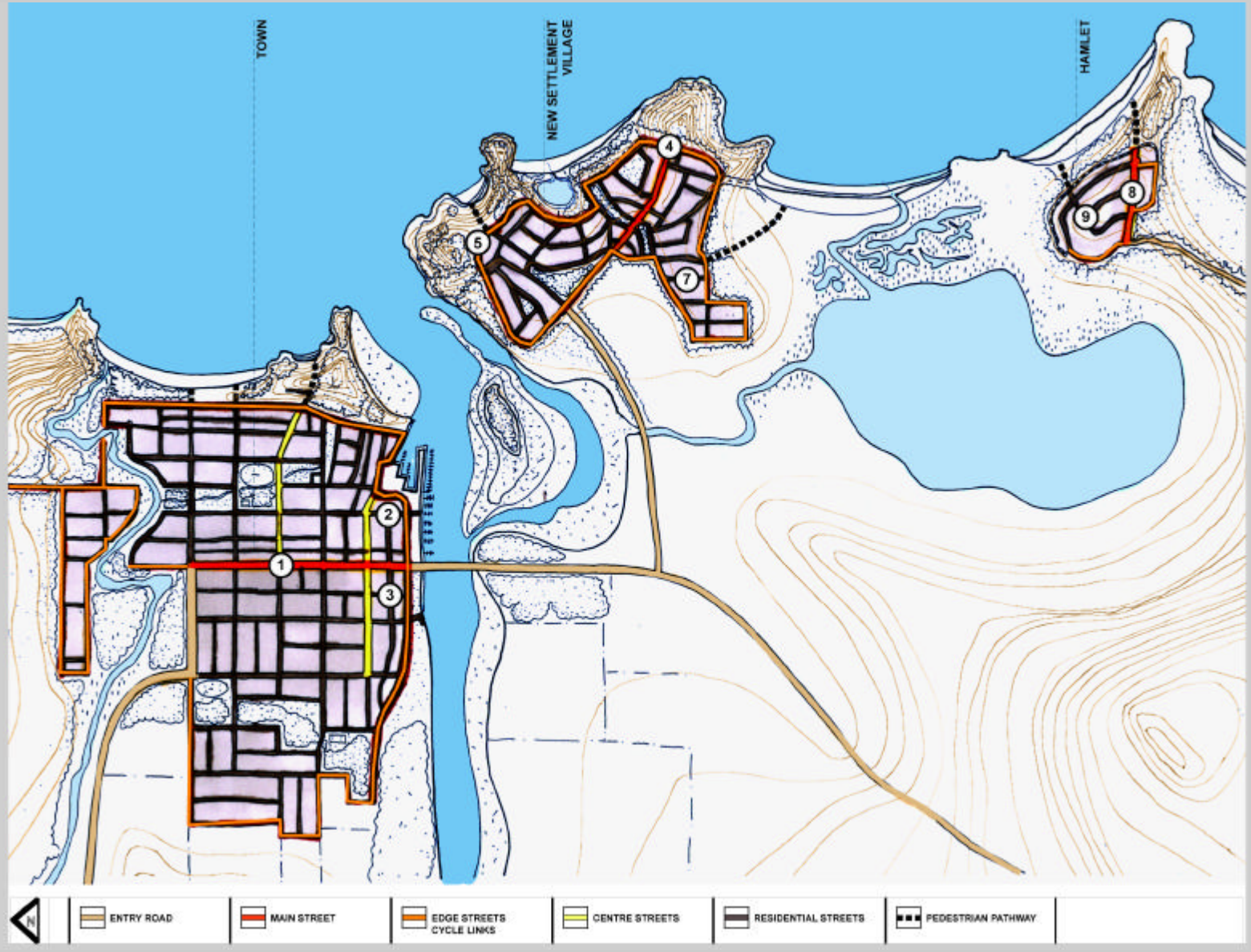
4 Residential areas do not have direct and safe pedestrian access to public spaces, public transport, shops and places of civic and commercial importance.

HAMLET

5 Existing natural and urban features are built over, views and vistas are built into.

6 Foreshore reserves are neither accessible nor useable because there is no public access and private backyards face onto them.

WALKABLE, PERMEABLE, ACCESSIBLE AND SAFE



DESIRABLE PRACTICE

TOWN

1 The main street is reinforced with mixed-use, street-edge commercial development and slower 50 and 40 km/hour speeds.

2 Town centre streets are oriented and aligned to features within the landscape.

3 Residential streets provide direct access to the river and views throughout and around the local area.

NEW SETTLEMENT (VILLAGE)

4 The street pattern relates to uses, heritage, public transport and topography.

5 Public access is provided along the entire length of the settlement's foreshore edge and links with the neighbouring settlement by a combination of public edge streets, unsealed gravel fire breaks and pedestrian pathways located on the boundary of public and private land.

6 Streets and blocks are orientated in response to the topography.

7 In a new subdivision outlook and views from housing is maximised by providing edge roads to foreshore reserves and open spaces.

HAMLET

8 It is easy to walk through the settlement in five to 15 minutes, to places of importance such as shops and the beach.

9 The street hierarchy and block pattern relate to the location and access requirements appropriate to building types and uses.

UNDESIRABLE PRACTICE


1>


2>


3>

1> The combination of private roads and public streets causes confusion about what is private and what is public.

2>With backyards facing onto it, the street's potential to add social and economic value to the area is lost.

3>The street pattern has not been designed to consider ease of access, open space, pedestrian and cycle networks, safety, community facilities, views, retention of existing vegetation or the establishment of wildlife corridor. Bouddi Bouddi Peninsula, NSW. Aerial photo.

DESIRABLE PRACTICE

1> This successful main street has maintained heritage buildings, has on-grade continuous shopfronts and clear separation between pedestrians and cars.

2> Views and view corridors have been maintained. This maximises visual connections to the foreshore, reinforces pedestrian access and relates to the original street pattern.

