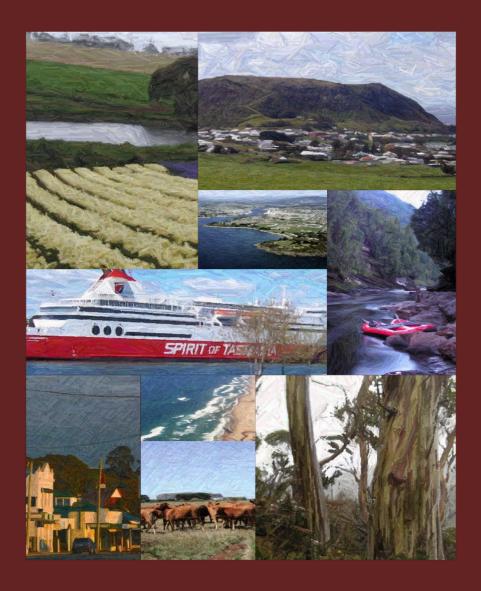
LIVING ON THE COAST

CRADLE COAST REGIONAL LAND USE PLANNING FRAMEWORK



Cradle Coast Regional Land Use Strategy 2010 – 2030

CRADLE COAST REGIONAL PLANNING INITIATIVE

Declaration of the Cradle Coast Regional Land Use Strategy

28 February 2024

I, Michael Darrel Joseph Ferguson, Minister for Planning, declare this amended Cradle Coast Regional Land Use Strategy in accordance with section 5A of the *Land Use Planning and Approvals Act 1993*.

hickael Juguron	Hon Michael Ferguson MP
28 February 2024	Date

This amended regional land use strategy came into operation on 28 February 2024, as notified in the Gazette.

Version	Effective date	Description
1.0	25 October 2011	Initial declaration
2.0	11 May 2022	Amendments to acknowledge the unique circumstances of King Island within the region and the correction of typographical errors.
3.0	28 February 2024	Amendments to respond to the region's changing residential land- use needs, remedy document structure issues, and correct minor errors and anomalies.

















CRADLE COAST REGIONAL LAND USE PLANNING FRAMEWORK

The Cradle Coast Regional Land Use Planning Framework provides a regional perspective on land use planning issues of significance for all the municipal areas within the Cradle Coast Region of northwest Tasmania.

The Framework has been agreed by each of the councils for the nine municipal areas forming the Cradle Coast Region.

The Framework contains the Cradle Coast Regional Land Use Strategy 2010 - 2030.

The Cradle Coast Regional Land Use Strategy 2010 – 2030 is a statutory planning instrument under the Tasmanian Resource Management and Planning System.

Purpose of the Strategy is to provide a consistent policy foundation for the regulatory intentions and requirements contained in local planning schemes prepared for each municipal area.

Cradle Coast Regional Land Use Planning Framework

Table of Contents

How to Read this Document		
Mi	inister's Vision	7
Ex	ecutive Summary	8
PA	RT A	
AB	OUT THE CRADLE COAST REGIONAL LAND USE PLANNING FRAMEWORK	10
Int	roduction - The Cradle Coast Regional Planning Initiative	10
1.	Preparation of the Framework	10
2.	What is Land Use Planning?	11
3.	Tasmania's Land Use Planning System	12
4.	Purpose of the Framework	14
5.	Liveable and Sustainable Places	16
6.	Constructing the Framework	17
	6.1 The Cradle Coast Region	17
	6.2 Understanding the Present	17
	6.3 Acknowledging External Policy Influences and Drivers	19
	6.4 Cradle Coast Vision - Imagining the Future	20
	6.5 Shaping the Cradle Coast Land Use Planning Framework 2010 - 2030	21
PA	RT B	
K۱	IOWING OUR PLACE	23
Pro	ofiling the Region	23
1.	Where We Are	23
2.	Natural Systems	24
	2.1 A Changing Climate	26
	2.2 Air Quality	29
	2.3 Water	29
	2.4 Land	30
	2.5 Biodiversity and Ecosystems	31
	2.6 Coastal Areas	32
	2.7 Natural and Historic Cultural Heritage	33

Cradle Coast Regional Land Use Planning Framework

3.	Economic Activity and Employment	36
	3.1 The Nature of Economic Activity	36
	3.2 Land for Biological Resources – Sustainable Access and Production	40
	3.3 Land for Agriculture – Growing Food, Fibre, Fuel, Flowers and Pharmaceuticals	42
	3.4 Mining and Extractive Industries	46
	3.5 Employment Land	47
	3.6 Tourism	52
4.	Settlement and Community – Liveable and Sustainable Places	55
	4.1 Setting	55
	4.2 Urban Settlement	55
	4.3 The Region's People	55
	4.4 Settlement Areas – Places for People	60
	4.5 Settlement Pattern - Managing Development and Growth	60
	4.6 Settlement Character – Planning for Liveability	63
	4.7 Settlement Capability - Access to Services	65
	4.8 Protecting People and Property	70
	4.9 Land for Housing – Places to Live	75
	4.10 Healthy and Active Communities	81
5.	Infrastructure – Supporting People and Economies	85
	5.1 Integrated Infrastructure and Land use Planning	85
	5.2 Transport – Moving Freight, Connecting People, Places and Activities	87
	5.3 Energy – Generation, Distribution and Supply	96
	5.4 Water Supply	99
	5.5 Telecommunication	101
	5.6 Waste Management – Solid and Liquid Waste	102
PA	RT C	
тн	E CRADLE COAST REGIONAL LAND USE STRATEGY 2010 - 2030	104
1.	Implementation – Making it Happen, Keeping It Relevant	104
	1.1 Purpose of the Strategy	104
	1.2 Structure of the Strategy	104
	1.3 Statutory Status	105
	1.4 Strategic Outcomes	106
	1.5 Principles for Implementation	106
	1.6 Coordination	109
	1.7 Continuous Improvement	111
	1.8 Monitoring and Review	111
	1.9 Public Engagement	112

Cradle Coast Regional Land Use Planning Framework

2.	Wise Use of Resources – Respect for What is Valued	114
	2.1 Context	114
	2.2 Strategic Outcomes	114
	2.3 Land Use Policies for a Changing Climate	115
	2.4 Land Use Policies for Water Management	116
	2.5 Land Use Policies for Land	117
	2.6 Land Use Policies for Air	117
	2.7 Land Use Policies for Conservation	117
	2.8 Land Use Policies for Coastal Management	119
	2.9 Land Use Policies for Cultural and Historic Heritage	119
3.	Support for Economic Activity— A Diverse and Robust Economy	121
	3.1 Context	121
	3.2 Strategic Outcomes	122
	3.3 Land Use Policies for Economic Activity and Jobs	123
4.	Places for People – Liveable and Sustainable Communities	129
	4.1 Context	129
	4.2 Strategic Outcomes	130
	4.3 Land Use Policies for Managing Growth and Development	131
	4.4 Land Use Policies for Protecting People and Property	136
	4.5 Land Use Polices for Facilitating Access to Business and Community Services	137
	4.6 Land Use Policies for Housing Land – Places to Live	138
	4.7 Land Use Policies for Healthy and Educated Communities	139
	4.8 Land Use Policies for Active Communities	139
5.	Planned Provision for Infrastructure - Support for Growth and Development	141
	5.1 Context	141
	5.2 Strategic Outcomes	141
	5.3 Land Use Policies for Integrated Land Use and Infrastructure Planning	142
	5.4 Land Use Policies for Transport Systems – Moving Freight and People	143
	5.5 Land Use Policies for Energy Systems – Generation, Distribution and Supply	144
	5.6 Land Use Policies for Water Supply	144
	5.7 Land Use Policies for Information Technology – Moving Data, Information,	
Kn	owledge and Services	145
	5.8 Land Use Policies for Waste Management	145
	5.9 Land Use Policies for Community Services	146
Glo	ossary of Terms	147
Ac	knowledgements	151
Αp	pendix 1	152
Bil	pliography	159

How to Read this Document

This document establishes the Cradle Coast Regional Land Use Planning Framework and is in three parts. Parts A and B collectively describe the context within which the strategy operates. Part C is the Cradle Coast Regional Land Use Strategy and contains the policies that are applied to implement the Framework.

Part A – About the Cradle Coast Regional Land Use Planning Framework

Part A provides background on the purpose and preparation of the Framework and its function within the Tasmanian land use planning system.

It describes a desired future for the Cradle Coast Region and explains how the Framework is structured to reflect and deliver that future. It outlines the issues and circumstances that inform the direction and intent at the time of drafting.

• Part B – Knowing Our Place

Part B provides a description of key regional characteristics and land use issues at the time of drafting. It explains their relevance for land use planning.

Knowing Our Place is a background for introducing and justifying the Cradle Coast Regional Land Use Strategy contained in Part C.

This Part does not purport to be an exhaustive examination of all relevant matters. Readers seeking more detailed explanation are directed to the bibliography.

Part C – The Cradle Coast Regional Land Use Strategy 2010 – 2030

Part C contains the strategic policy requirements for a coordinated and consistent approach to land use policy and decisions in the Cradle Coast Region.

Part C contains the policies that must be observed in the preparation and amendment of local planning schemes and Local Provision Schedules for each of the nine Cradle Coast municipal councils.

The Cradle Coast Regional Land Use Strategy is presented in five integrated parts –

- 1. Implementation
- 2. Wise Use of Resources
- 3. Support for Economic Activity
- 4. Places for People
- 5. Planned Provision for Infrastructure

Minister's Vision

Reforming the State's land use planning system to better meet the challenges of the 21st Century is an important part of ensuring Tasmania's ongoing prosperity.

The State Government has committed to an integrated set of reforms covering both strategic planning and statutory planning schemes. Together these reforms represent the most significant improvement to planning since the introduction of the Resource Management and Planning System in 1993.

The Cradle Coast Region is well known for its diverse rural and coastal landscapes, prime agricultural land, world class wilderness areas and attractive towns and cities. Matched with a gentle and temperate climate it offers an enviable quality of life which is increasingly attracting people relocating from interstate.

While growth and economic opportunities are vital to the ongoing wellbeing of the region, there is a need to ensure that the values that attract residents and the natural assets that are the economic lifeblood are not compromised. Competition and pressure for access to limited land resources requires coordinated planning at both a regional and local level to provide guidance to balance different land use needs.

This balance sets the future priorities in resource management, community development, infrastructure provision and economic activity and growth throughout the region.

The Cradle Coast Framework encourages the application of sustainability principles in determining the pattern of future settlement, location of strategically important industrial land, the protection of major transport infrastructure and acknowledging the importance of resource extraction, rural activity and agriculture throughout the region.

The Framework represents the combined response of the councils across the northwest of Tasmania to one of the Government's key planning reforms. From this Framework a suite of new consistently based planning schemes will be prepared for the individual councils to administer. The Framework will be complemented by other strategies and plans dealing with issues which require delivery outside of the land use planning system.

Into the future the regional strategic work will continue and the Framework will be a living, responsive and pro-active document reflecting the changing aspirations, needs and circumstances of the northwest.

Through the development of this Framework and the planning schemes that reflect it the future of the Cradle Coast Region will be prosperous and it will continue to offer a lifestyle second to none.

Hon Bryan Green MP Member for Braddon Minister for Planning State of Tasmania

December 2010

Executive Summary

Land use planning is the process of making policy and decisions regarding the use, development and protection of land for conservation, rural and urban purposes, and for ensuring infrastructure and community facilities are available and adequate for the needs of the present as well as for the future.

When it is done well, land use planning can help to establish and develop communities where people want to live, work and play by –

- ensuring that basic community needs are met, such as fresh air, clean water and recreational space
- facilitating the efficient, equitable, orderly, and sustainable use and development of land for housing, industry and community services
- providing access to infrastructure essential for a prosperous economy and liveable places, such as transport, waste management, energy and communication
- helping to protect and conserve natural and cultural resources, built assets and places

The purpose of the Cradle Coast Land Use Planning Framework is to provide strategic foundation for land use planning in the Cradle Coast Region of northwest Tasmania which provides a perspective on planning issues of regional significance.

The Framework provides background explanation for the land use planning system of Tasmania; and describes the circumstances and conditions of the Region to provide understanding on the key issues and their relevance for land use planning.

More particularly, the Framework provides a Regional Land Use Strategy which sets out the expectations and desired future outcomes for land use planning in the Region.

The Cradle Coast Regional Land Use Strategy promotes wise use of natural and cultural resources, a prosperous regional economy, liveable and sustainable communities, and planned provision for infrastructure and services.

The Strategy seeks to position the Region for a future where many of the traditional approaches to land use and development will come under increasing scrutiny as awareness of the conditions necessary for a sustainable future become more apparent and accepted. It provokes changed perspectives and promotes innovative and alternate approaches.

The Strategy assumes there is limited immediate need or benefit in wholesale change to the shape and appearance of regional towns, rural environments or conservation places. It proposes that settlement centres remain separate, compact, contained and individual, and that growth and development for housing, business and community purposes be achieved through a careful mix of intensification within established urban boundaries and considered expansion. The Strategy prioritises healthy, active and inclusive communities, and efficient, pleasant and safe places in which to work, live and play. It prioritises that towns and related activity become more energy efficient and reduce carbon emissions. It prioritises that the supply of land be matched to need, and that the prosperity and adequacy of each centre to meet economic and social requirements be the result of informed and innovative forward thinking.

The Strategy recognises economic prosperity and development grow from the resources that are available and from the attitudes and aptitudes of the communities who use them. The Strategy

Cradle Coast Regional Land Use Planning Framework

proposes priority be given the best and most productive use of land, and that irreplaceable and strategic economic, natural and cultural assets, including wilderness, agricultural land, mineral deposits, productive forest, water, scenic and biological resources be protected against consumption and conflict by urban and other uses. The Strategy recognises the potential of new technology and innovative thinking must be accommodated in the opportunities to use and develop land.

The Strategy prioritises use of existing and planned infrastructure over new and expanded systems, and requires the function, capacity and security of infrastructure assets be protected.

The Framework provides a land use perspective on the issues and considerations relevant to the future of the Region and its communities. The process for making land use strategy does not enable a comprehensive regional plan or a prospectus or action plan for discrete matters such as economic development, health care or infrastructure investment. The Strategy seeks to align the land use planning policies significant for the Region with the known strategies, policies and programs of the State and Commonwealth which share a wider responsibility with local government to manage the use and protection for all aspects of human, economic and environmental resources and systems.

The Framework is the beginning for a continuing land use planning process which transcends municipal boundaries and creates a new level of consideration which allows mutual thinking and coordinated action between the communities of the Cradle Coast Region.

It is not a Framework for radical change. It is a Strategy for sustainable growth and development.

PART A

About the Cradle Coast Regional Land Use Planning Framework

Introduction - The Cradle Coast Regional Planning Initiative

The Cradle Coast Regional Planning Initiative is part of a State-wide program to improve the policy foundation and operational efficiency of Tasmania's land use planning system.

The Initiative is required to consider the planning issues of regional significance and to prepare a regional land use planning strategy that will provide regional context and coordinated purpose for land use planning policy and regulatory decisions in the Cradle Coast Region.

The Initiative is also required to prepare a template for the planning schemes that will contain the regulatory requirements for land use decisions at municipal level. It will then assist the replacement of existing planning schemes with schemes that are consistent in purpose and common in structure.

This document represents the first element of the Cradle Coast Regional Planning Initiative. It identifies the issues of importance for the region in land use planning and provides the reasons and directions for the strategies and policies contained in the Cradle Coast Regional Land Use Strategy.

The Cradle Coast Regional Land Use Strategy is included as Part C.

1. Preparation of the Framework

The Framework is an output of the Cradle Coast Regional Planning Initiative.

The Initiative is a partnership between the government of Tasmania, the nine councils of the Cradle Coast Region, and the Cradle Coast Authority for the purpose of assisting greater certainty and consistency in the delivery of local land use planning.

Preparation of the Framework was guided by a Steering Committee¹ with representation from each of the partnership groups.

The Framework is a response to a need for an improved and formalised regional perspective that will bridge the gap between the broader policies of the State on land use planning and the more particular local concerns of individual municipal councils.

The Regional Land Use Framework will create a level of land use planning policy which has not previously existed, and which cannot reasonably be provided by individual councils.

10

¹ See Acknowledgements

Cradle Coast Regional Land Use Planning Framework

Planning for growth and change requires understanding on the capabilities of land. It also means understanding the factors which shape the characteristics, attitudes and values of communities, and of the systems which drive economies.

The Cradle Coast Region is well provided with data and analysis on its lands and resources, its peoples, and its prospects for the future.

Preparation of the Framework has drawn extensively from a large number of contemporary research and policy documents variously provided by State agencies, the Cradle Coast Authority and other institutions, and particularly by local government. It is a compilation and synthesis of existing data and proclaimed strategy collated and expressed within a common format.

Preparation of the Framework has augmented existing data and analysis where necessary, with original research into specific regional characteristics, and reflects best practice land use planning.

2. What is Land Use Planning?

Planning implies a concern for the future.

Land use planning has a specific and focussed concern with guiding decisions on the future use, development or protection of land.

The purpose of land use planning is to identify and apply an understanding of future and potentially competing social, economic, cultural and environmental needs and objectives and to provide efficient, equitable and ethical arrangements to enable those land uses and developments which will optimise the welfare of communities without undue conflict or long-term debilitation.

Land use planning is a structured process for taking an impartial, comprehensive and rational view to attain best available knowledge on likely future conditions involving the use or protection of land. It involves balancing interests and accounting for consequence to achieve the greatest benefit to all. It requires setting goals and identifying desired results to define the degree of growth and change and the level of control necessary for land use to sustainably meet need. It is a practical blend of political philosophy, technical understanding and regulatory intervention as the foundation for continued human activity and prosperity.

Because planning involves prediction about the future it is incapable of scientific precision. Land use planning is therefore a dynamic process - constantly examining for effect, and continually adjusting as necessary for changed circumstance, condition and need.

Land use planning is not comprehensive planning. While the process and outputs of land use planning must align to the broader policy and regulatory considerations relevant for the place for which it applies, the responsibilities of land use planning do not extend to include preparation of comprehensive strategic or development plans which detail aspects of social, economic or environmental endeavour such as community cohesion, nature conservation management, economic incentive, infrastructure investment, or social welfare plans.

The factors which are best able to be influenced and managed by land use planning are -

 allocation and disposition of land to provide a secure, adequate and appropriate supply of new and redeveloped land to meet demand from growth and change in population and economic activity, including for community development and support, business and retail, housing, industry, primary production, recreation and utilities

Cradle Coast Regional Land Use Planning Framework

- protection and conservation of land and places with identified significance for biodiversity, cultural heritage, ecological process, resource development and infrastructure function
- the liveability and the well-being of communities through provision of places which are accessible, affordable, attractive, clean, connected, convenient, diverse, healthy, inclusive, pleasant, safe, secure, sustainable and uncongested areas in which to live, work or visit for business or pleasure
- coordination for adequate and planned provision and optimum use of infrastructure for community services and utilities for transport, water, energy, communication and waste management
- provision and management of technical requirements for use of land to protect the property owner and occupier, neighbours, communities and cultural, economic and natural environments against dangerous, illegal and undesirable development without undue impact for compliance cost, competition, innovation, or the overall efficiency and effectiveness for the functioning of places and communities

When it is done well, land use planning can help to establish and develop communities where people want to work, shop, live or visit by –

- ensuring that a community's basic needs are met, such as fresh air, clean water and recreational space
- facilitating the fair, orderly, aesthetic and sustainable supply, use and development of land for housing, industry and community services
- providing access to essential infrastructure, including public transport, waste and other public facilities
- helping to protect and conserve natural and man-made resources, buildings and facilities

3. Tasmania's Land Use Planning System

Land use planning assumes there is both need and acceptance for some level of intervention to guide and control decisions on the use and development of land.

Most governments implement a statutory land use planning system to provide a legal framework for managing the use, development, protection and conservation of land and natural resources.

The Tasmanian Resource Management and Planning System (RMPS) describes the policy and regulatory arrangements applying in Tasmania for use and development of land and natural resources in support of the State's long-term economic, environmental and social goals.

The purpose the RMPS is to provide a logical and consistent strategic policy and statutory process that will assist all levels of government, industry and the community to set common goals, balance competing interests, and manage the impacts of land use and development.

The RMPS operates in a whole of government context, and is a core requirement for all policy and decisions relating to the use or development of natural resources and land.

The core objective for the Tasmanian planning system is sustainable development.

The term "sustainable development" is defined to mean a shared responsibility between government, industry and the community for the fair and orderly use and development of land.

Cradle Coast Regional Land Use Planning Framework

The rate of consumption must be sufficient to facilitate economic development and provide for the cultural and social welfare of communities in a manner that will serve the interests of both present and future generations while always maintaining the health and diversity of natural systems.

Governance arrangements for the RMPS are delivered in part by the land use planning processes detailed in the *Land Use Planning and Approvals Act 1993*.

Land use planning processes in Tasmania must -

- derive from informed long-term thinking
- align to and coordinate with related government policy and approval systems
- have specific regard for all social, environmental and economic factors
- secure pleasant, efficient and safe places for living, working and recreation
- conserve places which have special value
- optimise planned and existing community and utility infrastructure
- fully consider land capability

Local government is a key participant in implementing the State's land use planning system.

Each municipal council has status as a planning authority and must prepare and implement a local planning scheme determining the best arrangements for the use of land within its municipal area.

Planning schemes must not materially conflict with any higher level policy or regulatory requirements applying for the region in which the municipality is located.

Schemes must be consistent with and coordinated between adjoining municipal areas, and must have regard for the use and development of their respective region as an entity in social, environmental and economic terms.



Objectives of the Tasmanian land use planning system

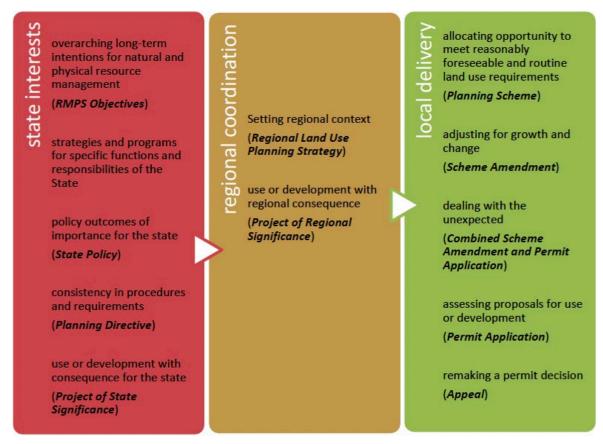
Cradle Coast Regional Land Use Planning Framework

The RMPS provides for a layered arrangement of statutory instruments to express strategic policy and deliver regulatory compliance.

The *Act* provides the Minister for Planning may declare a planning region for any part of Tasmania and implement a regional land use planning strategy for that region.

The purpose of a regional land use strategy is to consider the natural, cultural, economic and community attributes that are significant for land use from a regional perspective and at scale greater than for each municipal area.

The regional land use strategy is to embellish high level State policy to provide understanding and perspective from a regional level. It will guide consistency and coordination between local planning schemes for each of the municipalities within that region. The strategy is to underpin the local rules and requirements for managing the use of land.



Policy and regulatory layers under the Tasmanian land use planning system

The Cradle Coast Regional Land Use Planning Framework contains the proposed regional land use strategy for the Cradle Coast Region.

The Regional Land Use Strategy provides a policy framework for reconciling the long-term thinking and coordinated action necessary to achieve efficient placement of land use activities, infrastructure and settlement growth across the Cradle Coast Region of northwest Tasmania in the period to 2030.

4. Purpose of the Framework

The Framework provides a coordinated approach for regional land use planning.

Cradle Coast Regional Land Use Planning Framework

It reflects the role of regional planning within the Tasmanian planning system, provides an oversight on planning issues relevant for the region, and sets out policies on social, environmental and economic issues as they relate to land use and which are to be common for all municipal areas.

The purpose of the Framework is to –

- a. Further the objectives of the Tasmanian land use planning system
- b. Provide a regional context and perspective for the planning of settlement and land use in a way that reflects a broad geographic perspective and is coordinated across municipal boundaries
- c. Ensure that knowledge-based, long-term thinking will define the overall land use outcomes for the Region and inform all applicable planning processes
- d. Consolidate and align various existing land use policies applying for the Region in accordance with State and regional interests
- e. Propose a regional land use strategy that will provide direction and guidance for preparation of related environmental, economic, social and resource management strategies and planning instruments to enable more effective and efficient land use decisions within the Region

The Framework will -

- a. Reflect a vision for how the Region will be described in the future
- b. Acknowledge current conditions and known emerging circumstances
- c. Respond to issues of priority concern for the desired future
- d. Establish the necessary strategic land use policy positions for facilitating the desired future, acknowledging that land use circumstances may change over time

The Framework is intended as a reference document for defining coordinated land use planning action in response to an understanding of the requirements of the Region to meet reasonable predictions for future need in accordance with national, State and regional policies for sustainable development and liveable communities. It extends thinking and consideration beyond municipal boundaries to promote new and collective ways for delivering the multiple goals associated with the use and development of land.

The Cradle Coast Regional Land Use Strategy does not provide a generic and comprehensive regional strategy or development plan. The Framework deals specifically with the use, development, protection and conservation of land. It must focus on land use planning matters within the jurisdiction of the land use planning system. The Framework is not a prospectus for promoting population growth, economic development or social welfare.

The regional land use strategy is to integrate with existing policy and program aligned to resource management, economic, cultural and social interests. However, it cannot anticipate or serve as a substitute for such policy.

The Framework does not prescribe detailed requirements for individual land use decisions. It intends implementation will be achieved through the existing prescribed regulatory arrangements for land use planning, including local planning schemes.

Cradle Coast Regional Land Use Planning Framework

5. Liveable and Sustainable Places

A well-functioning region is an efficient, pleasant and safe place in which to live work and visit.

The concept of "liveability" is increasingly used to describe a place which supports the attraction of a place through its ability to support the health, social well-being and economic prosperity of communities. Liveability is a key factor in location decision making.

The concept of liveability eludes precise definition. The State of Australian Cities Report 2010² says in respect of liveability –

"Places considered to have a high degree of liveability have a high level and widespread accessibility to amenity including features such as open and green space, and provision of educational, cultural and recreation facilities. It is recognised that ensuring the liveability of places leads to increased migration, visitation, trade and investment.

"As well as these features of amenity, liveability encompasses other characteristics of the built environment, including the arrangement, design and construction of dwellings and other buildings, public transport systems, road networks, and public spaces, walkable accessibility to goods and services and a high quality of communication technology.

"Liveability also refers to the elements of the natural environment, such as low air pollution, the presence of parklands, trees, water or a view. Apart from physical features of cities and localities, a range of social factors contribute to liveability, such as political stability, social cohesion, lower risks to personal safety, conviviality and social inclusiveness, aesthetics, diversity among the population and heritage.

"Liveable places are widely perceived to be healthy, attractive and enjoyable places for people of all ages, physical abilities and backgrounds, which provide for an enjoyable and sustainable lifestyle for all sectors of the community."

The concept extends to include an efficient and effective environment conducive to the ongoing strength, viability and ease of access to employment and a career, and for facilitating opportunities for new and innovative business and economic activity. Factors of relevance include workforce development, available and accessible land supply, transport linkages and levels of congestion, digital broadband, and regional marketing and investment incentives.

Liveability reflects social and environment responsibility. Elements include access, affordability and diversity of choice for housing, management of population growth and demographic change, improvements in standards of physical, mental and social health, and the level of equity, leadership and community participation in decision making. It also includes addressing changes and deterioration in the natural environment and an increasing endeavour for energy efficiency and reduction in carbon emissions.

Liveability is not accidental or self-sustaining. The liveability of a place results from an acknowledged and agreed strategic perspective which balances a broad range of environmental and social needs with economic and business objectives. Policy planning must enable coordinated allocation of funding, resources and compliance measures to deliver and maintain key social, economic and environmental infrastructure.

Lands use planning has a significant role in making liveable places. The objectives and mechanisms for the Tasmanian land use planning process are directed to establish the conditions needed to maintain and increase the liveability of places. Planning is to manage growth and change and facilitate appropriate land use to ensure the economic, social and cultural prosperity of communities is in balance with environmental and biodiversity healthy and protection.

-

² Infrastructure Australia Major Cities Unit

Cradle Coast Regional Land Use Planning Framework

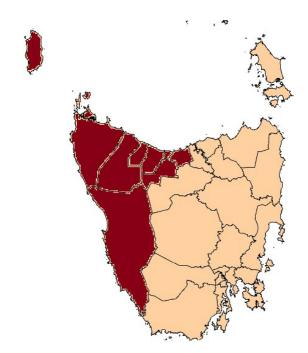
However, land use planning does not have an exclusive responsibility for liveable places, and it cannot initiate physical, economic or social activity. The Tasmanian land use planning system therefore requires land use planning be coordinated and integrated with the strategies, policies and programs of other agencies, and with the actions and views of industry and the community for managing natural, economic and human resources and needs of the State.

The objective of the Cradle Coast Regional Land Use Planning Framework is to assist the liveability of the Region.

6. Constructing the Framework

6.1 The Cradle Coast Region

The Cradle Coast Region is a regional planning unit for the purposes of the *Land Use Planning and Approvals Act 1993* and comprises the entirety of the geographic area for each of the municipalities of Kentish, Latrobe, Devonport City, Central Coast, Burnie City, Waratah Wynyard, Circular Head, West Coast and King Island.



6.2 Understanding the Present

The Cradle Coast Region occupies the western third of Tasmania and the western Bass Strait islands and contains an area of 22,520 km².

The Region contains the local government areas of Kentish, Latrobe, Devonport City, Central Coast, Burnie City, Wynyard Waratah, Circular Head, West Coast and King Island.

The Region is affectionately known by those who live here as "The Coast".

The Region is a relatively discrete and self-determining place in geographic and settlement terms. However, it is also an integral and un-severable part of the island state of Tasmania in economic, social and cultural terms. There is a strongly and unavoidable level of inter-dependence between

Cradle Coast Regional Land Use Planning Framework

the region and other parts of the State, and the communities of the Cradle Coast Region continue to identify and participate as part of the community of Tasmania.

It is in large part a wet, remote and rugged place; but otherwise it is a place of moderate maritime climate, and of accessible and habitable landforms.

It is a place of outstanding and diverse natural attraction and unrealised potential.

It is a place where settlement exists in close proximity with an expansive wilderness and highly productive renewable and non-renewable natural resources. The Region contains a variety of accessible natural and cultural landscape attributes which supports distinctive ecological, economic and cultural activity, and provide the foundation for an enviable lifestyle.

It is a place where population numbers are relatively small and stable at 112,000, where immediate prospects for growth are low at less than 1%, and where demographic trends reflect national movement toward an ageing population. It is also a place where families continue to form the dominant household type, where inward migration includes a significant proportion of people in the workforce, and where home ownership and housing accessibility remain high.

It is a place where settlement densities are low and dispersed. Where there is no single dominant centre, where the established settlement patterns concentrate 70% of the population into the northern coastline to provide a network of small-scale well connected individual towns, and where there remain a number of small but crucial centres in remote and isolated locations. Yet it is also a place where daily requirements and specialist needs for education, health, retail and recreation are readily accessible.

It is a place where primary economic activity is strongly export orientated and aligned with resource use; where businesses are small-scale. A place where sustained prosperity in all economic sectors requires diversification and innovation to counter vulnerability to shifts in global economic circumstance and market trends, transportation and supply chain costs, and to internal population trends, characteristics and skills. It is also a place where shifts in global perspective and climate provide advantage for agricultural, renewable energy and mineral production and security; and where lifestyle attractions have potential to support new and innovative enterprise as digital communication capacities expand.

It is a place that while relatively remote is well connected both internally and externally with transportation, energy and communication systems; where there is a high level of personal mobility and reasonable access to a range of community facilities.

The exception is King Island which both historically and geographically has special characteristics shaped by its remoteness and inaccessibility. While clearly part of the region, and with much in common with other remote parts, King Island is unique in being separated by 86 kilometres of Bass Strait which constrains its linkages to the main centres and services of the Cradle Coast and the other parts of the State.

It is a place where cultural history and collective values respect the significance of healthy natural systems for economic and lifestyle advantage.

It is a place where participation, social inclusion and community identity are important, and where innovation and resourcefulness promote resilience and adaption to changing circumstance and emerging challenge.

It is a place in which the advantages of landscape, community and existing investment are recognised to provide a substantial and secure capital on which to maintain and improve a diversified and robust economy, liveable and efficient communities, and a clean and healthy environment to the betterment of all.

Cradle Coast Regional Land Use Planning Framework

6.3 Acknowledging External Policy Influences and Drivers

Planning for land use in the Cradle Coast Region must acknowledge policy initiatives which govern wider areas and include the region.

The Tasmanian government has committed to a number of national agreements and State strategies which seek to better position government and communities to address challenges of the future with objectives relevant to the purpose of land use planning.

These include national undertakings with respect to -

- nationally significant infrastructure such as transport corridors, intermodal connections, and major communication and utility infrastructure, including the National Broadband Network which has an early stage rollout in the Cradle Coast Region
- population growth, distribution and composition³
- economic productivity and a global completive economy⁴
- climate change mitigation and adaptation, including access to scientific data and to common standards for planning and implementation of adaptation measures⁵, energy efficiency and renewable energy sources
- capacity and efficiency of transport networks to move people and freight for employment and trade⁶
- adequate, secure and reliable energy sources and supply
- adequate, appropriate and affordable housing
- protecting biodiversity and the life supporting properties of natural systems⁷
- addressing the economic, social and physical consequences of demographic change, including continued aging of the population
- ensuring adequate water supplies through water and waste water management and improved methods for consumption⁸
- provision of social infrastructure, including health care and education
- affordability, efficiency and liveability of urban centres, including measures for urban expansion, transition to higher population densities, levels of internal transport congestion, dysfunctional infrastructure, social inclusion and active and healthy communities⁹

³ Commonwealth Sustainable Population Strategy

⁴ Council of Australian Governments National Partnership Agreement to Deliver a Seamless National Economy 2009

⁵ Adapting to Climate Change in Australia 2010; National Partnership Agreement to Support Local Government

and Regional Development

⁶ National Freight Strategy; National Ports strategy 2010; National aviation Policy 2009; Nation Building Program; Regional Development Fund

⁷ Environmental Protection and Biodiversity Conservation Act 1999; Natural Resource Management

⁸ National Water Initiative Planning Principle 2008

⁹ National Urban Policy 2010; COAG Capital City Strategies; Healthy Spaces and Places

Cradle Coast Regional Land Use Planning Framework

 the unique circumstances of King Island are also reflected in a range of 'island' specific strategies and plans – such as the Regional Development Australia Economic Recovery Strategy and the Department of State Growth's Transport and Shipping Plan

In addition, the Tasmanian government has initiated strategic planning processes with implication for regional land use planning, including –

- Tasmanian Infrastructure Strategy 2010 and related programs
- Tasmanian Framework for Action on Climate Change
- Tasmanian Economic Development Plan
- Tasmanian Health Plan 2009
- Better Planning Outcomes

The Framework strategies and policies seek to reflect and deliver the objectives identified for strategies and programs of national and state significance.

6.4 Cradle Coast Vision - Imagining the Future

The Tasmania Together vision statement provides -

Tasmania is an island community, unique for its natural and cultural environment, where people enjoy a prosperous lifestyle based on quality, creativity, and opportunity.

The Cradle Coast Region is part of that island community and contains many of its unique natural, cultural and community attributes.

It is appropriate that the Regional Land Use Planning Framework reflect the vision for Tasmania and identify a future where —

- a. The Cradle Coast Region is a sustainable and dynamic place, where a diverse and secure economy remains competitive in a global environment by building on responsible use of natural and cultural advantages and reflecting big new ideas
- b. The Region's communities and centres are individually distinctive, but are also well connected, attractive, efficient, healthy, safe and viable. Communities offer a choice of options as accessible, functional and affordable places in which to live, work, visit and invest
- c. Communities celebrate their personal and collective identity and connectedness, value their health and well-being, and accommodate the rights and interests of all
- d. There is a culture of innovative and long-term thinking, with ready access to information, knowledge and learning promoting confidence and enabling creative actions that influence change and continuously prepare for the future
- e. The Region's air, water, land and complex natural systems, wild and human landscapes, economic and renewable resources, and social and cultural values are understood, respected and well cared for
- f. Coordinated action within and external to the Region delivers positive outcomes for land use and resource management, infrastructure and service provision, adaptation to climate change, and transition to renewable energies and efficient technologies

Cradle Coast Regional Land Use Planning Framework

6.5 Shaping the Cradle Coast Land Use Planning Framework 2010 - 2030

In the Cradle Coast Region there is a level of on-going change and emerging challenges in population and economic activity and in attitudes to place management. This is sufficient in the context of national and state initiatives to support a rethink on how we prepare for and manage the use and development of land and natural resources within the region, and consequently at municipal level. This is particularly relevant to alternative approaches that recognise the unique circumstances of King Island. Therefore, it is important that the Cradle Coast Regional Land Use Planning Framework enables a contemporary strategic response to emerging issues with a flexibility to respond and adapt to changing circumstances.

There is a practical benefit in challenging existing assumptions and in embracing big new ideas. If land use planning is to deliver sustainable development and meaningfully assist in leveraging regional advantage it must reconsider the shape and response for how the Region is to grow and change.

The Cradle Coast Regional Land Use Planning Framework provides a medium-term strategic perspective for policy direction on matters of regional interest related to land use and development within a planning horizon of 20 years.

The Framework seeks to ensure land use planning can support the use, development, protection and conservation of land. It will do this in a manner that creates opportunities and improve attraction of the Region as a vibrant place in which to live and invest.

The Framework supports regional aspirations for building strong, prosperous and sustainable communities. It describes desired outcomes and policies to reflect shared regional values, to shape and inform collective actions, and for making choices which balance the use, development, protection and conservation of land over the next 20 years and beyond.

The Framework recognises the realities of the Cradle Coast Region as a vast and varied place where individual communities, activities and environments each face different opportunities and challenges dependent on factors such as population, economic activity, rate of growth, and physical and natural conditions. The Framework accommodates these differences and is based on planning principles that apply for all communities across the Region.

The Cradle Coast Regional Land Use Framework -

- Promotes regional land use policies that respect the natural environment, facilitate a robust and successful regional economy, provide liveable communities and a sustainable pattern of settlement, and guide new use and development toward a secure and prosperous future
- Consolidates and aligns land use planning with related strategies for economic, social, environmental, conservation and resource management applying for the Cradle Coast Region and places them into an overall context of an integrated regional land use strategy
- Provides a basis for the coordination of future actions and initiatives related to the growth and development of the Region and promotes arrangements which optimise benefit for regional communities
- Initiates a regional land use planning process to provide a strategic regional perspective and a coordinate framework for consistent regulatory action
- Recognises the broad similarities across the region are also complemented by the unique location and characteristics of King Island which may warrant a place specific modification to the regional strategic outcomes due to its remoteness and different economic experiences

PART B

Knowing Our Place

Profiling the Region

This section provides an overview of the planning considerations of significance for land use planning in the Cradle Coast Region.

Part B provides a description of key regional characteristics and explains their relevance for land use planning in the context of national and State policy and statutory requirements.

The Part does not purport to be an exhaustive examination of all relevant matters. Readers seeking more detailed explanation are directed to the Bibliography.

Knowing Our Place is a background for introducing the issues to be contained in the Cradle Coast Regional Land Use Strategy contained in Part C.

While an intrinsic part of the region, the remoteness and unique circumstances of King Island have resulted in a higher degree of self-reliance and a mix of economic activity and land uses within a small geographic area. This indicates that different strategic approaches may be warranted to ensure equitable and appropriate delivery of the desired Strategic Outcomes contained in Part C.

1. Where We Are

The Cradle Coast Region contains 2.26 million hectares, or approximately one-third of the Tasmanian land mass.

It comprises the whole of the western portion of Tasmania and the western islands of Bass Strait.

The Cradle Coast Region comprises the nine local government municipality areas of Burnie City, Central Coast, Circular Head, Devonport City, Kentish, King Island, Latrobe, Waratah Wynyard and West Coast.

The Region is relatively remote, being some 300km from Hobart and 100km from Launceston at its nearest point, and is separated from mainland Australia by the waters of Bass Strait. In addition, King Island is also separated from the rest of the State by the waters of Bass Strait.

The majority of the Region is comprised of rugged, elevated and deeply dissected landforms constituting the western and north-western flanks of the central Tasmanian plateau and the south-western mountain ranges. These are fringed at their western and southern margins by a high-energy coastline of rocky points, cliffs and wide sand barriers to the Southern Ocean.

These largely undisturbed and high rainfall areas contain a complex diversity of geophysical, habitat, scenic and recreational resource. They represent many of the State's most significant conservation areas, incorporating highland, plateau, wild rivers, forest and coastal environments. The southwest contains extensive areas of high value economic resource, including a system of

23

Cradle Coast Regional Land Use Planning Framework

hydro-electric storage lakes, high-concentration deposits of mineral ore, wild and cultivated fish stocks, native species forest, and non-protected wilderness.

The northern coast line is a more benevolent place, with milder climate and gentler terrain. The majority of the Region's population and the larger part of its economic activity are focussed into the narrow coastal plain and low elevation ridges and valleys.

The Region's varied landforms and environment impart a strong wilderness, coastal, and rural identity and give it a distinctive settlement and community character.

2. Natural Systems

Healthy natural systems are the foundation for sustained economic prosperity and liveable settlements.

Much of the physical, economic and social character of the Cradle Coast Region is derived from its significant and varied environmental features, natural resources and cultural heritage.

The physical features and natural resource which impart the Region's distinctive natural character are well described in the Cradle Coast Natural Resource Management Strategy 2005; and addressed in the draft Natural Resource Management Strategy 2010 -2015, and in the reserve management plans applying for expansive areas of conversation value land.