3> The street pattern here provides a hierarchy of interconnected streets and considers the location of access and uses throughout the settlement. Connections provide access to open space, community facilities and a variety of quality residential streets. Ulladulla, NSW. Aerial photograph, 1996.

2.5

APPROPRIATE BUILDINGS FOR A COASTAL CONTEXT

Coastal settlements have the potential to offer a diversity of lifestyle choices in terms of accommodation, recreation and employment opportunities. They have the added benefit of being located close to extensive open spaces, beaches, waterways, surrounding bush and agricultural land.

The higher the density of development the greater the requirements for quality design to maintain amenity and ensure equity in the development potential for all sites..

There is extreme pressure to develop large buildings close to the coastal edge along the NSW coast. In areas where the pressure is greatest, a strategy is needed that considers incremental change over time, equity of development potential between sites, amenity and view sharing. Such a strategy will result in tall and large buildings being located in city and town centres. Buildings of this scale include residential flat buildings, large hotels and mixed-use buildings of three or more storeys.

Locating large buildings in city centres away from the foreshore reduces both visual impacts and overshadowing of public areas and the foreshore. It also optimises the use of public transport, promotes better urban form, encourages quality design and care of the public domain, and reduces the pressure for development in more sensitive locations along the coast.

The built form along the NSW coast can be categorised primarily in relation to different coastal settings. Locations are listed in relation to their sensitivity, visual and public importance.

1. Prominent coastal sites of local, regional or state significance. These sites (or a sequence of sites) are important to the public for visual, cultural or economic reasons. Such sites may include headlands, escarpments, river banks and sites visually prominent from important public locations within the settlement. Generally, controls are needed to avoid inappropriate development on these sites and seek to determine an appropriate interface with public streets and adjacent open spaces.
2. On dunes or within a foreshore reserve. These sites are characterised by being located on public land and will inevitably incur environmental impacts.
3. Along the edges of the settlement. This usually means being located close to natural or rural features such as coastal lakes, wetlands, national parks or agricultural land.
4. In settlement centres adjacent to the coastal edge or the foreshore reserve. These locations are characterised by being the interface between the settlement and the sea.
5. In settlement centres away from the coastal edge.
6. In the settlement centre along the main street.
7. Close to heritage items or within an area with heritage values.
8. Along the coastal edge or the foreshore reserve in a suburban location either in an existing or a new settlement.

THE VISION

The vision for built form in coastal settlements is that all buildings are sensitively designed within their existing context so as to contribute positively to the settlement character in terms of form, height, footprint, scale, massing, amenity, external appearance and materials.

ISSUES

Unlike other enduring aspects of a settlement's structure, built form is likely to change over time.

Currently the larger coastal settlements along the NSW coast are experiencing a second or third generation of built form. It is common today for this change to be extreme in scale, for example a single storey detached dwelling on a single lot may be replaced with a building of four, six or more storeys.

Large buildings designed and approved without consideration for the local context, or a clear vision for the future form of the settlement as a whole, result in the following problems:

- buildings out of scale with the natural and built form context
- loss of amenity and development potential on neighbouring sites
- poor quality apartment and open space design
- loss of commercial and social potential on streets and in coastal centres
- degradation of the public domain through overshadowing, encroachment on public spaces, and unsafe streets
- increased storm water run off
- lack of a well supported argument to lessen further overdevelopment.

The complex ownership pattern of large mixed-use and residential flat buildings precludes future redevelopment. Consequently mistakes once made become enduring legacies of past and present poor design and planning practices.

In less dense locations the pressure to develop along the edges of the coastal and lake foreshores has also increased. Many of these sites are typically highly visible and new development has the potential to impact by:

- overshadowing public foreshore areas and reserves
- being visually prominent from key public places
- polluting waterways, lakes, wetlands, soil and ecolgies
- alienating foreshores from public areas.

OBJECTIVES

The objectives for built form need to relate to different coastal settings. However, there are some objectives which are common to all new developments and they are to:

- ensure amenity is maintained on public land and on site
- be appropriate to its location within the settlement and the settlement type
- be appropriate to its natural setting
- add economic, cultural and visual value to its location
- be of high quality design
- recognise the importance of materials suitable to the coastal setting
- provide well designed, appropriately located and sized private open spaces which serve to minimise urban run off
- provide a visual focus only where identified for a public building
- maintain a high quality publicly accessible interface with the foreshore.

DESIGN GUIDELINES FOR APPROPRIATE BUILDINGS IN A COASTAL CONTEXT

1>

2>

3>

1> Here new buildings are consistent in height with the existing streetscape and its location on the foreshore. Front fences and private gardens look onto the street.

2> Building height is maintained below the tree canopy thereby ensuring a consistent visual setting across the settlement.

3> Although large two-storey houses form a consistent foreshore edge to the settlement, built form is dominated by both the foreshore and the surrounding natural environment.

Guidelines for built form relate to the desired future character of the settlement or precincts within the settlement (if it is a larger type). This is determined through place-based planning studies. A number of overarching design principles can also be set to guide design along the coast. It is expected that these overarching urban design principles are used as the basis to frame place-specific built form guidelines and controls.

BUILT FORM GUIDELINES FOR ALL SITES

There are a number of built form guidelines underpinning new development independent of its location.

1. Develop risk assessment and responses to address the effects of coastal processes. Locate and design buildings to respond appropriately within the local hazard context.
2. Reinforce the clarity of the settlement structure with new buildings that are appropriate in terms of location, uses, scale, height and site configuration.
3. Reinforce the desired future character of the settlement.
4. Consider the appropriateness of new buildings within the whole streetscape, rather than each building as a stand-alone object.
5. Maintain consistent street setbacks and street-edge configurations.
6. Ensure buildings address the street by providing direct and on-grade entries to the street for residential, commercial and retail purposes.
7. Rationalise car-related uses on site, such as driveways widths and lengths.
8. Protect views from public places and streets by maintaining consistent setbacks along streets and not placing buildings in view corridors.
9. Protect local views and vistas throughout and surrounding the settlement from public places by relating new buildings to the topography, reducing heights to maintain views of the surrounding landscape and maintaining consistent, height, bulk, scale with the street and local context.
10. Ensure that controls are coordinated to produce the desired building form and site configuration for developments. These controls include uses, building height, building depth, building separation, street setbacks, side and rear setbacks, and floor space ratio.
11. Ensure developments and neighbouring properties have:
    a. access to daylight
    b. access to natural ventilation
    c. visual privacy and acoustic privacy
    d. private open space
    e. a pleasant microclimate.
12. Achieving amenity relates to the design of individual buildings and, in particular, to:
    a. building orientation and depth
    b. the size of the lot
    c. open-space location, size and connection with the inside of the building
    d. carparking, location and access
    e. pedestrian access from the street
    f. street edge configuration and building separation
    g. mature trees, vegetation and soil areas.