Natural assets are defined to mean any natural resource or landscape feature that has economic, social or environmental value, and comprise the elements of –

- climate
- air
- water including surface and ground water, and freshwater, estuarine and marine areas
- land including fertility of soil, minerals, geology, and the less tangible cultural values attaching to landscape
- biodiversity including terrestrial, freshwater and marine ecosystems for plants and animals

Natural assets are strongly inter-connected, and individual elements cannot be separately considered without consequence for the balance.

The Cradle Coast NRM Strategy 2005 notes the Region's abundant natural resources under-pin its industries, including agriculture, fisheries, forestry, mining, hydro and wind energy and nature based tourism; and are essential for the health and lifestyle of its people.

These attributes are at the centre of many value statements, and hold deep meaning for people within the community. From the aesthetic value of landscapes to the productive capacity of water and soils; from the life-supporting function of healthy ecosystems to the benefits available in accessing, exploring, caring for, and/or generating economic return from the natural environment – the relationship between people and land is pervasive and complex. The natural environment is never remote or inaccessible and will remain a core consideration for most land management decisions.

Strategies for settlement and development inevitably promote opportunities for population and economic growth and an increased and continued demand for access and availability for land. Significant natural values can be readily threatened, compromised or destroyed by a wide range of settlement and development actions.

Cradle Coast Regional Land Use Planning Framework

Planning must have regard to maintaining the carrying capacity of the Region's natural systems. It must manage the cumulative impact of increased settlement and economic activity on the capacity and health of natural systems to provide sustainable life support for an increased population and demand for resources. There must be a focus on long-term viability as well as immediate opportunity.

Planning must consider the threshold limits at which the performance of natural systems and their attached cultural values may fail. Strategies are required which define limits and manage the rate and scale of change.

Healthy natural systems have by size, intactness and diversity, an ability and resilience to support natural processes and provide ecological services to the Region's natural and human communities. Large tracts of natural systems remain inaccessible and undisturbed.

Some 1.33m ha or 60% of the Region's land area has international, national or State protected status because of the uniqueness or importance of its plant and animal communities and geological features. The majority of conservation lands are located in the often inaccessible south western section. Conservation areas include the iconic Cradle Mountain/Lake St Clair, Franklin/Gordon Rivers National Parks which form part of the Tasmanian Wilderness World Heritage Area, the Arthur Pieman Conservation Area, and the land unit recently recognised as the Tarkine natural area. There are also recognised sites within the northern coastal area and on King Island, including Savage River, Narawantapu and Rocky Cape.

Conservation reserves are managed under a system of statutory or non-statutory management plans administered through the Tasmanian Parks and Wildlife Service. The purpose of each plan is to set binding objectives for the protection of natural values and to identify the level of human access and use.

Approximately half the Region's State forest reserved is allocated for conservation purposes and excluded from timber harvesting. These areas provide comprehensive, adequate and representative protection for specific communities of plants and animals.

Management objectives and actions to protect natural values and mitigate threat for lands outside the reserves system are detailed in the Cradle Coast NRM Strategy.

Notwithstanding the large physical size of the Region and its relatively low population densities, the land availability and accessible for growth and development is limited. It is necessary that land use planning optimise use of the land already converted to settlement and economic purposes in manner that does not intrude upon the values of natural areas.

The Framework must recognise that the condition of the Region's environmental, cultural and resource assets will continue to provide a foundation for the physical form, lifestyle and economy of the Region. Core environmental values must be maintained without unnecessary and unreasonable affliction.

The primary challenge for retaining health of natural systems is associated with the need to sustain rigour in economic and human activity. Protection of natural resources equates to protection of economy and population. Continued access to develop resource assets such as timber, water, extractive materials and minerals, and the productive properties of soils, and to land for settlement, industry and infrastructure, must be retained for the benefit of future generations.

The nature of events with potential to impact on performance and health of natural systems are both physical and biological. Such events include climate change, continued change in land use, increased population, encroachment on terrestrial and aquatic habitat by economic and settlement activity, inappropriate land use and uncoordinated management practices, inadequate strategic planning, and changing community knowledge, values and aspirations.

Cradle Coast Regional Land Use Planning Framework

Conserving and protecting the intrinsic value of healthy natural systems is the responsibility of many agencies and is a core principle underlying national, state, regional and local planning systems.

The Regional Framework must acknowledge the effect population and economic activity have on natural systems, and provide mechanisms to more specifically align and coordinate regional land use plans to protect and enhance viability of the Region's ecological infrastructure.

The Framework must direct settlement away from areas of high conservation or significant natural value, and ensure new development does not either directly or indirectly impact on sensitive environments.

Natural systems and processes, and the life supporting properties of air, water and land, must be recognised and appropriately managed for the protection of terrestrial and aquatic ecological process and biodiversity and to support human communities and economic activity.

Much remains unknown or uncertain about the characteristics and sustainable capacity of the Coasts natural systems, particularly outside protected areas. Continued research and policy development is required to achieve sustainable management outcomes. Accordingly, the land use planning framework must take a precautionary approach and seek to minimise the likely impact of settlement and land use on natural systems.

2.1 A Changing Climate

Climate determines the character of the environment and the nature of localised ecological processes upon which life and survival are dependent.

Climate also determines relative attraction of the Region for human settlement and the manner by which land and resources are used and developed.

The climate of the Region is temperate maritime. Rainfall is generally reliable and seasonal distribution is for with wetter winters and drier summers. Rainfall is highest on the central plateau and along the west coast. Temperatures are mild along the northern coast, but become more extreme with elevation and falling latitude to include areas of alpine conditions.

Settlement	January		July		Average Rainfall
	Min °C	Max °C	Min °C	Max °C	
Currie	12.5	20.3	7.8	12.9	900mm
Burnie	12.6	21.0	5.9	12.7	950mm
Strahan	10.6	20.5	4.8	12.1	1655mm
Waratah	6.3	17.6	0.8	7.2	2180mm
Queenstown	8.3	21.0	2.4	11.6	2404mm

The Region's climate has allowed development of varied ecosystems from lush wet temperate rainforest to high alpine meadows. It facilitates viable forestry and agricultural production, and hydro-electric generation. It allows a pleasant and relatively risk free environment for human settlement.

The government of Tasmania has accepted there is overwhelming evidence of global climate change and that the primary cause for such change is human activity.

Cradle Coast Regional Land Use Planning Framework

Current predictions¹⁰ indicate the immediate effects of climate change in the Cradle Coast Region will be relatively benign by comparison with other parts of Australia. There will be a slight increase in temperature, with fewer frost days and hotter summers; rainfall will increase marginally in the north but significantly along the west coast, although distribution will result in drier summers and more intense rainfall and severe wind events, and higher temperatures will increase water loss and reduce availability. Sea level will rise, and storm surge inundation will occur over a wider area.

Continued development of detailed modelling will more accurately establish localised change, and to allow quantifiable assessment of impact on natural and human systems.

Preliminary indications suggest climate change outcomes may –

- increase vulnerability of low lying and soft formation coastal shorelines, including in coastal
 estuaries and wetlands, and in existing major settlement areas such as Devonport, Ulverstone,
 Wynyard and Sisters Beach, to inundation and erosion through sea level rise and storm surge
 flooding; with implications for safety of people, property and natural ecosystems; and for
 continuity of fixed infrastructure, including major road and rail transport corridors and
 localised underground assets such as water supply, sewage and stormwater drainage systems
- reduce reliability of natural water availability in summer periods; with consequence for environmental stream flows, and likely increased demand for water storage and redistribution to meet agricultural, industry and urban requirements
- increase seasonal temperatures and heat-wave periods, with stress on human health, plant
 and animal production, native vegetation communities, and elevated risk of wild fire in both
 native and exotic forest and vegetation areas, and peak demand on energy supplies
- increase frequency and intensity of storm events producing wind damage and localised flash flooding, with implications for community and property safety, disruption to energy and transport movements, and emerging pressures for improved protection and mitigation works
- create environments conducive for introduction of flora and fauna pests and diseases into Tasmania, with consequence for human and environmental health, and for plant and animal production
- require the introduction of climate change mitigation and adaptation policy measures with implication for the continued availability and cost of carbon fuels, obligation and incentive for improved energy efficiency, and requirements for alternate and renewable energy sources

The immediate impacts of climate change provide relative advantage for the Region against other parts of Australia in terms of continued security for agricultural production, threat to human health and safety from extreme weather events and exacerbated severity of natural hazards, introduction of disease vectors, and demand on energy and emergency response.

However, the Region cannot be complacent about climate change. Climate change has implications for the economy, communities, natural systems and the built assets of the Region. Mitigation and adaptation measures to address climate change must be incorporated in the Cradle Coast Regional Land Use Strategy.

Climate change is a challenging contemporary issue, which is testing the boundaries of how far planning policy and practice can be used to meet communities' expectations. At a practical level, planning is in many ways an ideal tool to respond to the effects of climate change given its broad scope of application and reach and its relative flexibility as a tool to control land use and development. Nevertheless, planning was not specifically designed as a mechanism to tackle climate change and there are valid questions about its appropriateness in this regard.

¹⁰ Climate Change Futures for Tasmania 2010

Cradle Coast Regional Land Use Planning Framework

The Framework can best address the challenges arising from a changing climate as an overarching consideration rather than as a discrete policy area and specific actions.

The pattern, intensity and efficiency of human settlement, land use change, and associated infrastructure provision are credited with both contributing to the cause of climate change and holding the key for mitigation. While land use planning has much influence on these outcomes, it is not solely responsible.

"The Government recognises that planning can ameliorate the effects of climate change by managing the form and density of urban growth, and facilitating more efficient uses of energy, transport and land. Planning can also be used to restrict development in areas prone to flooding, storm surge or sea level rise, and ensure that essential infrastructure is relocated or protected from severe weather events. The three regional planning strategies give strategic direction for future land use, transport and infrastructure development. They will consider increasing the density of development, encouraging a greater mix of uses, minimising impacts on natural areas, and avoiding areas subject to climate hazards such as sea level rise, storm surge, flooding and bushfire."

Many public policy and private actions contribute to the shape and function of land use.

The role for planning in addressing climate change is clearest in the context of climate change adaptation. Planning is an adaptive function, responding to the challenges of the day. Assisting communities to adapt to the effects of climate change is entirely consistent with this function.

However, the role for planning in the context of mitigation is less clear. Mitigation involves proactive actions taken to reduce greenhouse gas emissions. While planning has a legitimate role to play in mitigation local planning rules that are inconsistent with national mitigation action are not desirable and run the risk of increasing the national cost of mitigation and deterring appropriate developments.

In the case of hybrid action that has both adaptive and mitigating benefits, planning would have a clearer role to play in ensuring that the action in question responds to the effects of climate change than aspects of the action that seek to mitigate the effects of climate change.

It is difficult at this time to propose detailed standards supported by empirical and policy positions for climate change cause or consequence. The capacity for land use planning to provide clear prescription is complicated by continued lack of scientific certainty for detailed action on climate change, and the absence of an agreed methodology and coordinated policy priority for climate change action¹².

The Framework policies seek to assist transition to a low carbon environment and reduced carbon emissions in accordance with the State government's targets¹³. Policies are included which contain and promote compact settlement patterns, minimise land use change to protect carbon stored in natural systems, and optimise infrastructure use. The Framework includes outcomes which promote renewable energies and recycling, energy efficiency, water sensitive urban design and active transport communities. These policies aim to assist to avoid, mitigate or remedy some of the causes for climate change.

The Framework includes economic and infrastructure policies which promote the advantages to Tasmania under climate change for agricultural production, carbon capture and storage, and renewable energy.

¹¹ Tasmanian Framework for Action on Climate Change

¹² A methodology for identifying the risks and assessing the vulnerability of Tasmania's municipal areas to climate change is currently in preparation through the <u>Implementation Plan for Future-proofing Tasmania's councils: A regional and land use based approach to climate change adaptation project, expected for release in March 2012</u>

¹³ A 60% reduction on 1990 levels by 2050

Cradle Coast Regional Land Use Planning Framework

The Framework also recognises climate change may exacerbate existing and introduce additional risks to the health and safety of people and for built assets and natural systems. It includes policies which are directed at adaptation measures in response to sea level rise, storm events, bushfire, flooding, and land movement or erosion.

2.2 Air Quality

Atmosphere or air is a core requirement for life.

The Cradle Coast Region has some of the cleanest air in Australia.

Air degradation within the Region is localised, with incidents of nuisance and amenity impact rather than declared environmental pollution.

The primary air quality issue is the global problem of carbon emission and climate change.

The most appropriate planning response is to protect forest and other plant communities for their function in carbon sequestration, encourage a compact settlement pattern where dependence on carbon emitting transport miles can be reduced, and support development for renewable energies.

2.3 Water

Water is a critical resource for sustaining all life.

The continued availability of both fresh and saline water of appropriate quality and in sufficient quantity is essential to meet diverse human need and to maintain health of ecological process.

High rainfall, particularly on the West Coast, provides abundant fresh water within the Region.

Water is naturally transported and contained in rivers, lakes, wetlands and groundwater; all of which support a variety of aquatic and terrestrial ecosystems; and provide a resource for ecological function, raw drinking water, agricultural irrigation, industrial processes, energy generation and recreational use.

The 21 major river catchments are generally steep, and flow either northward or westward. While there is considerable disturbance in most catchments, many include relatively undisturbed and contiguous to areas of natural landscape. All rivers are considered to have conservation value. Rivers are the major source of water for settlement and industrial use, and represent a potential hazard through flood and erosion for human settlement.

The Region's wetlands, including fresh, brackish and saline environments are important habitats. There are a number of sites of international RAMSAR and national significance for migratory birds and aquatic species habitat including Lavinia State Reserve on King island, and Robbins Passage and Boullanger Bay near Smithton.

There are a number of recognised ground water dependent environments located in the Region.

Changing climate and expanding patterns of settlement and economic land use have potential to increase demand and comprise quality and quantity.

The primary risk to water quality is modification in the catchment or channel and in flow rates. High nutrient and sediment inputs off farming and forestry land, litter and pollutant runoff from urban and disturbed forestry and mining catchments and acid sulphate soils, loss of biodiversity and encroachment on habitat are major threats to water quality.

Cradle Coast Regional Land Use Planning Framework

While rainfall may marginally increase under climate change predictions, distribution will result in drier summers, with consequence for natural stream flow, rainfall-based farming and demand on irrigation, and for urban and industrial use. These factors, together with changes in catchment land use, have potential to affect both quality and quantity of available water.

Meeting the competing demands on water and protecting water quantity and quality will require innovative approaches to new development and alternate management approaches for existing development using whole catchments as the minimum planning unit.

Settlement and development actions must seek to protect the source and quality of water and to assist outcomes which enable adequate and secure access to quality and quantity to meet all necessary and competing demands.

The Tasmanian State Water Quality Management Policy addresses both point and diffuse source discharge to manage specified water quality values for different categories of receiving water. The State Policy is supported by the Tasmanian State Stormwater Strategy with the objective to manage the rate and volume of discharge for urban stormwater and to minimise nutrient and suspended loads.

The Framework includes policies which seek to protect and enhance water quantity, quality, and security.

2.4 Land

Land is the foundation resource for terrestrial ecosystems and biodiversity and for human settlement and economic production.

Land is an exhaustible and non-renewable resource. Over 70% of the Region's land is in public ownership.

The Framework must recognise the intrinsic value and importance of land –

- for conservation being areas where size, condition, and diversity can provide significant value for retention in a natural state to protect biodiversity, ecological systems, aesthetic and geological landscape and spiritual value.
 - Some 60% of the land area within the Region is managed under a formal conservation reserve system.
- for production being land available for economic activity dependent on access to naturally
 occurring resources, including for cultivation, harvesting and extraction through activities for
 agriculture, forestry, mining and quarries, fisheries and marine farming, energy generation,
 and water catchment and storage.
 - 17% of the Region is used for agriculture and plantation forestry, and 10% is actively used as productive native forest. Some parts of the region, such as King Island (over 80%), have a much higher percentage of land used for agriculture.
 - The capacity to extend the areas available for primary production dependent on access to the resources inherent in land is extremely limited.
- for settlement being land converted to provide places for concentrated human activity, including for housing, commerce and industry, community development, recreation and utilities.

Cradle Coast Regional Land Use Planning Framework

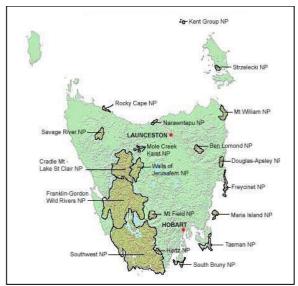
Less than 0.5% of the land within the Region is committed to urban and associated settlement activity. However, the process of human settlement has a disproportionate impact on the health and security of land as a resource.

Land is sensitive and vulnerable to disturbance. The health, productive value, stability and visual qualities of land can be rapidly and irretrievably destroyed through inappropriate use and management.

Development exposes land to risk of erosion and movement, decline in fertility, poor drainage, pests and disease, and decline in landscape significance through removal of vegetation cover, deep tillage and agriculture, and urban and infrastructure construction and management practices.

The challenge for planning is to optimise the use and development of land to retain capacity to accommodate settlement, facilitate economic activity and enable infrastructure provision, and to maintain the integrity of land as a natural resource.

Framework policies are proposed to recognise conservation areas, exclude use or development which has no need or reason to be on land significant for primary production, and to contain the demand for new settlement land.





National Parks

Conservation Areas

2.5 Biodiversity and Ecosystems

Biodiversity is the sum of all life forms and plays a vital part in managing the ecological health and resilience of water, air and land.

Biodiversity is an asset of inestimable value.

Decline in terrestrial and aquatic biodiversity can increase vulnerability of a system to failure and can have immediate and irreversible consequence for the health and viability of all human systems.

The Region's biodiversity is distinct and often unique. It includes 276 threatened species, many rare and ancient, in often unique and isolated ecosystems.

These resources can be threatened by vegetation clearing and fragmentation of native vegetation, introduced pests and disease, inappropriate use of fire, harvesting, and recreation.

Cradle Coast Regional Land Use Planning Framework

The regional, national and international importance of the Region's diverse, isolated and often unique natural systems has been extensively recognised for their biodiversity significance.

While biodiversity, ecosystems and the life supporting properties of air, water and land are specifically protected within declared conservation areas, the health of all systems is important for the Region, including in areas of remnant forest and non-forest native vegetation, in river and coastal systems and in settlement areas.

The Framework recognises the sensitivity of areas with biodiversity importance. It provides policies which ensure the extent, function and condition of biodiversity and ecological process is maintained in a manner that will enhance capacity to sustain habitat for dependent flora and fauna species and natural processes.

Policies for biodiversity also support and add value for economic activity and human settlement. Biodiversity is to be protected and enhanced across all land tenures and aquatic environments.

2.6 Coastal Areas

The Cradle Coast Region has 2640 km of coastline.

The region's coasts include exposed rocky shorelines, extensive unconsolidated sand dunes, and numerous estuaries, bays, features and off-shore islands, the largest of which is King Island.

The coast is a dynamic transition zone situated between a range of important marine and terrestrial habitats, provides significant landscape value, and is constantly exposed to impact and risk by coastal processes.

A healthy coastline is one which is constantly and directly influenced by the processes of the sea.

The State of Tasmanian defines the coastal zone to extend 1.0 km inland and available for conservation, economic and settlement purposes¹⁴.

Sections of the Region's coastline are recognised as an asset of national and international importance, including the RAMSAR wetlands on the far northwest and on King Island. Other areas, particularly estuaries and wetlands, are important as hatcheries and habitat for marine fauna and migratory birds.

Coastal land is also vital for economic activity and infrastructure and is the favoured settlement destination for residential and other urban uses. The coast provides the area of greatest potential for land use competition and conflict. It is the area most at risk to degradation of natural systems through modification of landform and landscape.

The coastal environment has been significantly modified along the Bass Strait coastline due to urban, resource and infrastructure development.

The topography of the Region's northern coastline is conducive for transport corridors, housing and industrial development, and is an area of milder and less extreme climate. A sizeable part of gross regional product is derived from land uses within the coastal zone. The off-shore waters provide some 50 species for a commercial fishery best known for its lobster and abalone.

The natural coast and its associated human investment is vulnerable to significant hazard from storms, inundation, erosion and alteration of habitat and landform resulting from human activity – particularly in low lying and soft shorelines. This situation is likely to increase under all climate change scenarios. High risk areas are sandy coastlines, wetlands, tidal marshes, salt marshes and estuaries.

32

¹⁴ Tasmanian State Coastal Policy

Cradle Coast Regional Land Use Planning Framework

There are problems experienced with developed sections of the coast that can be attributed to past and current action, including erosion and inundation.

It is important the coast be effectively managed to ensure the safety, function and amenity of urban development and economic activity, and the improved of health natural systems.

Areas for urban, rural, marine and recreation development must be identified and located away from sites of natural and amenity significance and high risk. This means the number of such areas will be significantly limited and non-linear.

Activity in the coastal zone must allow for natural fluctuation in coastal processes. Future use may require retraction of existing settlement locations and relocation of key infrastructure as more detailed risk assessment on coastal erosion and inundation is conducted.

High value natural assets on the coast are to be protected and managed for community benefit.

2.7 Natural and Historic Cultural Heritage

Recognition of heritage and cultural antecedents assists community to identity and connection with place and events.

The Cradle Coast Region has an extensive geological, flora and fauna, aboriginal, maritime, and historic cultural heritage, representing previous geological, ecological and climate activity, an extended period of Aboriginal settlement, and the more recent 200 years of western occupation.

Heritage is important as an indicator and explanation for how nature and human occupation has both modified the landscape and shaped the purpose and character of communities.

There are many tangible signals and remnants of the Region's historical pasts within its landforms and centres; and these require management in order to be both understood and protected.

The Framework does not provide discrete provision for Aboriginal heritage and historic cultural heritage. Rather, it promotes an awareness and protection of the past as important to the contemporary and future identity of all communities on the north-west coast.

The Framework does not specify detailed directions for consideration of Aboriginal heritage, or nominate landforms and sites of cultural value. The Framework is disadvantaged in ability to designate sites of Aboriginal cultural significance. Existing data is not comprehensive or publicly available, and predictive modelling systems have not been widely applied.

Framework policies imply consideration of appropriate management measures, including avoidance of development and growth opportunities in areas where heritage values are known to exist.

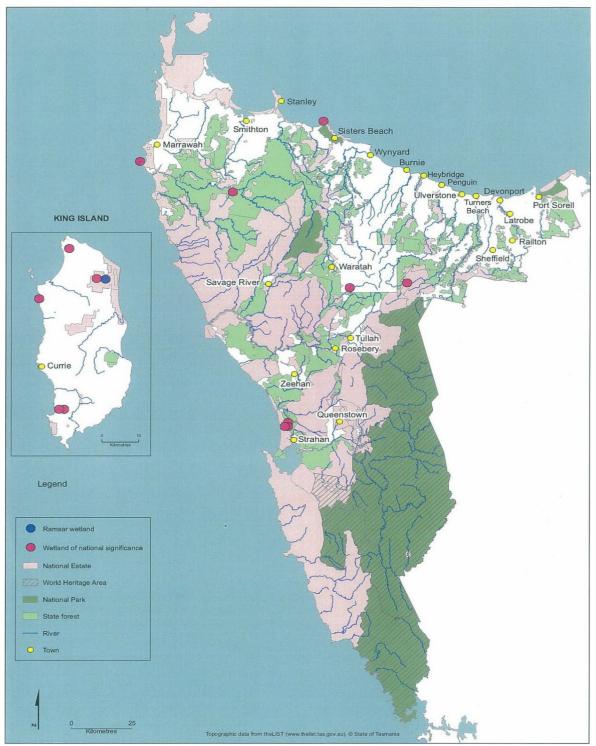
The Framework has been drafted in anticipation of broader reforms, including legislation to introduce better integration of land use planning with processes to identify, assess, and manage Aboriginal cultural values, and for the management of historic cultural heritage.

Directions for Natural Systems

The Cradle Coast Regional Planning Framework –

- safeguards the life supporting properties of air, water and land
- maintains and enhances the health and security of biodiversity and ecological processes
- provides sustainable access to natural resources and assets insupport of human activity and economic prosperity
- recognises and respects natural and cultural heritage
- promotes the optimum use of land and resources

NORTH WEST REGION - ENVIRONMENTAL FEATURES



3. Economic Activity and Employment

A strong and resilient regional economy is essential to sustainable settlement and development in the Cradle Coast Region and is the foundation for the health and well-being of the regional population and the environment.

3.1 The Nature of Economic Activity

The Region is geographically remote and sparsely populated. The pattern of economic activity across the Region is unevenly distributed and small scale.

The Region has insufficient internal scale and capacity to enable a closed-loop economic system and viable economic self-sufficiency. The regional economy is therefore dependent on participation as part of a larger State and national economic system and is focussed on export into domestic and international markets.

The economic base of the Cradle Coast is founded on resource industries and is augmented by manufacturing and a range of dependent tertiary, transport and specialty activities and capacity in tourism and renewable energy.

 Agricultural, mineral and forestry products have been the traditional mainstay of the Cradle Coast economy, and continue to engage over 8% of the workforce.

While small in area (376,300 ha) the Region's farm lands are disproportionately productive. Relative significance in terms of Tasmanian agricultural is high and is likely to increase in the face of continued population growth and climate change.

Plantation forestry has increasingly replaced old growth forest to underpin the Region's forest industry.

Mining remains of particular significant on the West Coast although activity fluctuates with adjustments in the resources market.

King Island has a unique economy reflecting its historical development and geography. This has resulted in a mixture of rural, extractive industries and tourist uses within close proximity across the island. While Currie provides for a medium level service centre, access to the higher level service centres of the region is reliant on air and sea transport links.

• Down-stream resource processing and manufacturing for a range of import replacement and export orientated products has supplemented primary production.

These industries support a significant proportion of the workforce at 14% in 2006; with about a third in food and beverage processing.

- A diverse range of commercial, community, professional and personal services have evolved to support industry and population needs.
- Employment opportunities continue to diversify and expand in the retail, hospitality and tourism, education and health, and recreation sectors to engage over 29% of the workforce.
 Continued growth will be commensurate with size of the resident population and retention of primary and secondary sector capabilities.

Cradle Coast Regional Land Use Planning Framework

- Tourism and visitor services reflect interest in the distinctive natural and cultural attributes of the region and the isolation of the region relative to other population centres. Tourism and visitor support activities are a significant and expanding component of the regional economy.
- There is a strong transport logistics function in the Region.
 - Regional freight and passenger transport capacity is critical to the State's economy.
 - Ports at Burnie and Devonport handle a large portion of import and export cargos for Tasmania, and provide a critical node for major road and rail transport connections to the State's north and south. The King Island Airport and the Grassy seaport provide the critical connection between King Island and both the rest of the State and Victoria.
- The Region's businesses are relatively small. Only 1% employing more than 50 people. 80% employ less than 20 people, and 58% having no employees.
 - 85% of employment is in the private sector, with a large proportion (2200 or 27%) involved with the agricultural, forestry and fishing sector.
- The Region's workforce has a relatively low formal skills profile but extensive on the job experience.
 - Less than 47% hold post-secondary qualification compared to a national average of 59% although the proportion is growing. Trade and engineering skills exceed national and State averages, a factor which reflects the traditional employment profile.
 - There is a significant gap between level of qualification and occupation, with over half the workforce in key industries having no formal qualification for the position held.
- Over three-quarters of the workforce are male and nearly 50% are in full-time work.
 - 65% of the workforce is aged over 35 although participation by those over 55 is below national average.
 - 47% of the workforce was not in the labour force at 2006, which is above national average and part-time work is increasing. Women make up the majority of those not in the workforce.

The nature of core economic activity, while diverse, is not exclusive to the Region. The Region is competing with resource based economies in other parts of Australia and internationally.

Nevertheless, the Region continues to show economic resilience. Job losses in some sectors (agriculture) have been balanced by gains in other (manufacturing, retail, health care) to retain relatively stable workforce numbers. The Region's economy survived the recent "global economic crisis" reasonably intact.

Industry	# of people employed	% of total employed
Manufacturing	6270	14.3 %
Retail trade	5163	11.8 %
Health care & social assistance	4365	10.0 %
Agriculture, forestry & fishing	3609	8.2 %
Education & training	3254	7.4 %
Accommodation & food services	2942	6.7 %
Construction	2869	6.5 %

Cradle Coast Regional Land Use Planning Framework

Industry	# of people employed	% of total employed
Transport, postal & warehousing	2571	5.9 %
Public administration & safety	2459	5.6 %
Wholesale trade	1679	3.8 %
Other services	1481	3.4 %
Administrative & support services	1468	3.4 %
Professional, scientific & technical services	1225	2.8 %
Mining	1084	2.5 %
Financial & insurance services	616	1.4 %
Rental, hiring & real estate services	472	1.1 %
Electricity, gas, water & waste services	385	0.9 %
Information media & telecommunications	379	0.9 %
Arts & recreation services	285	0.7 %
Inadequately described / not stated	1188	2.7 %
TOTAL	43764	100.00 %

There is no discrete economic development strategy or plan for the Region. A coherent capacity to effectively plan for and deliver economic development across the region has yet to be demonstrated.

The Tasmanian government is currently preparing a *State Economic Development Plan (EDP)* to provide a dynamic business and systems model for improving the prosperity of all Tasmanian's through development which is economically, socially and environmentally sustainable.

The EDP contains four goals -

1. To support and grow business

Create a competitive business environment conducive to entrepreneurism, innovation and success through positive fiscal and regulatory systems, assured access to workforce skills, and adequate infrastructure capacity and function.

2. To maximise Tasmania's economic potential in key sectors

Priority will be given to industry sectors which have –

- deep capacity and potential for sustained growth including food and agriculture, tourism,
 renewable energy, and information and communication technology
- greatest economic return and strategic importance for the future of Tasmania such as mining, mineral processing, niche manufacturing, marine, building and construction, scientific research, forestry, health and education

3. To improve the social and environmental sustainability of the economy

Assist the level of workforce participation through building on the knowledge, ability and energy of people in communities undergoing structural change or where there are limited existing employment opportunities.

It also seeks to maximise the natural attributes and environmental condition of Tasmania as an attraction and incentive for new investment, new business and new markets.

Cradle Coast Regional Land Use Planning Framework

4. To support and grow communities within regions through regional economic development plans specific to regional issues, challenges and opportunities

The approach reflects the highly decentralised nature of the Tasmanian population. It seeks to capitalise on local attributes and enhanced advantage in digital communication to provide constructive investment and employment options in locations where people live.

The *EDP* will have a strong regional focus and will underpin coordinated action to promote and support economic activity in Cradle Coast Region.

The proposed EDP goals suggest the Region should capitalise on these attributes and resources that are strategic, sustainable and unique and leverage existing capabilities to seek new, diversified and innovative opportunities –

- a skills base in resource development and processing
- an attractive and liveable environment and well-serviced centres
- availability and access to land and resources
- well developed transport systems and communication links both within and external to the Region
- reliable water supply
- a relatively benign medium-term response to climate change
- commitment to sustainability through conservation, resources management and renewable energy
- early access to the national broadband network
- a stable political and bio-security environment

The proposed EDP goals will assist the Region to counter negative perceptions often associated with investment in regional locations such as smaller capital gain, remoteness from major population centres, isolation from mainland and international markets, continued global economic adjustment, ageing or inadequate infrastructure, off-shore competition, changed market preference, rising energy costs and low population growth. They will also address regional shortcomings such as workforce availability and out-ward migration, uneven distribution of economic activity and employment, and the need to enhance business practices and technologies.

The Cradle Coast Regional Land Use Planning Framework recognises the importance of a robust economy. However, land use planning is not a mechanism for economic development. The Framework cannot of itself implement or provide programs or incentives that will deliver a prosperous and successful economy.

Land use planning can support economic development by policies which -

- Protect access to land containing natural economic resources
- Allocate land for manufacturing, processing, transport and commercial activity
- Buffer economic activity against interference and restraint from other land uses
- Protect capacity, function and security of infrastructure for communication, energy, transport and water

Cradle Coast Regional Land Use Planning Framework

- Promote liveable and sustainable communities
- Protect places of natural and cultural conservation value
- Ensure technical requirements and approval processes do not impose unnecessary cost on compliance or restrict competition and innovation

The core strategies for land use planning will identify land and assets necessary to support future economic activity; and to protect against encroachment by incompatible development.

3.2 Land for Biological Resources – Sustainable Access and Production

Land, water, vegetation and other harvestable biological resources are critical to economic activity in the Cradle Coast Region.

The Region's wealth has been largely derived from ready and abundant access to renewable resources, including timber, fish and water; and more recently the less tangible and spiritual value of landscape and wild places for tourism.

The major threats to sustainable production in a natural environment include impacts of climate change, depletion of non-renewable resources, and a variety of social and economic factors reflecting the attitudes and values of markets and communities.

The urgent need for national policy actions on climate change may require significant adjustment and present new opportunity for sustainable use of the natural resources of the Cradle Coast Region.

Managed production systems such as plantation forestry and aquaculture on public and private land play a vital role in supplementing wild resource and in transitioning from a native production base as areas of natural ecosystem are depleted or transfer to the protected estate.

The Framework polices are intended to allow continued access to natural resources and for development of alternate production systems.

3.2.1 Forestry

20% of the Region is in State forest reserves.

Continued access for sustainable production is provided under Tasmania's Regional Forest Agreement.

3% of the Region is under plantation forest. There is continued potential for private plantation operations to expand and to become more integrated with other agricultural practices.

Consideration must be given in the allocation of land for plantation forestry to the potential negative effects of increased plantation activity for demand on the water system, biodiversity, loss of food production land, increased fire risk and depopulation and social impacts on rural towns.

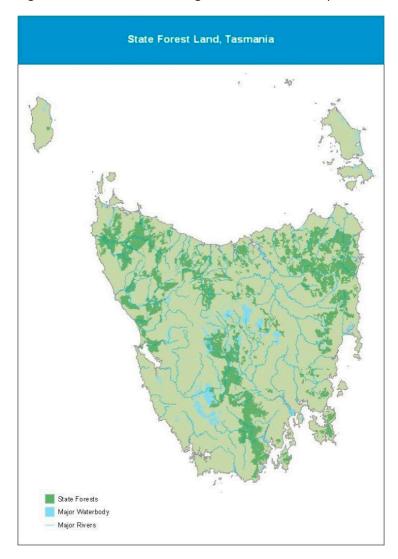
Management of forest practices is external to the land use planning system under the Forest Practices Act and the Forestry Act for private and State forests respectively.

The State has declared plantation forestry to be an agricultural use and requires the planning system allow plantation development on all but prime agricultural land.

Cradle Coast Regional Land Use Planning Framework

The Framework recognises forestry as a resource development of strategic importance to the Region's economy and provides that it be allowed equivalent status with other forms of primary industry.

The Framework recognises the value of forest vegetation for carbon capture and sequestration.



3.2.2 Fisheries

Harvest of wild fisheries for trawl fish, lobsters and abalone is a continuing activity.

Aquaculture is a strengthening industry for the Region, with ocean trout and salmon in Macquarie Harbour, and shellfish at Smithton and Port Sorell.

Careful location and development are required to address visual impact, ensure access to water, achieve waste management and avoid conflict with other settlement and natural resource uses.

Land must be identified to support managed production systems in locations where they will have minimal impact on and off-site and can maintain the productive capacity of the constituent areas.

Regulation on forestry and marine farming is largely outside Tasmania's land use planning system.

Cradle Coast Regional Land Use Planning Framework

The Framework can assist to ensure land significant for fishery production is identified and protected against encroachment and restraint from settlement and other use.

3.3 Land for Agriculture – Growing Food, Fibre, Fuel, Flowers and Pharmaceuticals

The State has mandated¹⁵ that land significant for agriculture will be conserved and protected for priority access and sustainable agriculture without unreasonable constraint or conflict.

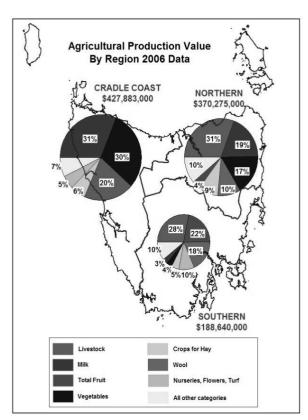
Agriculture dependent on the soil as a growth medium capitalises on the Region's combined natural assets of mild maritime climate, reliable high rainfall and fertile soils.

Some 376,300 ha or 17% of the Region's land mass is land significant for agriculture. It is an irreplaceable and non-expandable resource.

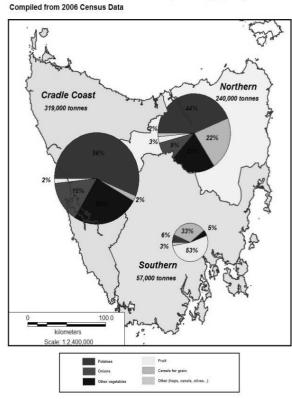
Norton (2009) has mapped the region's agricultural land and determined (2010) the level of impact from non-agricultural use.

The majority of the land suitable for farming has been developed to create a highly productive cropping and grazing system (21,500ha), livestock (283,400 ha) and plantation (70,500ha) systems.

This land occurs along the low elevation ridges and valleys of the northern coast from Cape Grim to Sassafras, and on King Island.



Annual agricultural production (tonnes) by region
Compiled from 2006 Census Data



42

¹⁵ State Policy for the Protection of Agricultural Land 2009

Cradle Coast Regional Land Use Planning Framework

The Region's agricultural land estate comprises 22% of Tasmania's total agricultural land. It includes 51,000ha or 50% of Tasmania's agricultural land classified as "prime" under the Tasmanian Land Capability Classification System.

Change and fluctuation in type and profitability of agriculture has occurred over time.

However, 52% of the State's total agricultural output in 2006 was from the Region, with values per hectare being 3 to 5 times those of other parts of the State.

The proposed EDP recognised agriculture, and particular food production, as a sector with deep capacity for sustained growth.

Farm sizes are not large. Relatively small farm holdings in the range 20-50ha make significant contribution to farm output, and holdings less than 5ha can generate viable revenues.

All existing agricultural land is significant to the Region. Factors for determining significance include

- size, scale, commonality, continuity, availability, and intactness of agricultural land as a geographic unit for agricultural use
- ability to replace with alternate agricultural land
- role, contribution, and degree of reliance on agriculture in the local and regional economy
- suitability for potential production based on factors such as climate, soil characteristics, water availability, and seasonal advantage, including in the range, intensity, yield, or uniqueness of particular activities (assessment includes but is not limited to land class under TLCS)

Significance for agriculture is not determined by -

- the size of individual holdings where forming part of a geographic unit of agricultural land
- the pattern of ownership for lots or parcels
- the current use of land, the level of improvement, or the standard of management

Analysis of agricultural land within the Cradle Coast Region indicates -

- agricultural land forms a number of close-spaced, contiguous geographic units located along the northern coastline and onto the adjoining lower-elevation ridges and valleys between Cape Grim in the west and Sassafras in the east, and on King Island
- agricultural land units are internally discontinuous; with land capability transitioning between higher and lower classes to reflect changes in terrain
- agricultural land units reflect the land already used for agriculture
- although connectivity is disrupted by steep narrow gullies, service corridors, and elements of non-agricultural activity, interruptions are not large-scale and agricultural land units are of sufficient scale and intactness to allow a predominance of integrated agricultural production
- there is an extremely limited capacity to expand the area of land available to agriculture due to
 constraints of elevation, topography, and conservation reserves although some 10% or 30,000
 ha of agricultural land (including much of the prime agricultural area) is in part occupied or
 directly influenced by non-agricultural use, the agricultural land units remain relatively intact
 and functional to sustain agricultural activity

Cradle Coast Regional Land Use Planning Framework

	Area of LGA	Cropping	Grazing	Plantation Forestry	Horticulture	Total	% Municipa area
Burnie	61,054	1,399	11,886	15,463	11	28,759	47.1
Central Coast	93,192	7,974	24,447	5,257	16	37,694	42.5
Circular Head	484,062	1,602	85,314	10,085	0	97,001	20.0
Devonport	11,430	1,888	3,487	33	139	5,547	48.5
Kentish	116,043	1,447	25,133	7,320	35	33,935	29.2
King Island	109,874	0	91,164	0	0	91,164	83.0
Latrobe	60,708	4,322	16,087	2,038	119	22,566	37.2
Waratah/Wynyard	352,916	2,851	24,529	30,338	0	57,718	16.4
West Coast	970,623	0	1,902	0	0	1,902	0.2
Regional Total	2,259,902	21,483	283,949	70,534	320	376,286	16.7

Proportion (ha) of each municipal area in the Cradle Coast Region under agricultural use

Source: Norton 2009

Although direct employment continues to decline, agriculture remains an important economic activity for the Region, and comprises a major part of the local economy in the Circular Head and King Island municipalities.

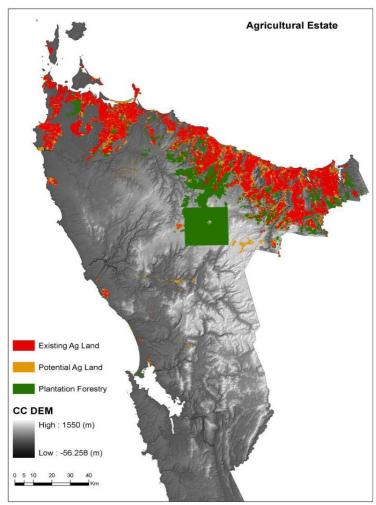
There is little doubt the agricultural lands of the north-west are of regional and local significance for agriculture; both as a natural resource and for the contribution they provide to the health of local and regional economies.

The situation is particularly evident on King Island where the island's economy is largely dependent on agriculture with over 80% of its land used for this purpose.

The importance of the land for agriculture may increase as the effects of climate change impact on mainland production zones, and as greater investment is made in irrigation to off-set expected variation in local rainfall.