BUILT FORM DESIGN GUIDELINES FOR SPECIFIC LOCATIONS WITHIN A SETTLEMENT

Development along the coast can be classified in relation to the settlement type, the location within the settlement and the geographic location of the site. It is appropriate to define a number of key sites common to many locations along the coast. Design guidelines for these locations/sites respond to both the locational importance of these sites and common issues recently experienced at a number of coastal settlements.

Prominent coastal sites

1. Recognise and document prominent coastal sites having significance to the local or regional area because of their visual, historic, public or social worth.
2. Ensure development (or redevelopment) on these sites is no bigger in scale, depth, floor-space ratio, height and footprint than existing buildings on the site unless urban design controls generate an alternative solution which responds to the site's significant characteristics and the desired future character of the area. This is particularly important for visually prominent sites such as headlands, cliff edges and prominent coastal ridges.
3. Create a public interface to the site and ensure development does not degrade the public nature of the site or the public open spaces adjoining or surrounding the site by:
   - reinforcing public and active uses
   - setting development back a sufficient distance to ensure adjoining public open spaces are not effectively privatised
   - ensure building edges adjoining public spaces reinforce public uses along and within public land.
4. Mitigate overshadowing of public open spaces and the foreshore by applying the standard, no overshadowing before 4pm midwinter and 7pm Summer Daylight Saving Time.
5. Define the boundaries of the site with a public edge, such as pedestrian pathways, public laneways or public streets, that connects to the street hierarchy.
6. Ensure buildings have well articulated and scaled elevations.

On dunes and the foreshore reserve

1. Only allow development for essential public purposes such as surf life saving club buildings. Use of the site for commercial or residential purposes is not encouraged. Where redevelopment occurs, the footprint of the new building is the same as the existing and, where possible, at a distance further back from high water mark than the existing building.
2. Minimise building footprints and heights and manage servicing so as to not adversely impact foreshore ecologies and landforms. Overshadowing on public open space and the foreshore should not be reduced.
3. Clearly define pedestrian and vehicular access to the facility through the dunes and to the foreshore by providing minimum widths, direct and controlled pathways.
4. Provide direct, controlled and minium width pedestrian and vehicular pathways to new development through dunes and along the foreshore.

Along the settlement edges

1. Prevent the privatisation of public open space by ensuring development adjacent to the edge maintains public access. Generally the boundary between public and private land may be defined with pedestrian pathways, public laneways or public streets that connect to the street hierarchy. The transition from private to public uses should be designed to consider security and privacy for residential uses.
2. Provide adequate building setbacks to allow for asset protection zones for bushfire management.
3. Design buildings to address open spaces and edge roads.

In settlement centres adjacent to the coastal edge or the foreshore reserve

1. Complement and coordinate the centre's hierarchy of built form with lower buildings adjacent to the foreshore and higher buildings away from the foreshore.
2. Mitigate overshadowing of public open spaces and the foreshore by apply the standard, no overshadowing before 3pm midwinter and 6.30pm summer daylight saving time.
3. Reinforce the visual amenity of public places and streets throughout the settlement by ensuring development does not build into important vistas or view corridors.
4. Create a public interface to the street and ensure development creates an edge to adjacent public open spaces by:
   - reinforcing public and active uses especially on the ground floor of buildings adjacent to streets and public open spaces, either public or private on the ground floor
   - ensuring the ground floor of the building is level with the street.
5. Where there is no existing street between the site and the coastal edge, define this boundary with a publicly accessible edge, such as pedestrian pathways, public laneways or public streets, connecting to the street hierarchy.
6. Ensure buildings have well articulated and scaled elevations.
7. Support building types that locate carparking at the rear of sites accessible from laneways or secondary streets or locate carparking under and in-line with the building's footprint so that the ground floor has active street-level uses.

guidelines

Settlement centres away from the coastal edge and the foreshore reserve

1. Complement and coordinate the centre's hierarchy of built form with taller buildings at the centre, away from the coastal edge.
2. Encourage mixed-use retail, commercial and residential buildings with complementary horizontal and vertical uses and narrow depths for the residential component.
3. Encourage block edge, street-aligned buildings with consistent setbacks from the street that define the three dimensional space of the street.
4. Activate the building edge with well articulated elevations and buildings with entries onto the street.
5. Provide active street level uses (either public or private), throughout the centre.
6. Encourage buildings that provide a high level of residential amenity and enhance the quality of streets and public open spaces.
7. Maintain view corridors from all streets and laneways throughout the centre.
8. Support building types that organise carparking at the rear of sites accessible from laneways or secondary streets or locate carparking under and in-line with the buildings footprint.
9. Prohibit buildings over or into streets, laneways and walkways throughout the centre.

Along main streets

1. Maintain the main street's visual connections to landmarks, vistas, views and places of public importance within and surrounding the settlement.
2. Activate the main street by ensuring the ground floor of buildings generally aligns with street level.
3. Activate the main street with ground floor uses such as retail, cafes, professional offices and ground floor entries to residences.
4. Minimise on-grade car related uses on the street front, including on-site parking and driveways.
5. Plan buildings within the streetscape built form design through consistent heights and setbacks.
6. Reinforce the streetscape with well articulated building elevations consistent in scale, proportion and detail (i.e. awnings and cornice lines).
7. Ensure new buildings contribute to the amenity of public open spaces adjacent to the main street.