Urban development has incrementally intruded onto the margins of agricultural land around the major centres.

An opportunistic pattern of rural lifestyle development has fractured intactness of the agricultural land estate by utilising its many small titles as house lots. Some 30,000 ha or 10% of land significant for agriculture (including the majority of prime cropping land) is estimated as potentially constrained by non-agricultural use (Norton 2010).



Cradle Coast agricultural land – (Norton 2009)

Notwithstanding, viability of agricultural land as a single resource unit to support sustainable agriculture remains strong.

State Government Policy for Protection of Agricultural Land reflects a community concern to protect and conserve the productive capacity of natural resources. It recognises all agricultural land is a valuable commodity as a growth medium.

The Policy seeks to prevent unnecessary and permanent exclusion of agricultural land and to minimise unreasonable risk for constraint on agricultural use by other land use, including urban expansion, industry, rural lifestyle living, and infrastructure development.

The Region's mild and stable climate, bio-security, established agricultural skills, processing, storage and transport infrastructure support potential for controlled environment and other intensive agricultural activity.

These activities are generally not dependent on the soil as a growth medium; and may have particular infrastructure, amenity and waste management requirements.

The primary consideration for the Framework is to protect and conserve agricultural land as a resource by indicating agriculture to be the priority use on land significant for agriculture, controlling activity which could permanently exclude land from opportunity for production, and minimising likelihood for non-agricultural use to constrain or conflict with agriculture.

Cradle Coast Regional Land Use Planning Framework

Planning has minimal concern to protect or promote any particular agricultural enterprise or to address the practices of farming.

The Framework policies proposes –

- all agricultural land be recognised as significant for agricultural use
- use or development that has no need or reason to be located on agricultural land is excluded
- the priority use of agricultural land be agriculture reliant on the soil as a growth medium
- recognize the isolation, historical development pattern and current economic circumstances of King Island require a nuanced approach to the use of agricultural land.

3.4 Mining and Extractive Industries

The Region is one of the most heavily minerilised locations in Australia, and contains an arc of high grade iron, lead, gold, copper, silver, zinc, tin and nickel ore deposits extending across the west coast into the far north-west and King Island.

Other extractive resources variously located across the Region, include silica flour, limestone (cement), construction aggregates and specialist stone.

These resources remain a significant economic advantage notwithstanding mining activity is vulnerable to global market fluctuations. The proposed EDP recognises mining as a sector with potential for high rates of return.

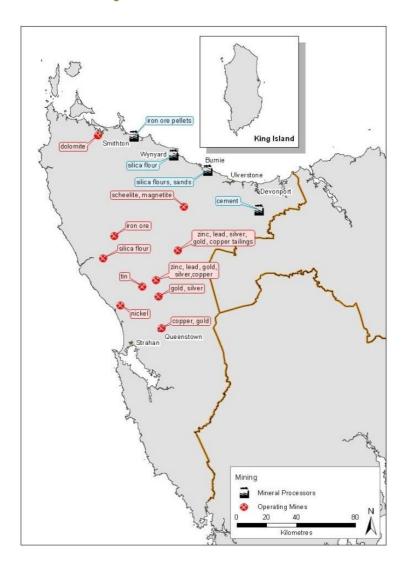
Many mineral deposits, although highly valuable, are small and occur in areas difficult to access.

Extraction can be impeded by encroachment of urban development, priorities for environmental protection, remoteness and ruggedness of terrain, social impact and acceptance, and management of spoil and waste.

It is unlikely that mining will again support the substantial residential population centres associated with its historic past. Mining towns such as Zeehan and Rosebery will cater to a largely transient workforce.

Land use planning can assist the mining sector by ensuring access to known resources and associated transport corridors is not constrained by encroachment of sensitive uses.

The Framework can assist to ensure mineral and construction resources are available for future use, and processing, transport and down-stream value adding can occur without undue restraint from settlement and other economic activity, and without adverse impact on natural and human systems.



3.5 Employment Land

Employment land are locations designated for clusters of industry, business, or other economic activity, including but not limited to manufacturing, processing, transport, storage, business and retail, institutions and tourism.

A core challenge for supporting economic activity is to ensure the right land is available in the right location at the right time with the right level of infrastructure and services.

Each industry type has distinct characteristics which determine land demand, location, relationship and infrastructure requirements.

The Framework is to ensure planning can provide for industry, business and commerce that is accessible, serviced with an adequate level of infrastructure, safe from natural hazards, buffered against sensitive land use, and does not compromise natural, cultural and community values.

3.5.1 Land for Manufacturing, Processing, Transport, Storage, and Servicing

There is an established processing industry base in value-adding primary resources, including for food, timber, pharmaceuticals and minerals. The Region has capacity to further expand value-adding in resource commodities despite recent closure of several major operators.

Cradle Coast Regional Land Use Planning Framework

There is also a niche manufacturing base associated with the fabrication of textiles and heavy machinery and components.

Outputs are destined for both domestic and international export markets. Export orientated industry can drive population growth and allied economic activity.

There is an established freight transport and storage sector providing essential support for freight movement and export and import activity within and beyond the Region.

Significance of the Cradle Coast ports for Tasmanian export/import trade has been enhanced by recent loss of international shipping functions from Bell Bay and the virtual closure of the Hobart port to cargo handling. Focus of road and rail transport into these destinations provides strategic incentive to build manufacturing and processing capacity within the Region.

The majority of existing manufacturing and transport industry is focused on the larger centres at Burnie and Devonport.

Resource processing industries are variously and more remotely located, including at Railton, Spreyton, Hampshire, Wynyard, Smithton and King Island.

Manufacturing and processing engage some 14% of the region's workforce.

All settlement areas include land for service industries orientated to support local communities. Activity is associated with building construction, minor fabrication, maintenance, repair, and cleaning. While this sector comprises the major proportion of individual industrial businesses, it is the smaller occupier of land, and has the lowest land demand. Service industries are not always exclusive to the local population. There is a capacity to service several communities from a single location.

The established pattern of designated industrial land use is highly fragmented and precludes identification of major industrial estates. It comprises small-scale locations, often inter-mixed and in close proximity to other land use categories. There is surplus land stock of varying size in most locations. There is a tendency in urban areas for all forms of industrial activity to co-locate.

Not all manufacturing and processing occurs on land designated under planning schemes for industrial purposes. Many resource processing activities are located in rural areas.

It is important that planning determines demand and identifies suitable locations for both local service and export industries. There is a strong distinction in the respective drivers for service, transport, and export orientated industry. Spatial distribution and land demand factors differ between the three main industry types.

The common location factors for industry are –

- proximity to resources
- adequate and available capacity and function in energy, water and waste disposal
- proximity to efficient freight transport infrastructure
- proximity to a skilled and available workforce, suppliers and available land with capability for industrial use and contiguous with other industrial uses
- separation from sensitive uses

Service industry requirements are largely driven by factors such as population growth, immediate proximity to the catchment population, strength of the local economy, and ability for

Cradle Coast Regional Land Use Planning Framework

complimentary association and aggregation to be operationally viable. Each settlement centre requires capacity for service activity on smaller sites (< 2ha) in a designated location accessible and buffered against conflict with other uses. Many existing arrangements in established areas are generally less than appropriate. However, incentive for major internal restructuring of urban spaces is low. Not all service industries rely exclusively on the local population. Many have a district or sub-regional.

Demand for service industry land over the next 20 years is anticipated to be low (SGS 2008) given predictions for population growth.

Whereas it is relatively straightforward to assume each settlement area will generate an internal need for service activity, and it is less certain to predict land demand for transport and export industry. Demand can be infrequent and lumpy. Recent closure of several large manufacturing enterprises, including at Smithton, Burnie and Wesley Vale, has released designated land for possible redevelopment, thus potentially down-sizing demand projections.

Major industrial land users cannot always be accommodated by standard industrial designations. Proximity to resource is a key consideration, and location within areas set aside for rural resource use is a viable option. Planning need be reasonably flexible to accommodate the specific requirements of individual industries. However, decision on resource processing and export orientated manufacturing should be directed to locations (rather than specific sites) where key site selection criteria can be satisfied.

Resource processing, manufacturing and transport and storage activities frequently require large and preferably green-field sites, and ready connection to major freight transport corridors and nodes, including State highways, rail, sea ports and air ports. There are a number of synergies to support co-location.

The Department of Economic Development (2008) estimate export orientated industry has a potential demand across the Region of between 130 and 160 ha in the period 2006 to 2011; differentially distributed. These estimates assumed continued expansion in export activity and did not take account of land released on withdrawal of established industries, including the paper mill sites at Burnie and Wesley Vale. The estimate also underplayed expansive industrial opportunity identified but not formalised at Port Latta. More recent analysis (AEC 2010) suggests the take-up rate for industrial land has been very low in recent year. Existing designated supply is anticipated as sufficient to accommodate trend need for at least the next 20 years.

The then DED analysis noted the primary constraint on access to industrial land to be -

- the small size and fragmented location of established industrial estates
- absence of available or adequate capacity utilities for under-developed and vacant industrial land
- proximity of many sites to established residential and other urban uses
- restraint on ability to expand in urban locations or over agricultural land

The proposed State EDP anticipates resource processing and niche manufacturing as key income earners. Work aligned to the EDP is investigating potential locations within Tasmania for future industrial use. The work indicates priority locations within the northwest, including at Port Latta, Wynyard, Burnie, Devonport and Railton. Preferred areas are based on location factors such transport advantage. Designation will enable coordinated action to plan and provide for availability of utilities and for management of relationships with land use values on land in the vicinity.

Cradle Coast Regional Land Use Planning Framework

Industrial site	Description				
Burnie Airport	Industrial estate adjacent to the Bass Highway.				
Devonport	Includes major food and dairy processing operations, light and heavy engineering, general manufacturing. Storage, logistics and distribution facilities are located in close proximity.				
East Ulverstone	Light industrial estate.				
Hampshire	Wood chipping and forestry operations.				
Latrobe	Light industrial estate.				
Smithon	The main processing hub for the far north west, with the surrounding area producing vegetables, dairy, meat, seafood and timber. Includes an integrated wood processing plant.				
South Burnie/Wivenhoe	Light industrial estate.				
Wesley Vale	Industrial site currently including a pulp and paper mill operation (which is to be closed in 2010) and light industries.				
Wynyard	Industrial estate adjacent to the Bass Highway.				

There has been a tendency for non-industrial uses such as bulky goods, large format retailing and indoor recreation to intrude into industrial areas. The attraction of large lots, cheaper land and ease of access provide advantage over other sites compete with uses for industrial land. Their presence has potential to displace or disrupt manufacturing, processing, and transport activity due to their different purpose and character. It is appropriate these forms of use be recognised and provided for in separate designated areas where there is a priority use for retail or recreation.

The Framework promotes -

- industrial use and development occur in locations where there is availability and adequate capacity in transport infrastructure, energy and hydraulic services and digital communication
- service industry be recognised as a commercial activity aligned to and located so as to support the function of individual or clusters of settlement
- resource processing, manufacturing, transport and storage are economic activity of regional significance located to optimise advantage in resource availability and strategic factors such as connection to transport and energy systems
- industrial locations be buffered against impact from adjacent land use and intrusion by nonindustrial use
- locations for future industrial development be identified in accordance with the regional components of the Tasmanian Economic Development Plan

3.5.2 Land for Retail, Business and Professional Service

Retail and service activity is a significant part of the regional economy.

Prospects for commercial and business activity are closely aligned to current and future population and to the capacity for economic activity to sustain a high proportion of the Region's workforce.

There is a strong public interest component in planning strategically for an aggregation of business and commercial land uses to support liveability and the wellbeing of communities. Designation of commercial centres allows ease of access to consumer goods and services and create places which provide a centre for community activity.

Cradle Coast Regional Land Use Planning Framework

Emphasis must be given retaining attraction and function of existing commercial centres. Policies must accommodate opportunities to provide a range of retail and business activity by enabling development that will enhance established character and identity. Capacity of a town centre to provide a vibrant and functional commercial space generates efficiencies in social, economic and infrastructure.

Land use planning must be careful to avoid restraint on competition and the efficient market function of commercial centres through requirements which direct or restrict entry and distribution in the type of commercial development in order to build capacity or protect viability of existing business.

Settlement structure planning should encourage appropriate and sensitive redevelopment and rationalisation. Expansion at the fringe of existing centres is preferred over new locations to concentrate retail and commercial activity into geographically confined yet highly accessible locations. New retail and business activity should be directed to existing commercial locations unless necessary to serve requirements resulting from growth in local populations.

Attention is required to avoid decline in attraction and performance of primary centres through dispersed provision of opportunity for bulky good and large format retailing on sites that are not contiguous.

Focusing high-order business and commercial activity into major centres at Burnie and Devonport; Latrobe, Sheffield, Ulverstone, Wynyard, Queenstown, Smithton and Currie will support on-going viability of these towns and assist sustained access by the Region's population.

It also provides incentive for effective public transport and provides a critical mass and synergies which attract other human and recreation services.

3.5.3 Land for Micro-Enterprises

Small business enterprises comprise some 80% of the Region's 7,000 individual businesses. 58% do not employ labour. The majority are in agriculture and primary production. However, the range of activity is expanding to include cultural, creative, knowledge based, and boutique activities reflecting tourism and lifestyle orientated undertakings.

There are significant opportunities for growth in this sector. Increased access to high capacity broadband digital information networks will further remove location dependency for microenterprises. It will increase opportunities and competiveness for businesses decisions involving lifestyle and liveability factors, particularly where linked to efficient freight and passenger systems.

This group of industry has no particular land demands. They are small scale, may be home-based, can exist as an adjunct to other activity, and provide an important employment source in remote and smaller centres. Micro-enterprises do not necessarily rely on a local resource or service a local market. These characteristics preclude ability for ready designation of discrete micro-enterprise zones.

Planning must be careful not to unreasonably and unnecessary constrain or render unlawful microenterprise. Provision for micro-enterprise must be integrated with policies supporting liveable and sustainable communities.

Cradle Coast Regional Land Use Planning Framework

3.6 Tourism

Tourism has a higher relative importance to the Tasmanian economy than it does in a national context, contributing almost 5% of GDP and employing some 6.2% of the workforce.

Tourism in the Cradle Coast Region continues to show modest but steady growth in visitor numbers, and accounted for some 40% of places visited and 20% of visitor bed-nights for visitors to Tasmania in 2010¹⁶. It has an important part in the economy and identity of the Region, and is a focus for activity in several centres, particularly for the more remote west coast and highland areas; and the major points of arrival for air and sea travel.

Tourism has moderated impact of fluctuation in other industries of the Region in recent years and has provided incentive to the Region's retail and hospitality sector.

In isolation tourism is unlikely to be the Region's primary economic driver for the future. However, it can provide incentive for new businesses, and for existing business to expand and diversify. It also has capacity to convert into other economic opportunities by stimulating activity and exposing attraction of the Region as a place to live, work and invest.

A successful tourism sector involves a complex inter-dependency of attractors, providers and support systems. The central strategies for tourism in Tasmania are contained in the plans and programs of the State, including the Tourism 21 – Strategic Business Plan 2011 – 2013; and are supported in the regional and local tourism strategies and marketing plans.

While the historic image of tourism in the Cradle Coast Region is as part of the Tasmanian experience, it is now adjusting to a more regional focus. A range of regional specific tourism strategies and marketing plans, including the Regional Touring Trails, promote a mix of nature, wilderness, cultural and epicurean experience; capitalising on wild and rugged mountain, forest and coastal places, and the cultural legacies of its mining, and the products of its agricultural traditions and population centres.

The Framework is best positioned to support Strategy 5 of the Tourism 21 plan which seeks to build destination capacity and improve infrastructure to enhance experience of place and increase economic yield, and to support the sector's objectives for environmental and social sustainability tourism.

The land use planning process is directed at supporting sustainable development of the Region's lands through the allocation and disposition of opportunities for use. In this regard it has direct relevance for tourism. The Framework acknowledges the major opportunities for tourism are those which build on natural and cultural heritage, lifestyle attractions, regional enterprises, and commitments to conserve and protect the Region's landscape and biodiversity attributes.

Regional land use strategies can manage competing land use interests to ensure tourism appeal in the natural and cultural attributes for key locations is safeguarded without disruption to function of other economic activity and social need. It can provide requirements that will ensure integration of tourism operations and facilities into local and regional communities without alienation and displacement. It can require provision of utilities which assure accessibility, and protect the health and safety of visitors. It can also ensure regulatory requirements and approval processes do not unnecessarily direct or constrain the location and nature of tourism development or burden the cost of compliance.

52

¹⁶ Tasmanian Tourism Snapshot, year ending December 2010 – Tourism Tasmania

Cradle Coast Regional Land Use Planning Framework

The Framework recognises many of the attractors for tourism in the Region are embedded in the natural attributes and cultural adaptations of the physical environment, and in the activities and products of its communities.

Although the Region contains international calibre sites at Cradle Mountain and Macquarie Harbour/Gordon River, many of the region's natural tourism advantages remain underdeveloped. There is a concerted regional tourism endeavour to build quality and expand the range or experiences through improvement in destination and product, with a particular emphasis on the Tarkine wilderness, mining heritage and food and wine.

Small operators typify much of the Region's tourism infrastructure; and continued growth depends on a high profile regional and subregional identity, and effective marketing and promotion to offset limits in inter-state transport capacity, a relatively short season, reliance on domestic travel, and competition from more exotic locations. Drivers for tourism relate significantly to consumer knowledge, opportunity and disposable income, the accessibility and effectiveness of marketing and packaging programs, and the experience of place.

The location and development of tourism related infrastructure such as accommodation and food can be supported by the land use process. However, such activity is not exclusively about the "tourist experience". It also serves lifestyle requirements in local and regional communities; supports business travel and family visitors; and has a dimension that integrates with other regional systems. In this regard tourism facilities can support liveability where they integrate with the structure and activity of settlement areas and service a wider need.

To the extent that tourism is recreation time spent in some-one else's backyard, the Framework does not need to specifically allocate land for exclusive tourism use. Integration of tourist facilities and accommodation into the general fabric and activity of centres and places is the preferred approach for enhancing liveability.

However discrete designation of land for major tourism infrastructure is appropriate, particularly within proximity of conservation areas to align with dedicated reserve management plans. Designation outside these locations will only be necessary where facilities are of a scale and nature exclusive to tourist purposes or require individual identification for management of values and function.

Directions to Support Economic Activity

Prosperity and liveability of the Cradle Coast Region is achieved through economically, socially and environmentally sustainable development.

Land use planning -

- facilitates regional business through arrangements for the allocation, disposition and regulation of land use which promote diversification, innovation and entrepreneurism and avoid unnecessary restrain on competition and cost for compliance
- promotes use and development which maximises the Region's economic potential in key sectors where it has deep capacity and potential for sustained growth and economic return or a clear strategic advantage
- improves the social and environmental sustainability of the State and regional economy by allowing economic development and employment opportunities in a range of locations while respecting the link between a healthy environment and a healthy economy
- supports and grows liveable regional communities through coordinating with State and regional economic development plans specific to the issues, challenges and opportunities of the Region and the specific characteristics of King Island

4. Settlement and Community – Liveable and Sustainable Places

4.1 Setting

The Region is a part of a small State with a small and dispersed population.

The settlement areas of the Cradle Coast Region do not form a continuum with settlement area in other areas of Tasmania. The Region's settlements form a discrete although dispersed unit with a strong common focus.

The Region's most intensive areas of land use and human occupation are concentrated on the gentler terrain of the lower elevation ridges and valleys and the long narrow coastal plain adjoining the coastline to Bass Strait. Here a combination of mild maritime climate, undulating landform, fertile soil, and reliable water supply has enabled a pattern of separate but well connected urban settlement and a cultural landscape in dramatic contrast to the rugged, remote and more extreme environments of the west coast and King Island.

A small but scattered population exists on the west Coast to service environmental, resource, recreation and tourism activities. Settlement on the far northwest and west coast is very low density, and each centre has its own attraction derived from relative isolation and immediate proximity to mountains and ocean wilderness.

The island Municipality of King Island lies to the north-west of Tasmania and forms part of the Region. The Island's small population (< 2000) and its economy are in large part directly reliant upon agriculture, although mining and tourism are also important. The Island's remoteness and reliance on air and sea transport create unique land use planning considerations.

4.2 Urban Settlement

Current urban development occupies less than 0.3% of the region's land mass yet has a strong visual and functional presence.

The nature and scale of established human occupation is characterised by a network of dispersed and discrete settlement centres, ranging in size from small rural localities to regional towns (20,000+), each with distinctive identity and set apart within a varied landscape of agriculture, forestry, wilderness and coast.

The Framework must provide an approach which will improve and maintain liveability and sustainability of both the settlement network and individual centres. It must be able to accommodate growth and change in population and economic activity, while also carefully managing the established form and identity of individual centres and their relationship to natural places. It will do this by allocating land for settlement purposes, and by indicating the desired outcomes for the manner in which land is used and developed.

4.3 The Region's People

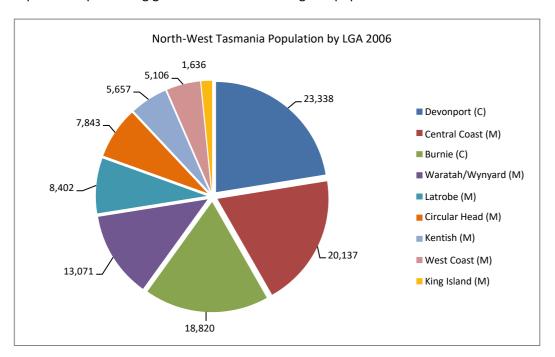
Understanding the characteristics of the Region's population will assist in meeting land requirements for housing, employment, and related infrastructure and community services. At the time of drafting, the key characteristics of the region's people are:

Cradle Coast Regional Land Use Planning Framework

The Region is the least populous area of Tasmania. The population is relatively small at 112,000 in 2010 and has a very low density of 4.9 persons per square kilometre.

75% of the region's population live in the settlements and rural lands of the northern coastline where density in settlement areas at Devonport exceeds 200 persons square kilometre. Over 60% of the population live in the adjoining municipalities of Burnie, Central Coast and Devonport.

Population numbers have been relatively stable in absolute terms since the early 1990's, declining marginally between 1996 and 2001, but trending positively since to an estimated 112,000 at 2010. Localised change and fluctuation have been differential, with distribution showing some municipalities experiencing growth and others having lost population.



Prospect for population growth is modest in the short to medium-term.

Accurate projections are difficult and uncertain given a small population base and low levels of variability. Population forecasting is also complicated by the external influences on economic activity and investment.

The medium-growth scenario for Tasmania¹⁷ suggests a regional population increase of some 7,500 people or 7% by 2030. The population is therefore likely to grow to 118,500 from a 2007 base of 110,085. This is a net increase of less than 0.5% or 400 people per year. Distribution in growth will be uneven, with some municipalities anticipated to decline. Low-growth scenarios for the Region indicate a static population, while high growth does not significantly exceed the medium projection.

Growth will be driven primarily by a small net gain in inward over outward migration, primarily from other regions of Tasmania and the mainland and by low levels of natural growth.

Inward migration reflects a balance of age groups and most are not retirees. It is positive for working age people under 45 and children with outward migration being primarily in the secondary and tertiary education age group and particularly from the more remote municipalities. Inward migration is attracted to all municipalities, although age groups vary between localities.

_

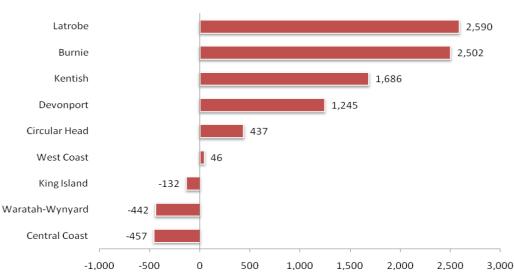
¹⁷ Department of Premier and Cabinet

Cradle Coast Regional Land Use Planning Framework

Population will not change uniformly in all centres. A pattern of uneven internal regional adjustment and distribution will continue, with some municipalities growing and others facing reduced population in the period to 2032.

The municipalities of Burnie and Latrobe are each anticipated to experience growth in excess of 2,000; and Devonport and Kentish will grow from between 1,000 people and 2000 people. Circular Head and West Coast will remain relatively static; and Waratah Wynyard, Central Coast and King Island could see a small decline in population numbers.

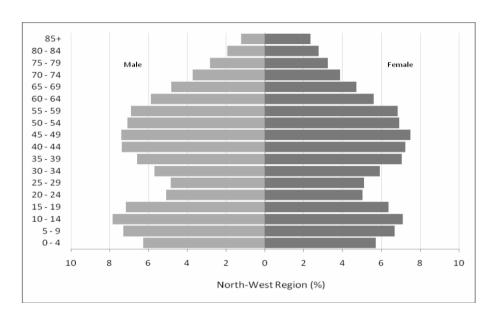
Population projections reflect very small increments; and are based on retrospective data. Continual monitoring is required to assess movement in population as relatively small adjustments can manifest as significant change given the small samples sizes in all populations.



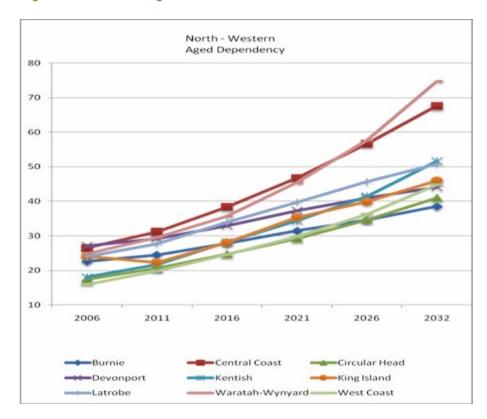
Population Growth Forecast 2008 - 2032 by North-West LGA

There is also likelihood of significant change in population structure and demographic.

The proportion of people over age 65 has increased by 25% between 1996 and 2006 to 16%, slightly above State and national averages for the period and is anticipated to continue to increase. About 20% of the population are children. However, over 50% of the population remain of working age.



Cradle Coast Regional Land Use Planning Framework

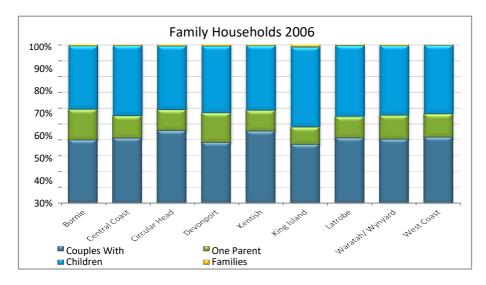


The majority of the Region's population are Australian born.

Families with children remain the most common household type at almost 40%, slightly below national average, but fell by about 9% between 1996 and 2006. Some 26% are single person households, and 30% are families without children. Both categories grew by about 16% between 1996 and 2006.

Household size is predicted to decline from around 2.4 to 2.1 persons per dwelling by 2026.

Almost 78% of households have been in the same dwelling for the five years prior to June 2006 suggesting a relatively stable regional housing market.



Middle-income households predominate across the Region although there are very few high-income households (under 10%), and a significant proportion (27%) of low-income households,

Cradle Coast Regional Land Use Planning Framework

including families with children. These data are consistent with a higher level of socio-economic disadvantage in Tasmania. The distribution varies marginally between municipalities but the pattern is relatively uniform with pockets of disadvantage in centres at Burnie, Devonport and Wynyard.

There is a level of housing stress at around 13% in 2005, a proportion which may have increased given significant upward movement in housing prices.

The changing characteristics of the population mean that even in municipalities with little or no population growth, there will be continued development and a changing demand for housing, employment, community services and amenities.

Population growth and demographic change have significant implication for economic activity and for community systems in health care, welfare dependency, housing needs and affordability. They can impact on size of the workforce, in both the nature and preference of employment options and community support service needs in future years. The Region's characteristics are relatively consistent with national and State trends, and do not mark out the Region for special circumstance considerations in land use planning.

There is high degree of personal mobility across the Region. 52% of households have 2 or more motor vehicles; although 8% have no vehicle, and 6% use public transport (buses) or walk to work, and less than 1% cycle.

Over 30% of people work outside the municipal area in which they live. The level of intermunicipal movement is greatest in the Wynyard to Port Sorell coastal strip, with Burnie and Devonport being the dominant employment centres. It is less apparent in more remote communities such as King Island (100%), West Coast (91%) and Circular Head (94%).

These data have implication for the pattern and distribution of housing, education and employment opportunity, and for the management of road transport systems. They also contain inherent risk of dysfunction for mobility if shortages and penalties on fossil fuel use restrain affordability for private car travel. The Framework must take particular note of actions emerging from the proposed State economic Development Plan to ensure investment and employment options are available in the more remote and dormitory locations.

This is particularly the case with King Island which is a predominantly self-contained economy reflected in the journey to work data in the table below.

			JTW	ORIGIN	IS 2006					
DESTINATIONS 2006		Burnie	Central Coast	Circular Head	Devonport	Kentish	King Island	Latrobe	Waratah/Wynyar d	West Coast
Ĕ	Burnie	4875	1464	44	344	51	0	129	2543	8
_ ≧	Central Coast	233	2977	0	469	70	0	156	86	0
EST	Circular Head	36	7	2608	0	0	0	3	97	3
	Devonport	148	1322	3	5540	601	0	1532	79	3
Ϋ́	Kentish	4	43	3	123	656	0	97	11	3
	King Island	0	6	0	0	0	609	0	0	0
	Latrobe	23	183	0	706	163	0	1279	13	0
	Waratah/Wynyard	537	102	49	33	6	0	30	2460	12
	West Coast	35	27	0	24	7	0	14	37	1476

Cradle Coast Region journey to work - Origin and destination by municipality

4.4 Settlement Areas – Places for People

The term settlement is used to describe the manner in which people occupy and use land.

Settlement includes the function and distribution of towns and related activities, the utilisation of natural resources, the carrying out of economic activity, the arrangements for movement of people, freight and utilities and the provision of services for individuals and communities.

Liveable and sustainable settlement promotes provision of healthy and successful economies and societies, and a respectful relationship with natural systems.

Community values and preferences are important for informing the choices to be made in land use planning and for the manner in which land use and development opportunities are allocated and managed.

The people of the Region hold strong attachment to land and community, and express value statements which reflect a deep respect for natural systems and a commitment to community identity.

The Region is described by its people as being a place that remains free, clean, natural, open, and wild. There is a retained spirit of pioneering and self-reliance. It is described as safe, supportive, well-serviced, and possessing a clear sense of community identity and inclusion. It is also considered a place which is progressive and innovative, with an emerging cultural, educational, health care and technological capacity of comparative standard to many larger regions.

Community values reflect awareness and knowledge of dimensions of past, present and future. They promote balance in outcomes between a strong economy supported by land and natural resources, clean and healthy natural systems, and people-friendly communities.

The manner and processes by which the Region will locate, design, grow, service, live and move as communities directly impacts land, and determines how it may continue to be used into the future. The pattern and function of settlement influences whether there are safe, healthy, efficient and pleasant places in which to live, work and visit.

The primary purpose of the Settlement elements in the Framework is to balance economic, social, environment, infrastructure and human service needs and to guide future development and investment.

4.5 Settlement Pattern - Managing Development and Growth

Cradle Coast settlement areas each provide accessible, attractive, functional, safe, sustainable and inclusive places in which to work, live and visit.

There is no existing strategy or structure plan for the pattern of regional settlement.

Effective management of settlement and development is a priority regardless of the rate or direction of growth and change.

An important role for land use planning is to provide for and manage growth and development and coordinate the provision of a land supply and infrastructure services that will match present and reasonably predictable future needs for housing, industry, commerce and recreation.

This requires knowledge of the physical characteristics and capabilities of land and the nature and scale of the likely pressures and demands for use and occupation. A range of environmental, economic, cultural and socio-demographic issues need to be considered.

Cradle Coast Regional Land Use Planning Framework

Urban development in established settlement areas occupies less than 0.3% of the total land area.

However, the existence of lands valued and reserved for conservation, crucial for sustained economic development, and constrained by likelihood of risk to the health, safety or convenience of people and property means the land reserves available for future urban settlement are limited. The consideration of growth and development strategies is particularly important to protect the region's resources, such as agricultural land, and to avoid risks such as slope instability, flooding and inundation. Almost 70% of the Region's 22,492 km² is closed to settlement as conservation and state forest reserves. 18% is significant for cropping, grazing and plantation forest.

In addition, contemporary planning considerations promote settlements which are liveable and sustainable. These are places which make optimum use of land and the available and planned infrastructure, and which provide ready ability to internally access daily requirements for employment, education, retail, health and social and recreational needs. They are also places which are energy efficient and have a reduced carbon footprint. By definition, they are therefore compact and integrated places.

Implementation of the proposed State Economic Development Plan also has potential to stabilise and promote growth through policies directed at creating employment in the locations where people already live.

There are large quantities of land zoned or identified for residential and urban purpose within the Region. However, additional land supply may not always be assured in accordance with need, or with land capability or service availability. Current arrangements for settlement have created a number of issues for sustainable regional development, including encroachment on areas of natural and resource significance, fragmentation and dispersal of employment land, inefficient use of land and of utility and community services, and exposure to natural hazards and risk to people and property.

The development and growth management issues which the Framework seeks to address are –

- sustainable urban growth and development
- growth opportunities
- provision of land to accommodate demand for dwellings
- growth by infill or expansion
- linear expansion of settlements new settlements

The Framework provides a settlement management strategy in Part C at a broad scale for whether settlements in the Region should apply a high, medium, low or nil growth scenario.

The Framework also indicates whether settlement growth and development are based on a negative growth, stable, intensification, expansion, contained, new settlement or temporary growth management strategy.

The majority of settlement growth in the Region is expected to occur in the existing urban centres between Wynyard and Devonport, including Burnie, Penguin, Ulverstone, Latrobe and Port Sorell.

Settlement Growth Scenarios

Nil – demand is negative, with likely emergence of surplus land and redundant building stock and infrastructure.

Low – demand is driven largely by internal population change and very low rates of inward migration. Growth relies on existing land supply (including vacant zoned land) and available infrastructure within the designated urban boundary without need for intensification.

Medium – demand is driven by internal population change and growth and/or moderate positive inward migration. Growth relies on intensification of existing land supply within designated urban boundaries and/or expansion.

High – demand is driven by internal population change and/or significant inward migration. Relies on intensification of existing land supply within designated urban boundaries and/or expansion, and may require new settlement.

<u>Settlement Development and Growth Management Strategies</u>

Negative Growth strategy is appropriate for settlements with falling population numbers. If falling household sizes keep pace with population decline the existing housing stock may continue to be in demand.

Stable strategy restricts new development to existing land supply within the designated urban boundary without priority for intensification.

Intensification strategy gives priority for growth and development on land allocated or developed for urban purposes within the established urban boundary. The strategy provides for intensification of land use through infill of vacant and under-developed land, and redevelopment and conversion of aged or redundant sites, to create a more compact urban form and higher residential and commercial densities. The approach is appropriate for areas where there is under-utilised infrastructure capacity or under-developed designated urban land; or a constrain on expansion due to factors such as natural hazards, inadequate services, and proximity to a resource of economic, cultural or natural value.

Expansion strategy provides for continued inclusion of new lands into the urban area and does not actively promote intensification of existing urban land. While such a scenario may assist land affordability, low density sprawl development can result in adverse effects such as competition for resource land, inefficient use of infrastructure, reliance on private transport, and reduced viability in centralised commercial and community services.

Contained strategy promotes a mix of intensification and strategically planned expansion to retain compact urban form and provide a mix of development and growth opportunities. The mix does not need to occur in balanced proportion. The approach allows for optimum use of available and planned infrastructure in both established and new release areas.

New Settlement strategy provides opportunity to plan a new urban area modelled on contemporary technology and sustainable development. This in itself should not be used as justification for a new settlement. There is no driver for new settlement under current projections for the Region.

Temporary Growth strategy involves the short-term expansion of a settlement or the creation of a new temporary settlement for purposes such as a mining operation or major infrastructure project. Regard must be had to the likely duration of the resource development and to whether the settlement will have a viable function beyond life of the project.

Cradle Coast Regional Land Use Planning Framework

The established settlement pattern presents as a network of compact and contained, relatively close spaced, and well connected centres of small to medium size, located within an immediate matrix of farm, forest and coastal landscapes, and each with individual identity.

It is anticipated short to medium-term development needs can generally be satisfied through containment and rationalisation within the designated boundaries of existing settlement including through the optimal use of vacant and under-developed land set aside for urban land under existing planning instruments.

The approach seeks to better use the land already designated and serviced rather than an outward expansion of urban boundaries onto new land releases.

The concept of containment is consistent with the ideals for liveable and sustainable centres, and with the economic imperatives to optimise use of available and planned infrastructure, to address the causes and consequences of climate change, for meeting the goals of the proposed state Economic Development Plan, and for creating active and health communities.

While the growth and development of settlements can increase economic activity and improve the viability of services, poorly managed growth can decrease the liveability of an area and cause detriment to the special characteristics which make areas unique.

Municipalities are advised to prepare local settlement structure plans to establish arrangements for orderly and economic response to movement in social and economic activity. The provision of appropriately zoned land and the finer grain detail for how development will occur is to be determined at municipal level through local settlement strategies and statutory plans, prepared in accordance with the Cradle Coast Land Use Strategy principles and reflected in the provisions of local planning schemes.

4.6 Settlement Character – Planning for Liveability

The pattern and function of settlement and the way in which towns are designed and managed not only affects how they relate and look but how they perform as liveable and sustainable places.

Well planned towns respect their identity and surroundings, protect areas of natural and cultural value, are externally and internally well connected, encourage investment, and provide convenient, safe, attractive, inclusive and secure places in which to live, work and visit.

Character of the Region's individual towns is well established.

It is important to understand what is unique, special or particular about each place, and to define desired future character. The elements defining character and place go beyond those afforded formal protection under heritage conservation rules for the grand and spectacular. Core elements are concerned with the common place and ordinary, with the quirky and the unconventional. Community identity reflects common history, geographic position, natural features, community values and future aspiration.

4.6.1 Spatial Distribution

The identity of settlements can be established at the macro-scale.

The relatively easily travelled but narrow northern coastline dictates a linear and elongated pattern of close-spaced but separated settlements.

Cradle Coast Regional Land Use Planning Framework

The rugged terrain of the south and west has produced a more segregated and isolated settlement outcome.

The retention of inter-centre breaks and a clear use and visual transition is important for individual township identity, and for the regional settlement character. Merging or coalescence of centres is to be discouraged.

The closer spaced coastal settlement band between Latrobe and Wynyard is particularly vulnerable to risk of coalescence.

4.6.2 Carbon Efficient Centres

The dispersed low-density settlement pattern across the balance area creates considerable internal regional interaction and connectivity between centres.

The result is high levels of personal mobility for employment, recreation and social activity.

Continued reliance on personal motor transport as the principle and preferred mode of transport has implication for a safe and functional intra-regional road system, and for energy and carbon efficiency.

Challenge for the Framework is to balance retention of capacity and value in the existing settlement network with incentive for more self-contained centres in which daily requirements for employment, education, health, retail and social activity can be satisfied with minimal travel requirements.

Alternatively, it requires increase in the availability of public transport.

4.6.3 Development Standards

It is the established pattern and form of development which most influences attraction and liveability of a town.

Radical reconstruction in the core structures and layout of existing centres, and the re-disposition of function within the space is most unlikely given the predicted pace of population and economic change.

There are many actions which can improve the liveability of a place if implemented as part of a coordinated approach for urban improvement. These include regulatory arrangements which provide a broad-based approach to allocation of land use and less emphasis on discrete single purpose zoning, require increased connectivity between urban spaces for walking and cycling, and which promote energy efficiency, water re-use and avoidance of known hazards.

Ad hoc and incremental action carry potential to under-mine or destroy liveability, including insensitive civil construction, ill-conceived urban improvement programs, and the arbitrary application of externally sourced design codes without regard to local circumstances.

Provision of appropriate design and development guidelines for development, including subdivision lay out, building density, height and mass, and urban spaces in both the public and private domain can assist capture and understanding of the essential character and identity attributes for each centre. Standards can assist to ensure new development is reflective and courteous to existing character without compromise adaptability, innovation, performance and attractiveness as a place to live, work or visit.

4.7 Settlement Capability - Access to Services

Continued sustainability of regional settlements is a key consideration for the Framework.

The ability for the Region to support a liveable and sustainable community can be enhanced and protected by ensuring the level of access and investment in community and human service infrastructure and in business and employment activity is adequate in purpose, scale and location to meet both local and regional needs.

The Framework proposes the Region's people will be provide with opportunity to meet daily requirements for employment, retail, education, health and social inclusion activities in locations accessible to where people live. Such services must be capable of efficient, effective delivery at an acceptable economic, social and environmental cost in the context of competing demand for limited resources.

The Framework acknowledges decisions on the distribution of community and human service infrastructure and business and employment activity between settlements will be made on criteria as to whether they are necessary locally to a settlement's immediate catchment population or to a broader population.

There are some services which rely on a regional or sub-regional population base or which cannot efficiently or effectively be provided through multiple sites. These services, because of service volume, workforce specialisation, cost or location constraint, or critical dependence on other service sites, can only be delivered sustainably from a single or limited number of sites.

Regional planning frameworks frequently introduce an activity centres hierarchy to manage disposition of certain land uses.

The Productivity Commission¹⁸ recently examined the concept of 'activity centre' policy. It noted these policies operate in most Australian planning jurisdictions at various levels of prescription.

Activity centre policy is intended to encourage particular types of activities to co-locate under a designated hierarchy in which settlement centres are described by size, type, location and distribution¹⁹. The concept involves directed action to discourage development which is outside this model. The rationale is to improve the accessibility, productivity, complementarities and efficiency in use of larger scale and single-site activities to meet a wider population need. The model retains ability to provide a single local destination that will meet the majority of people's daily needs.