Heritage/significant elements

1. Development adjacent to heritage or significant items should respond to heritage protection controls.

Along the coastal edge or the foreshore reserve in a new settlement location

1. In new developments, define the edge between public and private land along the coastal edge and the foreshore with pedestrian pathways, public laneways or public streets connected to the street hierarchy.
2. In new locations provide generous setbacks to mitigate coastal hazards affecting the site such as coastal erosion, wind and wave action, sea-level rise, river flooding and to protect ecological systems.

c. Recognise streetscape character through consistent building setbacks and fencing.

d. Ensure 30% of the site is maintained as deep soil zone.

UNDESIREABLE PRACTICE

TOWN

1 Five-storey residential flat buildings are built within a two-storey detached dwelling context.

2 Heritage buildings on the main street are replaced with seven-storey flat buildings.

3 New podium tower buildings overshadow and overlook neighbouring sites and eliminate their potential to develop at a similar scale.

4 New tower buildings dominate views of the settlement from across the river.

NEW SETTLEMENT (VILLAGE)

5 A former public hotel and park site is developed for private residential uses.

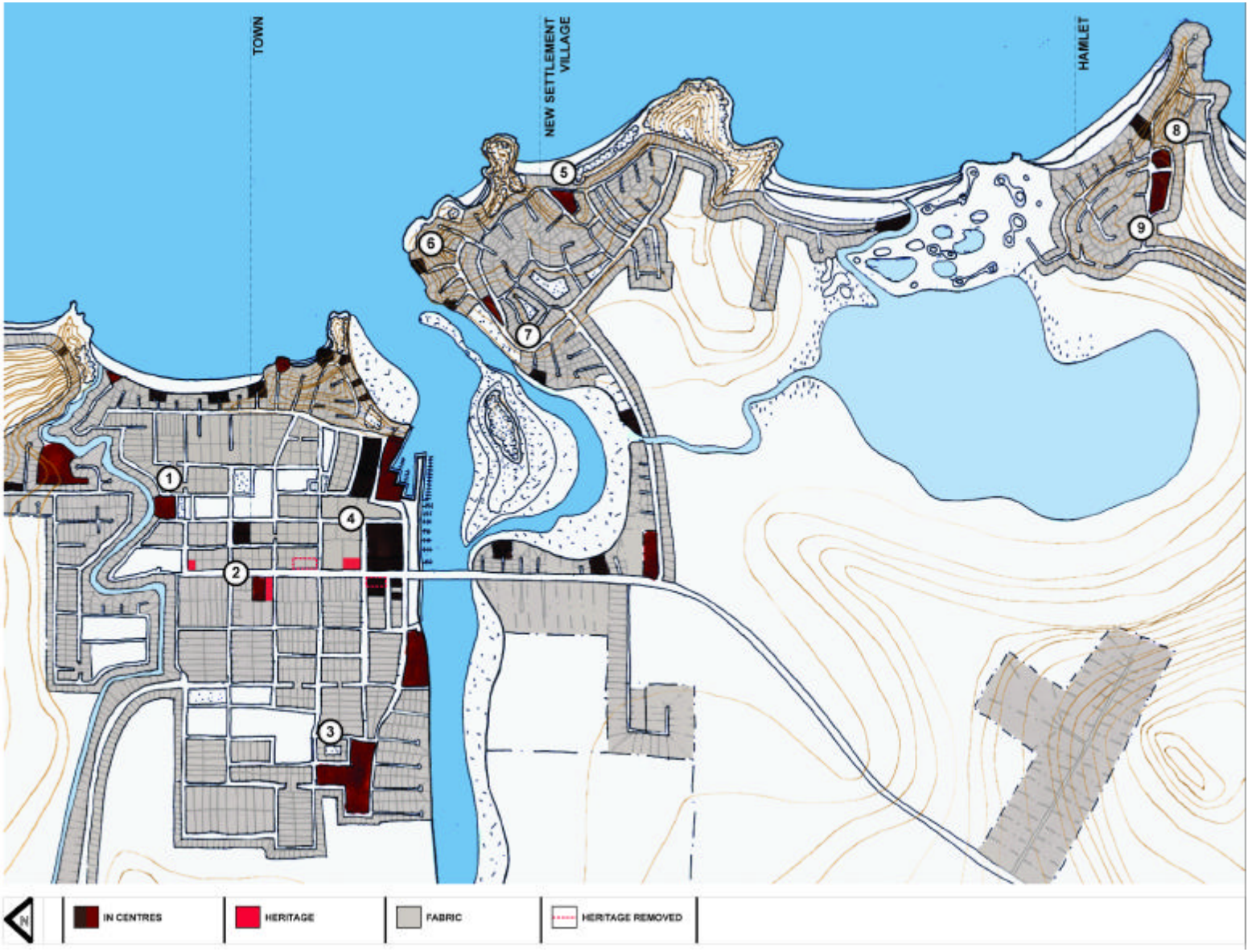
6 A prominent headland site is developed with a large residential flat building visible from afar and dominating local streetscape views.

7 Residential flat tower-type buildings of five to seven storeys are randomly located along the foreshore in an existing context of two- to three-storey buildings.