The Productivity Commission concludes the concept of activity centres is valid subject to the qualification that it does not unnecessarily or unreasonably impose restraint on market competition.

Consequently, the ranking of Currie as a second tier activity centre must also be considered in the context that the linkages to the higher level of activity centres are limited. This indicates that King Island does not fit neatly into the hierarchy of the majority of the region.

Action to protect the viability of centres and their function to serve a wider population or purpose should be fully considered during the strategic planning phase and not in the context of individual applications assessed under local or state regulatory decisions.

¹⁸ Performance Benchmarking of Australian Business Regulation: Planning, Zoning and Development Assessments February 2011

¹⁹ Centres are variously described on a hierarchy of scale as city centres, major regional centres, district centres, suburban centres and local centres

Cradle Coast Regional Land Use Planning Framework

Strategies should clearly identify locations for future commercial activity and core regional functions and avoid opportunity for fragmentation into edge of centre and more remote locations.

Tasmania's Health Plan 2007 promotes a *service capacity framework* for providing clinical services according to whether they can attract adequate patient volume from a local referral population or whether there is dependency on a broader population base or a limited specialist resource to sustain quality service.

Sustainable service design requires decisions are evidence based. If it is not possible to design a sustainable service for each of the Cradle Coast Region's centres that will meet needs of the Region's entire community but it is possible to design one or only a few sustainable service for all of the Region's population, the service should be provided in one or only a few location. Sustainability will be assured where the quality or efficiency of the service is volume-dependent and there is no additional service unless there is evidence to indicate there is a reasonable demand for such services and no other service will be compromised.

The choice of location and nature of service will be that which is most accessible to where most people live. The nature of the service will be appropriate to need and located where it can be best integrated with other providers. A number of factors and critical interdependencies influence whether a service can be delivered sustainably from more than one or two sites. The objective is to meet need through coordination.

Tasmania's Health Plan 2007 notes decisions on provision of clinical and other health services is "not an issue that can be decided at a single hospital level – the system as a whole has a legitimate interest". The principle applies for the region. Decisions on where services of common regional benefit are located are a matter for the entirety of the Region and not for a single municipal area.

Tasmania's Health Plan 2007 provides a practical application for an 'activity centres' approach to health care.

Both the Tasmania's Health Plan 2007 and the Productivity Commission report support a level of strategic policy is required in the Framework to provide a sustainable service capacity for those activities which are of regional importance.

The concept of activity centres is mooted in the draft Tasmanian Economic Development Plan.

The concept of activity centres promotes the largest and most centralised centre as the preferred location for higher order services.

There is no single dominant centre within the Cradle Coast Region, and no immediately external centre which assumes this function. Absence of a single dominant centre excludes natural aggregation of higher-order functions.

Launceston (100,000) is sufficiently distant to exclude significant influence on employment, commercial and community activity; it does not place demand on the Region for dormitory residential or utility support functions, thus allowing the Region to function as a separate and relatively self-contained unit.

The Framework recognises the absence of a dominant regional population centre as a logical magnet for regional scale and single site services. It also recognises the absence of a coordinated and informed regional approach to accommodating regional level services could fragment and disperse such services to the detriment of the Region as a whole.

The arrangement of established settlement between Port Sorell and Wynyard means these places tend to function in many respects as a collective activity centre. The majority of regional scale activities are provided from Burnie and/or Devonport.

Cradle Coast Regional Land Use Planning Framework

The evolved settlement pattern manifests as a functional structure, enabling viable capacity and regional independence for a range of economic, social and community services and facilities.

The cities of Devonport (24800) and Burnie (19800) are located some 50 km apart within the concentrated coastal settlement area. Each serves a substantial regional catchment population, and is clearly the established major centres. The Cradle Coast Region has a significant reliance on each centre as a provider of regional level service and activity.

The two centres provide the focus for services reliant on a population size exceeding that of any single resident community, including in higher order human health, education, cultural, community functions, industry, transport, business and commerce, retail, administration and recreation.

Both Burnie and Devonport are comparatively small regional centres, and the viability of some established higher order functions may be marginal if allocated on population criteria alone.

The towns of Latrobe (4800), Sheffield (1050), Ulverstone (9800), Wynyard (4800), Smithton (4200), Currie (pop) and Queenstown (3400) are each the centre for their respective municipal areas. Each serves a distinct geographic district with essential and some optional economic and community functions. The more remote towns of Queenstown, Currie and Smithton provide a level of service to their immediate populations in some respects equivalent to that of the larger centres.

Settlements at locations such as Port Sorell, Penguin, and Somerset each contain a moderate-sized residential population. While these centres may be relatively self-sufficient in daily need and convenience services, they are not sufficiently diverse in function to be considered individual district centres. They are each closely aligned and dependent on larger centres at Devonport, Ulverstone and Burnie respectively.

There are a number of varying size smaller centres across the northern coast and hinterland, including locations such as Wesley Vale, Spreyton, Forth, Wilmot, Turners Beach, Railton, Gawler, Ridgley, Yolla, and Sisters Beach, Forest, and Irishtown. Each supports a permanent residential population, and provides a focal point for local convenience requirements and community interaction.

There are also places which may more accurately be described as a locality or community hub, where the existence of a facility such as a school, hall, sports ground, or convenience store provide a focus for social interaction. These include the various shack site clusters and coastal hamlets such as Edgecombe Beach, Crayfish Creek, Redpa, Marrawah and Arthur River, where populations may be semi-permanent.

There are local centres where there is high level of singular activity allowing recognition as a specialist place. These include the townships of Zeehan and Rosebury on the West Coast which primarily support mineral extraction. Cradle Village, Strahan, Tullah, Stanley and Waratah have all emerged from alternate beginnings to become primary tourist centres.

Specialty functions in specialist towns can have transient or cyclic existence to reflect peaks and troughs in population, employment and investment subject to global market fluctuation and seasonal interest. These cycles and uncertainties can impose different demands on housing and infrastructure not evident in centres with a more permanent population. High levels of uncertainty and instability may impact adversely on the longer-term liveability and viability of a centre.

Several regional centres have sought to re-invent themselves as tourist destinations and place emphasis on heritage and eco-tourism to market profile. Although permanent population growth is unlikely to be substantial, the need to maintain services and to retain capacity as liveable communities is recognised. The mechanisms used to allocate land for use or development and to deliver services may not be consistent with models applied in other centres.

Cradle Coast Regional Land Use Planning Framework

While differences exist between centres, the standard of core business, infrastructure and community services available in each centre is generally adequate and commensurate with size and function. With the exception of King Island, towns are well connected by road and telecommunications, are internally provided with reticulated utilities and community facilities to meet primary needs in education, health care and recreation.

The principal cause for concern in each centre is to secure more immediate access to a greater and more specialist level of service at local level. Justification to sustain or increase the level of service in any centre will be dependent on the rate and direction of population change and economic activity. Increase in local activity and a broadening of the economic and population base of the Region has potential to increase service levels and to improve community and cultural facilities within each centre.

The evolved settlement pattern manifests a functioning structure, enabling viable capacity and regional independence on a range of economic, social and community services and facilities. It is important to retain and enhance the established role and the diversity of the existing regional service centre and to minimise risk for erosion in capacity.

The Framework aims to sustain provision of higher order social and economic services for the Region into established centres in Burnie and Devonport and to retain and reinforce the role of Smithton, Queenstown, Wynyard, Currie, Ulverstone, Latrobe and Sheffield as service centres with a district orientation and capacity to satisfy local needs.

It is important to avoid commercial and community services of regional and sub-regional or district scale relocating or emerging in local centres. Limit on nature and size is required for activity in local centres in order to not only ensure efficient allocation of land and resources, but to also further reinforce the established key role of larger centres in meeting district and regional needs.

Describing the current and desired future role and function for each of the main centres within the Region will –

- support the incumbent strength and sustainability by agglomeration of development of a like kind
- provide justification focus for service provision and investment decisions
- establish the role for each centre in servicing the regional settlement pattern
- clarify and coordinate action to ensure a balanced and considered mix of activities at a scale and standard appropriate to needs of the Region
- protect and build on viability of existing and planned public and private investment
- avoid loss, depletion, fragmentation or dysfunction in service provision through dispersal of key functions across a number of centres
- strategically identify where growth and enhancement of regional and district level services and infrastructure should be supported and located
- promote equity, efficiency and effectiveness in planning and investment for community services and infrastructure between centres
- promote access and connectivity between centres

Cradle Coast Regional Land Use Planning Framework

The description of activity centres that apply for the Cradle Coast Region is:

Centre Description	Centre		
Regional Activity Centre			
Provide services and facilities which deliver for needs of the local community together with a wider regional or subregional catchment.	Devonport and Burnie.		
These towns offer higher order services reliant for operational efficiency on a population of regional or sub-regional size or on a single or limited number of locations in education, health, culture and entertainment, community support, professional and personal service, comparison and specialty retail, sport and recreation, and diversity in housing options.			
Major centres are primary nodes for industry, business, public sector, and transport activities with a regional focus; and offer a range of employment options.			
District Activity Centre			
These towns have a larger population base for a discrete part of the Region and provide services and facilities which meet needs of the local community and an immediate discrete hinterland and may also contain some activity which is of a regional scale.	Latrobe, Sheffield, Ulverstone, Wynyard, Smithton, Queenstown, Currie		
These towns offer a range of services in education, health, culture and entertainment, community support, personal service, and convenience and comparison retail options where sustainable service levels can be supported across a number of sites.			
District centres are to offer a range of employment and business opportunity.			
Local Service Centre			
Local centres are of varying population size and cater primarily to the immediate needs of the local community in housing, education, health, culture and entertainment, community support, personal service, and convenience retail options at a level which does not service a regional or sub-regional population.	Railton, Port Sorell, Forth, Gawler, Penguin, Sulphur Creek, Ridgley, Somerset		
Employment and business options are sized and orientated to the local population. This may involve economic activity dependent on a strategic or resource based need.			
Specialty Centres			
Small centres are places which include a singular primary purpose derived from natural attributes of the locality and support resource development or tourism, and may support a permanent population unrelated to that activity. Specialty centres also operate as local centres and provide	Rosebury, Zeehan, Savage River for mineral extraction Cradle Village, Strahan, Stanley and Waratah for		
convenience services for the local community.	tourism		
<u>Localities</u>			
Small settlements where limited small-scale convenience retail or community facilities provide a focus for very localised or rural	All other centres		

Cradle Coast Regional Land Use Planning Framework

The Framework does not support use of the planning system to manage competition between centres by assessing the viability of new commercial use or to consider the likely impact of a proposed commercial use on the viability of other existing commercial use. It does not suggest there should be restriction on the number or scale of any particular activity or in the proximity of a particular use to other use of that type.

What the Framework proposes is that the scale and function of each centre be focused to deliver key community requirements in a manner which is complimentary and efficient to the needs of the resident and catchment population of that centre and to the Region as an entity. It suggests the Region's centres be considered as part of a sustainable and efficient network.

An activity centre policy does not impose a hierarchy of economic, social or cultural importance. Rather the concept is to ensure a continuum of size and function, and an absence of unnecessary dysfunction for activities which are regionally important and which rely on a regional population.

It assumes recognition of the pre-eminence but not exclusivity of Burnie and Devonport as the centre for administrative, business, community, retail and transport services. It does not mean that such activity cannot occur elsewhere in accordance with local need or that centres cannot compete in terms of their attraction as a place to work, live and play.

Nor does it promote higher order centres as the desired focus for all economic activity and employment. The policies of the Framework promote distribution of such activity consistent with resource access, infrastructure capacity and land capability to minimise travel and to build more sustainable and integrated centres.

The centres model is consistent with objectives for certainty for business and infrastructure investment, and for ability to make strategic decisions in support of liveable and sustainable communities.

4.8 Protecting People and Property

The places in which people live and work should not be in locations where they are at an unacceptable level of risk from –

- Physical hazard such as landslip, bush fire, flooding, coastal regression and inundation, including occurring hazards which can be modified and intensified by human development
- Human induced hazard such as contaminated land, hazardous or noxious activities such as petroleum storage or sewage treatment works
- Activity which may impact on safety or amenity such as extractive industries, mining, manufacturing and process, large-scale recreation venues and major transport corridors

The places in which people live and work should also not be in locations where they are likely to constrain objectives for protection of economic resource management, ecological process and environmental health or which provide a buffer to protect another site from a hazard.

Risk is not simply concerned with issues of injury or loss to life or physical harm to property. There are substantial consequences associated with impact of both catastrophic and incremental events on natural, economic, social and infrastructure systems, including for disaster response and recovery, grief management, loss of productivity, income and property value, disruption to function and capacity of transport and communication assets, and reduction in life of infrastructure and service assets, and reduction in access to and coverage by insurance.

Cradle Coast Regional Land Use Planning Framework

Land use planning considers the safety of places where people, live, work and visit as a key factor for liveability and sustainability. Planning must anticipate likely risk and locate new or expanded settlement opportunities in areas with minimal exposure.

Knowledge and understanding of regional and locally significant risks are important for strategic decisions on location of use, development and infrastructure and for identification of actions to avoid exposure, control impact, and prepare and recover from occurrence.

Knowledge includes the nature of the hazard, the likelihood for change in the frequency or magnitude of that hazard, the likely social, economic and environmental vulnerabilities, and the capacity of communities to absorb and recover.

It is necessary to establish an acceptable level of risk for each known hazard category. The acceptable level of risk will be determined having regard to the likelihood for occurrence and the magnitude of the consequence for each risk to a particular form of land use in social, economic and environmental terms.

Development for housing, employment, community service, and essential infrastructure purposes should generally be restricted to locations where the level of risk is low or where it is reasonable to take measures which can avoid, mitigate or manage to provide a low level of risk.

The extent of knowledge associated with each hazard processes and consequence is variable and incomplete. There are a number of continuing investigations within the Region which will assist understanding of natural hazards and the likelihood for risk to settlement and development, including for the impacts of climate change. The standard for acceptable levels of risk is fluid in the face of expanding knowledge and community expectation.

The Framework notes an absence of planning standards for risk management based on national benchmarks developed from objective data and balanced scientific assessment.

The Framework identifies a range of likely hazards are known to exist in the Region.

The extent of available information affects the level of detail that can be reasonably contained in planning policies and requirements.

The Framework cautions against drafting prescriptive objectives and requirements where there are information gaps on scale, magnitude and impact. Information gaps occur where there are omissions in the information base which reduce confidence on how a resource may respond to a particular management action. Gaps exist where the information is derived from a broad reconnaissance only and is at a scale which imposes limit on application for detailed planning. Gaps also occur where information is dated or does not comply with contemporary research methods, and is thus unreliable. Gaps occur where the sufficiency or source of data is uncertain, and where raw data has not yet been analysed and interpreted to provide certainty and confidence for meaning.

There are substantial and significant information gaps with respect to identifying and managing the impacts of climate change, including risk from sea level rise or inundation.

There are also situations where the very nature of a resource or risk limits ability for information. Under-surface conditions are generally presented as modelled rather than measured data. The extent of available information therefore affects what outcomes can reasonably be required.

The Implementation strategies identify need for further information on exposure and impact to natural hazards before preparation of prescriptive requirements.

Cradle Coast Regional Land Use Planning Framework

The Framework notes it is the intention of government to work with local government and planning agencies to provide hazard management statements for each of coastal inundation, coastal erosion, bushfire, landslip and river flooding as part of an integrated State approach to mitigation of natural hazards through the land use planning process.

It may not always be practical to exclude development from vulnerable areas. There are existing levels of development and infrastructure investment which for reasons of historic decision, design criteria and operational efficiency, cost, connectedness within a linear system, or the absence of viable alternate sites, cannot readily be abandoned or relocated. There may also be facilities in vulnerable locations without which communities and economies cannot function sustainably. There may also be strong cultural, environmental and economic imperative to settle or remain on vulnerable land in preference to degrading value or productivity in alternate sites.

Land use planning must take account of hazards and consider whether new, continued or expanded occupation will exacerbate the existing level of risk. Best practice design, construction and safety measures must be applied to mitigate or manage unacceptable levels of risk where avoidance is not possible. Communities must also be expected to be more self-reliant and to take responsibility for the risks they live with.

There is likelihood for climate change to introduce or exacerbate hazards. The Framework proposes risk assessment consider the level of risk that may occur across the life of the development for hazards where likelihood or consequence may increase as a result of climate change. The Framework also recognises there is need for broad-based community and government policy for settlements with increased exposure to climate related risk, including for whether to retreat or defend locations such as low lying coastal areas exposed to progressive increase in erosion and inundation from sea level rise.

The benefit of allowing new, expanded or replacement development on sites which exhibit high levels of risk or development constraint must be balanced against the potential social, economic and environmental costs associated with disaster impact, response and recovery or for restraint on enjoyment or production. The level of tolerance in the wider community and future generations, including insurance providers and relief agencies, to accept risk must also be considered. The liability of policy and decision makers for the consequence of enabling exposure to risk must also be considered. The existing pattern of settlement in the Cradle Coast Region occurs on land vulnerable to a range of both natural and human induced risk —

• The extensive coastline contains sections of low lying soft sediment susceptible to mobilisation, particularly under wind and storm wave conditions and inundation with rise in sea level.

Vulnerable coastal formations contain portions of the established settlement areas at Pardoe Beach, Turners Beach, Devonport, Ulverstone, Penguin, Heybridge, Burnie, Wynyard, Sisters Beach and the coastal villages between Rocky Cape and Stanley.

They also contain significant sections of the main road and rail corridors connecting coastal communities.

- Much of the steep coastal escarpment and adjacent ridges, favoured for residential development due to elevated and northerly aspect is susceptible to geological movement.
 - Significant urban development has occurred within these areas between Devonport and Boat Harbour and on the west coast at Strahan.
- The relatively small and steep catchments of the Region's river systems preclude extensive and prolonged flooding.

Cradle Coast Regional Land Use Planning Framework

Events are localised and small scale. Most settlement is clear of exposure major flooding in rivers.

However, change in catchment land use, increased rainfall intensity, and restriction at drainage outlets due to storm induced and permanent sea level rise may exacerbate risk of flash flooding in established settlement areas if storm water drainage capacity is exceeded in the short-term.

- The Region's expansive areas of native and plantation forest, coastal woodland and heath, and
 peaty grasslands are susceptible to wildfire. Predictions for warmer temperatures, drier
 summers and stronger winds resulting from climate change increase vulnerability of these
 vegetation communities to fire. There is an increase in risk for adjoining settlement centres
 and for isolated rural development in bushland setting.
 - Exposure to bush fire risk occurs at a number of existing settlement locations, including Burnie, Sisters Beach, the west coast towns, and on King Island.
- Naturally occurring conditions in some soil formation have potential to create significant risk for natural and economic systems, and for infrastructure and construction if disturbed and inappropriately managed.
 - These include highly toxic and corrosive acid sulphates released by exposure to air of wet organic soils (prevalent in low lying coastal areas and peaty grass lands); and salinity, known to occur on King Island.
- The Region is economically and socially reliant on continued access to healthy natural systems and resources, particularly for agriculture, aquaculture, forestry, minerals, water supply and tourism.
 - These activities and values can be permanently compromised through inappropriate location of settlement and development, both within and at the margins.
 - Development may directly exclude access or restrain use and quality.
 - Continued interest in rural lifestyle and coastal living, and in resource development, will maintain pressure and competition for access and impact to these resources.
- The evolved pattern of settlement and juxtaposition of land use has resulted in arrangements which are not always compatible.

The challenging hinterland topography, and an early focus on coastal shipping, has resulted in major transport and utility corridors and nodes sharing the narrow coastal plain with the major portion of the Region's urban settlement.

These associations contain a number of risks for safety, health and amenity.

The legacy of past activity can result in contaminated or defaced land and has consequence for efficiency, performance and attraction for investment.

There is a fragmentation of industrial land such as to preclude designation of discrete regional industrial estates. Established locations are frequently small-scale and adjacent to residential and other urban uses.

Predictions for regional growth and development in the short to medium-term provided limited indication of need for significant expansion of settlement. There is little incentive to initiate major restructure in the allocation of land use and the form of townships to address many of the known risks and constraints on settlement.