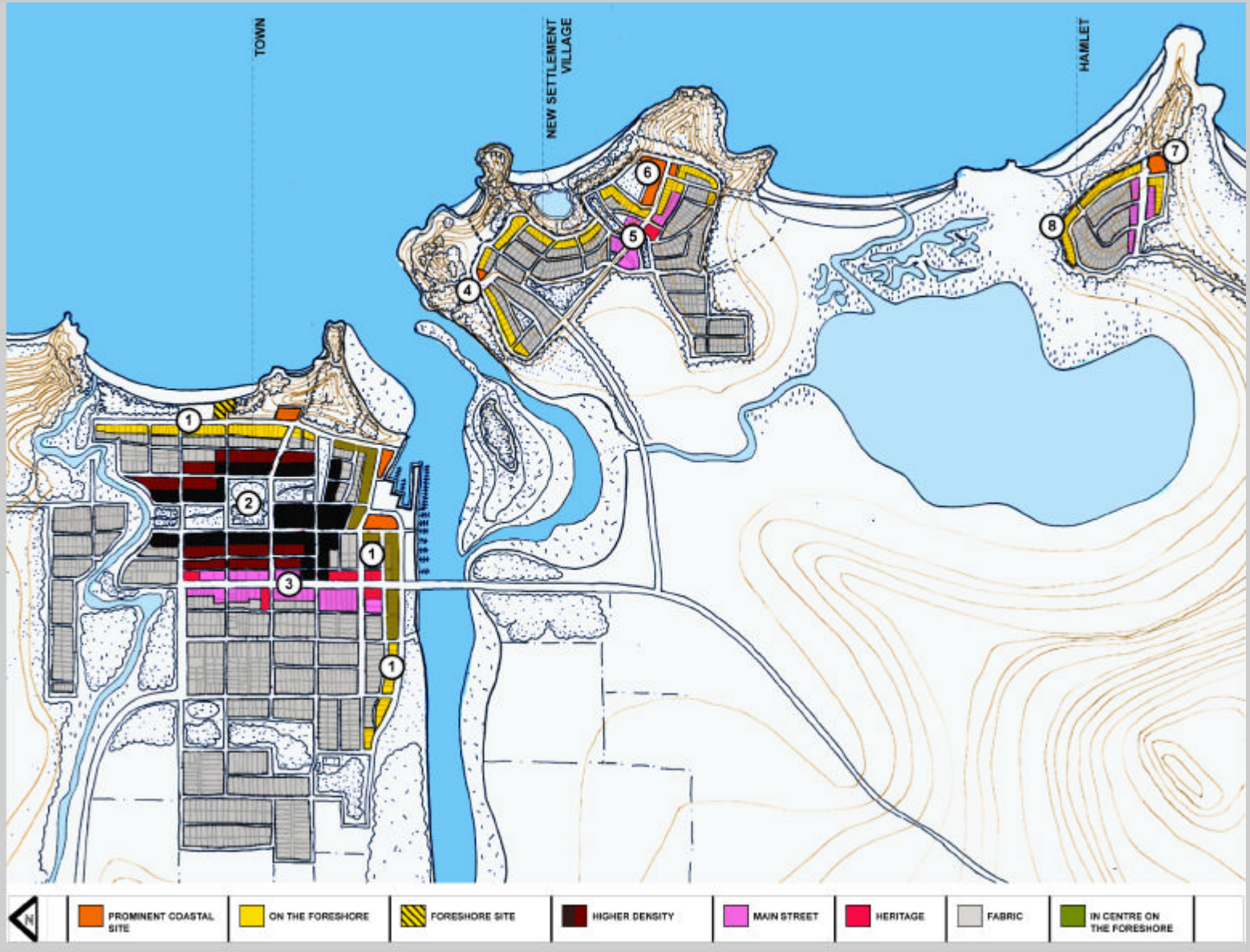
HAMLET

8 A former public site with generous surrounding public areas is developed as a residential flat building of four storeys spread across the entire site.

9 Sites in the hamlet are amalgamated and townhouses with high site coverage, minimal gardens and on-site large communal carparking areas are built.



PLACE SPECIFIC BUILDINGS



DESIRABLE PRACTICE

TOWN

1 Town centre coastal foreshore sites are developed with block edge and street addressed, mixed-use buildings to a consistent height of three storeys.

2 Town centre sites around a large park are developed with block edge, street addressed, narrow footprint residential flat buildings to a height of five storeys.

3 Heritage buildings are protected and new development responds to the existing heritage context in terms of height, street edge configuration, materials, proportions and detailing.

NEW SETTLEMENT (VILLAGE)

4 New development on a headland site is no bigger than existing buildings in height or footprint.

5 Sites surrounding the village centre square are developed with higher density mixed-use buildings. New buildings are block-edge type buildings and consistent in height along the street.

6 The prominent coastal foreshore site is recognised as an important public place. It has public uses only, with limited residential development.

HAMLET

7 The public site is maintained for public uses and new development is set well back from the foreshore edge.

8 Development on sites along the coastal foreshore and the settlement edge is a maximum of two storeys.

UNDESIRABLE PRACTICE

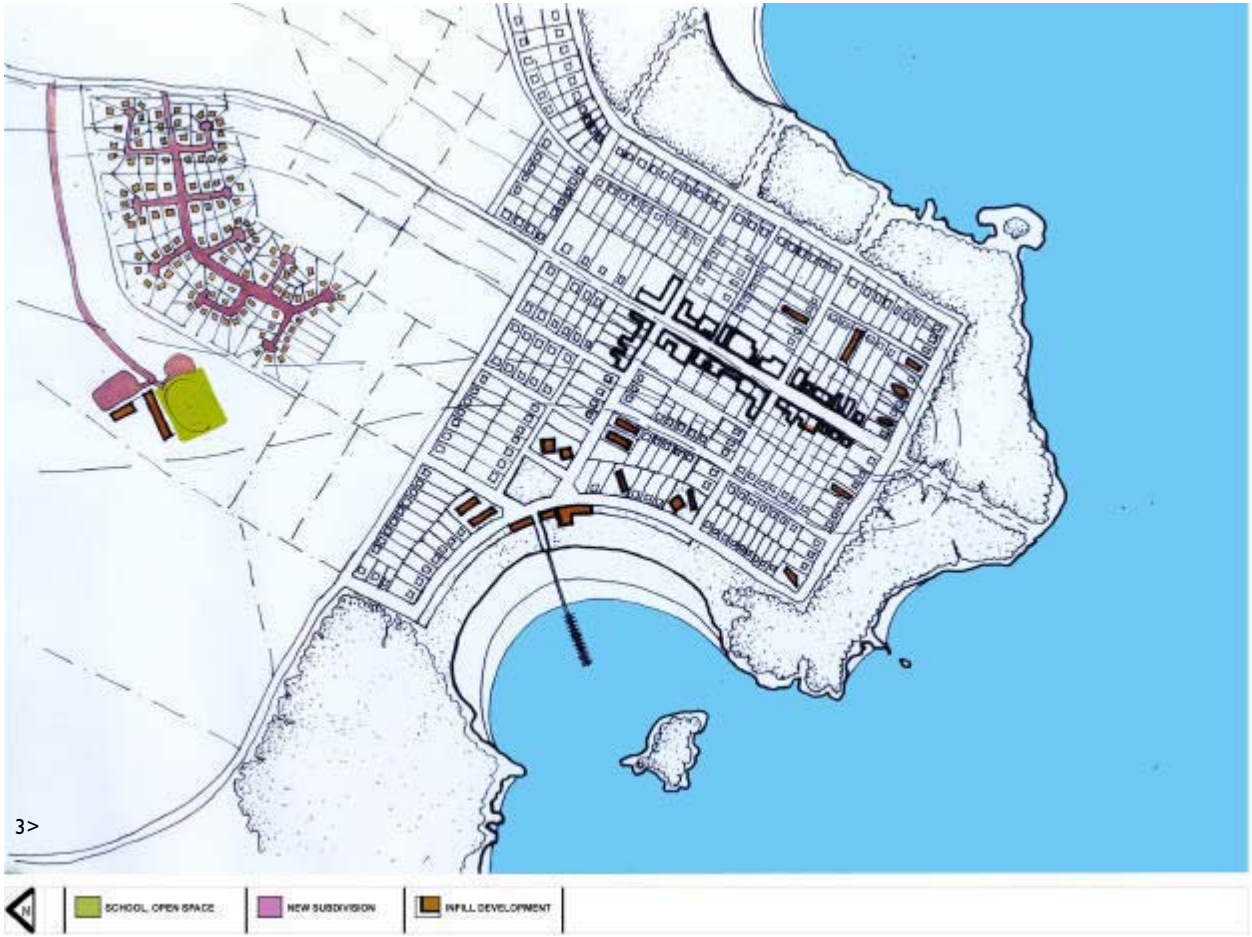
1>

2>

1> Buildings located on the foreshore are out of scale with the headland and overshadow the beach.

2> Large residential flat buildings impact on the visual quality of this location.

3> Here a fictitious settlement has major new developments, such as a school, a subdivision and large buildings, located and designed in an ad hoc way without responding to the settlement's urban characteristics.



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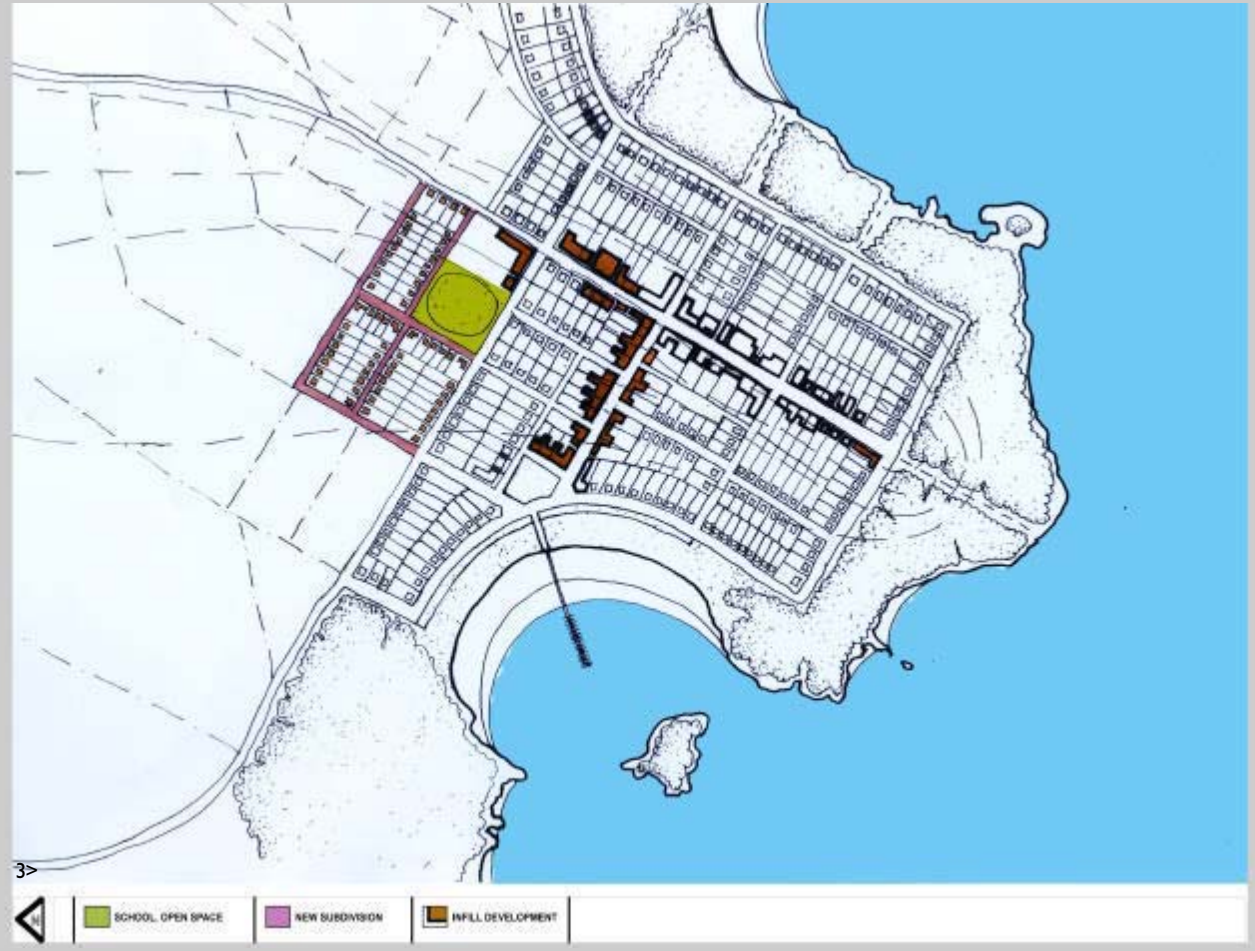
DESIRABLE PRACTICE



3>

1>

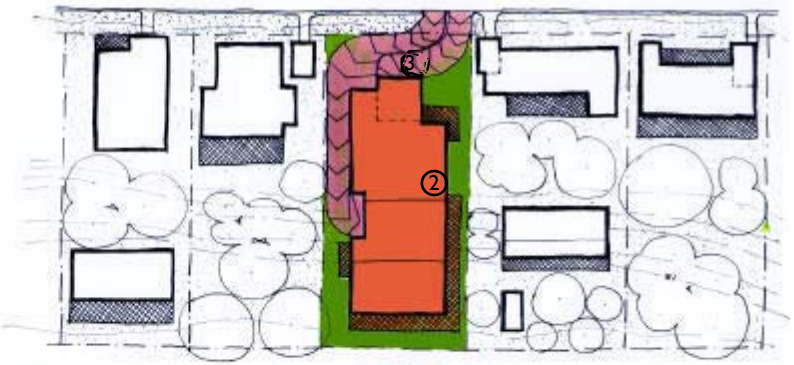
2>

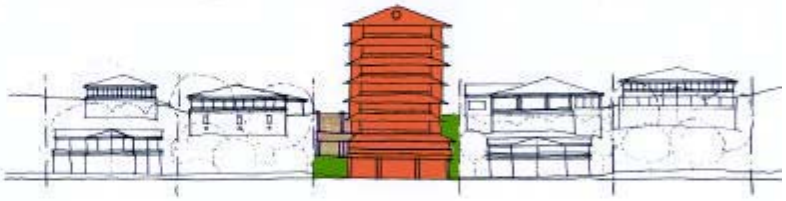
1> Building heights are consistent with the rise and fall of the topography.

2> This hotel's heights are consistent with the scale of the street. The footprint of the buildings is designed to create views from many of the apartments.

3> Here a fictitious settlement has development located and designed to reinforce the street pattern and reduce impacts on residential areas.

UNDESIRABLE PRACTICE





1> A city building is three times the height, bulk and scale of other buildings in the street.

2> Generic landscaping and house types do not contribute to the character of this coastal village.

3> A new residential flat building located close to the coastal edge in a city differs in height, scale, proportion and building footprint from the surrounding built context. Materials and detailing are reminiscent of commercial, city centre buildings rather than a residential coastal location.

1 The building's footprint covers most of the site.

2 Vegetation and deep soil zones are minimal.

3 Two to three cars per apartment are accommodated on site.

4 The development is visible from afar.

DESIRABLE PRACTICE

1> City buildings define the street, have active retail frontages and are consistent in height along the street.

2> Materials, detailing, building form and proportions feels distinctively coastal and contribute to this coastal street.

3> A new residential flat building located close to the coastal edge in a city maintains consistent streetscape, bulk, scale, height, materials and detailing to the existing context.

1. The buildings footprint relates to the subdivision pattern, it is divided in two.
2. Vegetation and deep soil zones are maintained between buildings.
3. On-site car parking requirements are reduced due to the steepness of the site.
4. The impact of new development on setting of the settlement is minimised.

Part THREE

CONCLUSION AND NEXT STEPS

ONCLUSION AND NEXT STEPS

IMPLEMENTATION AND DELIVERY

Balancing public and private benefits is the key to maintaining character and amenity of coastal settlements. The best outcome for the residents and the environment is achieved when private development contributes to the identity and amenity of the settlement.

Examples presented in this document illustrate a range of different characteristics, opportunities and constraints related to coastal development. The examples also show that there are issues which need to be resolved to protect and enhance the quality of the coastal environment in the future. In addition, the examples highlight the positive characteristics that shape successful coastal development and those characteristics that will detract from the quality and character of the coast and are inconsistent with State Government policies.

The issues raised have been used as the basis for developing the guidelines to provide a design framework for the public domain (streets and public spaces) and private development. This will ensure that:

- desirable characteristics are maintained and reinforced
- past mistakes are remedied
- scenarios for future development are established.

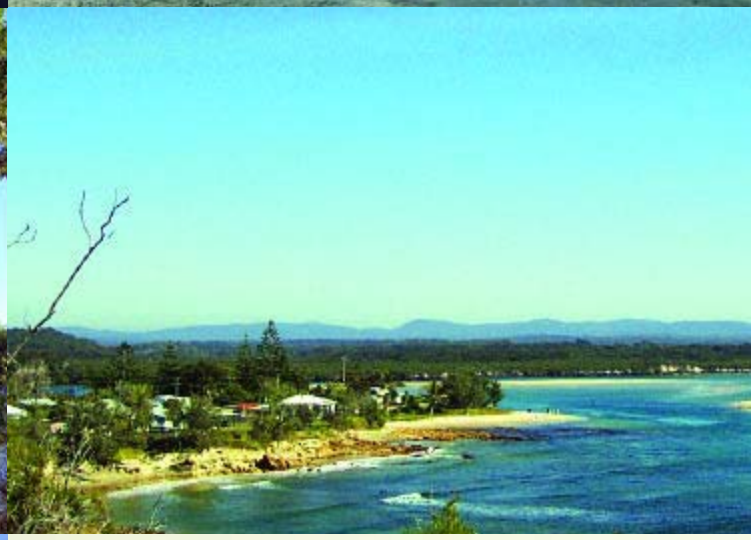
The coastal design guidelines should be seen as part of an evolving set of support documents to assist in the better planning, management and use of precious coastal resources. For too long decisions have been taken in an ad hoc way leading to impacts which damage environmental features, public amenity and visual values. Design practices for specific foreshore improvements, rural residential areas, recreational facilities and caravan parks also need to be developed. They must be consistent with principles outlined in these guidelines.

These guidelines need to be viewed in the context of other government initiatives, both now and in the future. PlanFirst, the Comprehensive Coastal Assessment, and the Coastal Zone Management Manual are three new initiatives relating to design. State Environmental Protection Policy No. 71 (SEPP 71), which was gazetted in November 2002, also relates to design. The intention of this policy and these initiatives is to enable the planning and management of the coast in an integrated and holistic way. This will mean that new development and redevelopment is placed in a well articulated and supported strategic context. In this way greater certainty is assured and underpinned by a clear policy direction.

Coastal Council welcomes the opportunity to discuss the use of these guidelines with local councils, community groups and developers. We support changes to LEPs and DCPs, as appropriate, based on the principles outlined in this document. Developers are invited to test ideas presented here against master plans and other conceptual plans, which are being generated to meet economic and social needs. The guidelines should also help other interested groups review and comment on public and private sector proposals. In one sense they should also constitute an educational document and help communities project a vision for their future.






GLOSSARY

ACOUSTIC PRIVACY: a measure of sound insulation between apartments, between apartments and communal areas and between external and internal spaces.

AMENITY: the liveability or quality of a place, which makes it pleasant and agreeable to be in for individuals and the community. Amenity is important in both the public and private domain and includes the enjoyment of sunlight, views, privacy and quiet.

ARTICULATION ZONE: the area of three dimensional modelling at the periphery of the building, including any changes in façade alignment, balconies, bay windows and sun-shading devices.

BUILDING TYPE: a general building form describing a group of buildings that have a common set of characteristics and a common three-dimensional form. This is a useful way of understanding the basic attributes of a building and its ability to relate to a specific site and urban context. Building types can be adapted to fit specific urban contexts and site conditions.

COASTAL EDGE: high water mark or the edge of a coastal lake or lagoon.

DEEP SOIL ZONE: an area of natural ground with a relatively natural soil profile, which is retained within a development. Deep soil zones have important environmental benefits. These include the healthy growth of large trees with large canopies or mature vegetation and the infiltration of water to the water table and reduction of stormwater runoff.

EDGE ROADS: public roads along the edge of a public open space or reserve, which have development facing onto them.

ECOLOGICALLY SUSTAINABLE DEVELOPMENT: the guiding principles of ESD which underpin the NSW Coastal Policy 1997 are:

- decision-making processes should effectively integrate both long and short-term economic, environmental, social and equity considerations (the principle of intergenerational equity)
- where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (often called the precautionary principle)
- the global dimension of environmental impacts of actions and policies should be recognised and considered
- the need to develop a strong, growing and diversified economy which can enhance the capacity for environmental protection should be recognised; the need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised
- cost effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms
- decisions and actions should provide for broad community involvement on issues which affect them.

FOOTPRINT: the extent of the built area of a building or a settlement.

FORESHORE BUFFER ZONE: an appropriately managed and unalienated zone of unconsolidated land between a natural beach and foredune area and development within which shoreline fluctuations and hazards can be accommodated to minimise damage to the ecological values of the natural area and development within urban areas.

FORESHORE RESERVE: public land located between development or private land and the coastal edge.

GROUND: the original level of the ground.

NATIVE VEGETATION: Native vegetation refers to plants which are indigenous to a particular area on the coast.

ON-GRADE: on ground level (not on a building structure).

PLAN DEPTH OR WIDTH: measured from inside face of wall to inside face of wall or from inside face of glass to inside face of glass.

RESERVE: an area of land protected, valued or maintained for its natural or social functions.

RUSTIC ROAD: an unsealed road leading to a place of attraction.

SETBACK: an area between a natural area boundary and development. The setback protects the natural area from the impacts of urban settlement and the impact of a natural hazard on a settlement. A setback is an extension of the ecology of the area to be protected. Setbacks do not contain roads, non-native vegetation, playing fields or infrastructure. In the first instance NSW Fisheries and the Department of Land and Water Conservation should be consulted for appropriate setback distances and configurations.

SHOP-TOP HOUSING: mixed-use development where the ground floor is retail or commercial and the levels above are residential. Generally shop-top housing is no more than two or three storeys.

STOREY: a level in a development, which includes space used for car parking, laundries or storeroom if the ceiling above the space is not more that 1200mm (measured from lowest point on the site) above ground level.

UNDERGROUND: a level in a building below ground level.

VIEW CORRIDORS: contiguous space in the public domain defined by buildings or vegetation. It visually and spatially links one part of an urban area to another by focusing on a feature, such as a park, plaza, water, trees, public building, view of the sky.

WATER SENSITIVE URBAN DESIGN (WSUD): integrated water management, water balance, water quality, water consumption and environmental objectives into urban areas. Complete urban water cycle management where the emphasis is on minimisation of water usage and water recycling. WSUD is based on ESD principles. The overall goals of WSUD are to:

- preserve existing topographic and natural features
- protect ground and surface water
- integrate public open space with drainage corridors, public access, passive recreation and visual amenity
- restore and enhance ecological values.

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COASTAL DESIGN GUIDELINES FOR NSW

This document illustrates how an urban design approach informs developments sensitive to the unique natural and urban characteristics of coastal places in NSW.





Part 1> Determining a local hierarchy of coastal settlements.
This part describes the concept of establishing a hierarchy of coastal settlements and how this relates to planning within a local area. It also defines seven coastal settlement types, which can be used to analyse and understand urban development along the NSW coast.

Part 2> Design principles for coastal settlements.
This part illustrates the key components of coastal settlements and best practice urban design and built form outcomes. These principles can be used to manage development within a settlement to ensure how both the urban and natural character complement each other in order to capture the character of coastal places. Best practice outcomes are contrasted with illustrations of undesirable practice to highlight common coastal planning problems.

Part 3> Conclusions and Next Steps.
This part describes what steps need to be taken next. It is a general discussion on the future of the guidelines.