Cradle Coast Regional Land Use Planning Framework

The Framework can promote a planning environment in which –

- All levels of decision making take into account information on risk to social, economic, environmental and infrastructure environments
- Information on the likelihood of damage from hazards is obtained, verified and shared and common mechanisms are available to support understanding of potential risks and costs
- Use and development standards are regularly reviewed to ensure they remain appropriate for the known risk environment
- Decisions take account of both private and public risks
- Settlement is not exposed to unreasonable or avoidable risk from hazards that provide an unacceptable level of risk to life, property or amenity or to economic and natural systems
- Intensification will not occur within established settlements in vulnerable locations unless
 there are suitable arrangements to harden infrastructure or to implement other measures that
 will protect life or property against increased levels of risk
- Identification of hazard areas can include allowance for likely impacts of climate change, including the effect on frequency and magnitude of events associated with —
 - increased wind speed over a geographic area
 - increased intensity of rainfall in single extreme events
 - increased storm surge associated with storms crossing coastal areas
 - higher sustained temperatures
 - seasonal redistribution of rainfall and higher loss to evaporation
 - permanent rise in sea level
- Planning processes can take into account likely exposure, acceptable level of risk, and appropriate standards to avoid, mitigate or manage the following risk categories –
 - Riverine flooding, including flash flooding in a natural watercourse or urban storm water drainage system, having regard to existing and likely change in climate or catchment characteristics or conditions and any impediment on discharge
 - Coastal inundation due to permanent rise in sea level or storm surge as indicated by the Tasmanian Coastal Vulnerability Project 2010
 - Erosion or mobilisation of coastal landforms due to action of water or gravity, including migration of a water course, shoreline instability as indicated on the by the Tasmanian Coastal Vulnerability Project 2010
 - Bush fire due to proximity to both native and plantation vegetation. Site assessment and management to be in accordance with the Guidelines for Development in Bushfire Prone Areas of Tasmania prepared by the Tasmanian Fire Service
 - Geologically unstable areas such as steep slope, susceptibility to land slip, springs and seepage (particularly on the coastal escarpment and adjoining ridges and steep valley walls and including designated Class A and Class B Landslip) swelling clays, or subsidence, and including areas of landslip and movement susceptibility as indicated on Tasmanian Landslide Planning Map Series prepared by Mineral Resources Tasmania

Cradle Coast Regional Land Use Planning Framework

Site and locality assessment are to be undertaken for each proposed use or development in accordance with the Australian Geomechanics Society 2007 Landslide Risk Management Guidelines

- Areas of conservation value or biodiversity significance identified by the Cradle Coast Natural Resource Management Strategy
- Land significant for agriculture and land in the vicinity of land significant for agriculture
- Acid Sulphate Soil and Salinity Areas indicated by the DPIPWE
- *Mineral or extractive resources*, including aquaculture and forests, and their designated haul routes
- Areas unable to be efficiently or economically serviced with basic infrastructure
- Urban water supply catchment and storage areas
- identified landscape and aesthetic areas
- locations in the *vicinity of Airports* at Wynyard and Devonport, seaport at Burnie and Devonport, and to corridors for rail lines and Class 1 to 3 State and local roads
- land adjoining major hazard facilities
- Contaminated land for the purposes of the Environmental Management and Pollution
 Control Act 1994 unless appropriate investigation, site management and/or remediation
 measures to address and mitigate known and suspected hazards are in- progress or have
 been completed

4.9 Land for Housing - Places to Live

Accessible, affordable, appropriate, safe, and secure housing is a basic human need, and a critical component for community well being.

The design of housing, neighbourhoods and centres can impact on wellbeing of individuals and communities.

The Australian Bureau of Statistics notes -

"Housing satisfies the essential needs of people for shelter, security and privacy. Shelter is recognised throughout the world as a basic human right. The adequacy of housing is an important component of individual wellbeing. Housing also has great significance in the national economy, with its influence on investment levels, interest rates, building activity and employment. In turn, changes in these aspects of the national economy can also affect housing."

Planning must facilitate housing options that are well located within serviced, attractive, functional and safe environments. The principal function of planning is to allocate land for housing use at a rate sufficient to match supply to demand and which allow for choice and diversity in housing type and location.

The changing demographics of the Cradle Coast Region are likely to continue a significant shift in consumer housing demand.

An aging population, declining household size, more single parent families, single and communal living requirements, and varying economic and stage-of-life circumstance, suggest likelihood for

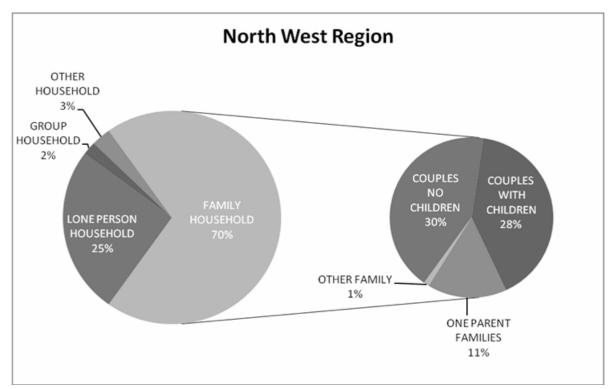
Cradle Coast Regional Land Use Planning Framework

greater choice and diversity in housing options, including movement away from the current predominance of single houses.

There are currently some 47,500 dwellings within the Cradle Coast Region. 14% or 6600 of which are described as flats and units, with the majority being single detached dwellings on individual lots.

The proportion of units to detached houses varies between municipalities with the higher concentrations in Burnie, Devonport and West Coast. However, nowhere does it exceed 20%. The type and mix in existing housing stock offers limited choice.

Some 60% of housing stock is occupied by only one or two people yet over 75% consists of dwellings with three or more bedrooms.



Although projected population increase is low, demographic data indicates that in common with the rest of Australia, housing occupancy rates in the Cradle Coast Region will fall to approximately 2.1 persons per dwelling by 2030. Falling occupancy rates suggest an additional housing demand of some 8,600 dwellings or 18% growth on existing housing stock over the next 20 years in the absence of any population growth.

Population growth to 2030 anticipates an increase by 7,500 people. Assuming occupancy rates of 2.1 persons per dwelling an increase of 3,570 dwellings is required by 2030.

The combined effect of falling occupancy rates and population growth could result in need for some 12,500 new dwellings.

Cradle Coast Regional Land Use Planning Framework

Municipality	Flats & units	Residential houses	Rural-residential houses	Rural houses
Burnie	16%	72%	9%	3%
Central Coast	11%	63%	19%	6%
Circular Head	8%	41%	34%	17%
Devonport	18%	74%	6%	1%
Kentish	3%	29%	53%	15%
King Island	9%	52%	12%	28%
Latrobe	13%	52%	29%	6%
Waratah/Wynyard	14%	56%	24%	6%
West Coast	18%	80%	1%	0%
TOTAL	14%	63%	18%	6%

While the proportion of residential, rural residential and rural housing is relatively consistent across the non-urban parts of the region, King Island exhibits a strong variation with very little rural residential and a higher average number of rural houses.

The current ratio of single to multiple dwellings in the Cradle Coast Region is 4.5 to 1. Recent building statistics for Tasmania suggest a ratio for new approved dwelling of single to multiple dwellings of 4.2 to 1.

However, national trends are for a reducing proportion of single detached dwellings in favour of semi-detached, flats, units and apartments. For the period 2001 to 2006 there was a greater increase in the number of new multiple dwellings against new single dwellings, with multiple dwellings now representing about 32% of national housing stock²⁰. It is unrealistic to assume the Cradle Coast Region will remain immune from these trends given similarity to national conditions in changing affordability, demographics, household composition and live-style choice.

If all new dwellings are provided in multiple unit buildings, the result is 32% of housing stock in units or flats in 2030. This would place the Region in line with 2006 national housing mix. However, a scenario involving no new single dwellings is most unlikely. Even with a trend to more unit developments single detached houses will remain a majority form of housing option.

The distribution of housing increase will not be even. Concentration will occur in locations where population growth is anticipated and where land capability allows.

Housing demand projections clearly indicate continuing demand for new housing land (Appendix 1).

There is a practical need to retain a minimum 10-year outward supply given the considerable lead time often associated with urban land release.

The Framework must consider growth scenarios which accommodate future housing land.

²⁰ HIA Economics Group Australia's Housing Stock – 1996 to 2006

Cradle Coast Regional Land Use Planning Framework

4.9.1 Land for Urban Housing

There will be need for additional land releases in some centres if market preferences remain for new estates for single housing. Centres will need to determine capacity to infill and expansion.

There is an absence of a centralised land supply and demand data and policy arrangement in Tasmania. The State is the only jurisdiction in Australia to leave land supply planning and supply processes entirely to the discretion of local government. As a consequence, there is a disparate, incomplete and inconsistent level of available data which makes regional comparison and conclusion difficult. The Framework proposes this situation be remedied.

The relatively low rate of anticipated change within the Region's small base population, and the dispersal of that population across a number of settlement centres make accurate local land supply forecasts difficult.

At the time of drafting, analysis (as shown in Appendix 1) indicates most centres have sufficient surplus in land stock to accommodate housing development within the timescale of the Framework without need for significant expansion. This analysis has informed the settlement growth management strategies identified in Table 4.3 of Part C.

Residential development will continue to be focused into a range of different sized urban centres, small hamlets and rural residential clusters. Most centres have a distinctive low density character, with varying proportions of vacant residential land in both single serviced and un-serviced blocks and as larger occupied under-developed lots. Notwithstanding the relatively low level of urbanisation within the Region, most centres are constrained in ability for outward expansion.

The Framework does not advocate all new growth and development is to occur only through infill, redevelopment or conversion (land recycling) to produce significantly higher housing density. Rather, it supports priority for better use of the land already designated and serviced for urban use before advancing options for expansion in settlement boundaries and new green-field development. It must be recognised the circumstances of the Cradle Coast Region are such that settlements are unable to sustain growth entirely through raw land releases. A balanced approach is required under which the majority portion of development in the short to medium term will continue to occur by subdivision and building on vacant site as centres fill in gaps and absorb undeveloped land.

The rationale is to address one or more of a number of planning factors, including changing housing preferences; limited opportunity for new land supply imposed by priorities to protect areas of natural and cultural value and to avoid urban encroachment onto areas of economic resource; economic imperatives to better utilise residual capacity in existing and planned infrastructure and land designated for residential development; to minimise carbon emissions associated with transport and personal mobility; and to create more socially inclusive, healthier and active communities.

Urban containment underlies many of the integrated planning strategies for Tasmania. The Tasmanian Infrastructure Strategy and its related modules have a core outcome to optimise use of existing infrastructure. Healthy and active community strategies are also underpinned by policy outcomes to intensify and diversify urban forms and function within a contained and compact spatial area.

Urban containment policies which seek significant change in the nature of urban spaces may encounter a number of practical barriers, including need to aggregate land from several ownerships to achieve large-scale solutions, higher construction costs for transitioning to medium to high density residential infill development, and community and market opposition with inherent consequence for certainty in approval and financing processes.

Cradle Coast Regional Land Use Planning Framework

However, it is imperative that communities confront and accommodate the necessity for change, and develop new attitudes and mechanisms to resolve initial resistance.

The Framework does not promote immediate or significant change in the density, form or pattern of urban development. It does not mandate residential densities which compel transition to multiple unit development. Densities of up to 30 dwellings per hectare in all centres will allow a continued predominance of single detached houses intermixed with small-scale multiple unit on lots from 400 m² to 800m². The practical outcome will in large part reflect the nature of development currently occurring across the Region on both infill and vacant sites.

There is increasing housing stress and inequity in access to home ownership.

Median house prices for Tasmania increased by at least 50% in the period 1999 to 2009. While this engenders consumer confidence it has also precipitated a decline in housing affordability and increasing levels of household debt. First-home buyers and low income households are increasingly being excluded from the housing market.

The Region has a relatively high proportion of welfare recipients and low income working families with high dependency needs (frail, aged disabled and long-term unemployed). A shortage of public housing, low vacancy rates in the private rental market, increased cost of owner-occupied housing, an aging population, and a significant proportion of low income households experiencing housing stress, creates need for more liberal and alternate approaches to provision of housing.

At the same time, there is a growing demand for high quality housing options to meet needs of the financially independent, including retirees.

The Framework can assist the role of Housing Tasmania to secure assisted access to housing for low income and special needs Tasmanian, particularly given the several locations of priority high and moderate housing stress existing with the Region at Burnie, Devonport and Wynyard. In this regard Housing Tasmania is the largest single participant in the regional housing market.

The objectives for Housing Tasmania to provide housing options and opportunities that improve quality of life in a broad social context are consistent with those for housing provision generally. So too are objectives to improve supply and provide housing that is "affordable, appropriate, accessible, healthy, supportive, suitable, viable, secure, and of high quality and comfortable".

The housing sector generally must look to innovative approaches to increase supply and to maintain access to housing. Flexible land use policies provide for a range of housing options and tenure in locations that are accessible to services, employment and community facilities.

4.9.2 Land for Rural Housing

There is a strong presence of rural lifestyle housing within the hinterland immediately adjoining most of the northern centres.

Historic patterns of land division throughout the northern part of the Region have resulted in a large number of relatively small land lots. Some are too small if managed alone for viable traditional agriculture but are attractive as residential sites. This ad hoc and dispersed pattern of rural lifestyle development can exclude and constrain land significant for rural resource development, including agriculture. Dispersal also makes it difficult to adequately service for utilities and road transport through traditional models.

Polices are required to provide a more structured approach to legitimise rural settlement development as a housing option and lifestyle choice in accordance with the Framework principles

Cradle Coast Regional Land Use Planning Framework

for settlement. This includes designed rural residential estates for very low density housing within a rural setting absent of any direct association with primary production and managing opportunity for housing outside designated rural residential areas.

The Framework must ensure adequate opportunity for choice and diversity in housing location, type and style appropriate to all needs and circumstances; and which are designed to complement the natural and build environment and which maximise opportunity for amenity, safety and efficiency.

4.9.3 Housing Land Supply

In order to match supply to demand residential land supply planning and preparation must be initiated several years in advance. This requires forward commitment in anticipation of need.

In small and variable markets such as the Cradle Coast Region this can be a disincentive to investment. The system therefore requires a more responsive and compressed process.

The planning process can provide early consideration and identification for where new residential development is to occur. It can facilitate zoning to establish the priority purpose for housing use. In so doing planning can resolve acceptance by the community and coordinate with infrastructure providers to ensure land and services will be available well in advance of when the land is to be development ready.

Planning must also fix the standards under which use and development will occur. Planning can assist the compliance process by reducing need and simplifying permit and assessment processes to remove time and cost implications, and by minimising number, complexity and variation of prescriptive requirements for information, for use or development criteria, and for engagement with the public.

In this regard planning mechanisms may incorporate urban structure plans into schemes (described as Specific Area Plans under draft Planning Directive No 1) to establish the proposed layout of residential and other development areas. Such plans evolve from detailed examination of all relevant land use planning factors in advance of individual development proposals, and may provide a framework for development outcomes such as road layout, open space networks, coordinate infrastructure provision and match residential density to infrastructure capacity.

Structure plans can provide the information relevant to assist the design and construction of individual development proposals. They are also useful for delivering integrated outcomes across a number of separate land parcels.

Structure plans can manage likely conflict and constraint in the relationship between adjacent land uses.

Structure plans address the sequencing of land release or direct significant levels of change within an established residential locality.

Structure planning also has the capacity to indicate the future direction for residential development beyond the medium-term provisions incorporated inside the settlement boundary.

The Framework proposes each municipal area prepare a local settlement plan to identify planned and future options for growth and development. It is not the role of the regional land use strategy to define the details of settlement in individual locations.

The planning process must adopt a responsible timeframe for forward identification and preparation for access to residential land.

Cradle Coast Regional Land Use Planning Framework

In this regard the Framework proposes that planning maintain at all times the ability to accommodate residential demand for a minimum forward period of 10 years. This can be achieved through both infill and green-field options and can be supported by the application of appropriate zoning, development standards, and where relevant, informed by local strategy or structure planning.

The Framework therefore establishes a rolling and realistic obligation aligned to the medium-term 10-year timeframe for certainty of access to a supply of serviceable land. It is unrealistic given the uncertainties for population growth and land demand to provide a similar degree of certainty out to 25 years.

4.10 Healthy and Active Communities

The concept of liveable communities indicates high priority for places which enable more active and inclusive lifestyles. They also promote ready access to adequate and accessible levels of health care and education.

Liveability principles respond to a growing awareness that contemporary standards of health can be improved by access to urban spaces which enable people to incorporate increased levels of physical activity and social inclusion into their daily lives.

Increased in incidental and deliberate physical activity and social interaction can reduce preventable health risks associated with inactivity, obesity, poor diet, smoking, and social isolation (including cardio-vascular, diabetes, cancer and mental-illness). Increase levels of physical activity can also have positive economic outcome for the health sector and workforce productivity, and for social inclusion, energy efficiency and carbon emissions.

Land use planning has a significant role in constraining or encouraging healthy and active communities.

Planning policy can segregate and inhibit access to key destinations, rendering even relatively small urban spaces inefficient and ineffective places.

Planning policy and regulation should require development of environments which prioritise the needs of pedestrians, cyclists, public transport users and recreational walkers over private car dependency. Urban spaces should enable people to walk and cycle in safety and with ease as part of their daily lives, including for journey to work, school and social engagements and exercise regimes, by ensuring proximity and ease of connection between housing and facilities for daily needs in employment, education, health care and recreation.

Liveability strategies emphasis higher residential densities, a greater mix of land use, interconnected streets, accessible, linked and quality open-space systems, and increased access by public transport. Urban environments are to provide well integrated and accessible walking and cycle routes and attractive, safe and stimulating settings for structured and informal physical activity and social interaction.

Implementation strategies for the Cradle Coast Region will largely involve modification to the existing built environment as change in use, infill, and redevelopment occurs. A disbursed and small population, and a relatively slow pace and smaller-scale of growth and development, will require localised and incremental change and wise use of limited resources.

Responsibility for improving opportunity for physical activity involves a number of public and private interests working in collaboration on strategic, policy, and project implementation tasks.

Cradle Coast Regional Land Use Planning Framework

4.10.1 Community Services

Some aspects of liveable communities require structured arrangements for provision of high cost and specialist facilities.

Community service facilities includes provision for health, education, family and community care and support, public and civic administration, arts, cultural, recreation, legal and financial advice, public safety and emergency services.

The scale and standard of provision is population dependent and largely, but not exclusively, public funded. These activities are collectively high employment generators, although recruitment and retention of professional providers can be challenging.

Delivery of human services is a key priority for community stability and identity and essential to the health, welfare, development and quality of life of the Region's population. Services must particularly meet growth in aged care needs and retain attraction for youth and young families.

The relatively small and dispersed population, even within the more intensively settled northern coast, present challenge for delivery of adequate services in locations where they are required. Demographic change increases complexity for the sector to plan and deliver, and impacts the immediacy, nature and location of service provision.

a. Health Care

The Tasmanian Health Plan²¹ promotes a revised approach to health care under which prevention and management takes precedent over clinical intervention.

The model for clinical care proposes a sleeker more focused institutional presence based on evidenced need and service capacity. There is to be a more focused and dynamic arrangement for emergency and specialist clinical care and hospital accommodation. Major facilities will be provided at Burnie and Devonport, each with a specialist but not duplicated function. Higher order treatment options will be provided in Launceston or Hobart as part of an integrated State health care system.

There will be a greater integration of health clinical and advisory care into the fabric of urban centres in a move away from single destination, large-scale multiple purpose hospitals.

The Plan also envisages increased emphasis on healthier and more active lifestyles as a measure to minimise and manage chronic illness.

The Region has some of the highest incidents of preventable disease in both the State and Australia. It is also the Region that will experience the greatest level of change in arrangements for the provision of health services as the Tasmanian Health Plan is implemented.

Land use planning need respond to the Tasmanian Health Plan by ensuring flexibility and capacity within planning regulation to accommodate both specialist acute care and health support facilities as a use conforming to the core purpose of urban and residential areas, and for which there are a minimum of regulatory requirements.

Land use planning can also support health care initiatives through the design of urban spaces to provide more accessible and convenient opportunities for active lifestyle and social interaction. Land allocations and planning requirements must be reasonably flexible and dynamic to ensure services provision is accessible, cost effective and responsive to community need.

Demographic trends to an aging population will require improved aged care services, including residential facilities and home support services.

²¹ Tasmanian Department of Health and Human Services

Cradle Coast Regional Land Use Planning Framework

b. Education

Education from kindergarten to secondary level is available from public and private providers in district and larger local centres.

Flexibility is required to avoid permanent designation of school sites in order to allow adjustment as population characteristics change.

Multiple-use of school facilities must be allowed to promote efficient return on investment, and to build opportunity for community interaction.

Senior secondary, tertiary and vocational training opportunities are primarily provided in Burnie and Devonport. Alignment of courses to industry and employment needs is beyond capacity of the Framework. However, development for training must not be excluded in locations allocated for industry and business.

c. Social Inclusion

The Framework can promote environments where there is access to services for daily needs and which are conducive to quality of life and success as a viable and inclusive community.

However, land use planning cannot produce "community". Community is not a product capable of deliberate creation. It is the by-product of many factors including shared circumstance and experience.

Planning can assist the development and retention of community by requiring environments which allow opportunity for greater community engagement and interaction through collocation and shared use of facilities and the creation of compact, connected and mixed urban spaces.

4.10.2 Sport and Recreation

Access to active and inclusive sport and recreational opportunities enhances community and individual well-being

The Region provides a comprehensive range of sporting and recreation facilities and environments that offer opportunities for active and inclusive sport and recreation.

Recreation, sport and healthy life-style opportunities are widely recognised as factors which contribute to individual health and community cohesion and to the attraction of place.

The sport and recreational requirements of the Region have been expansively examined and a number of strategy and policy positions have been established, including in the Cradle Coast Regional Open Space Strategy.

Key elements note the changing nature and pattern of involvement away from organised field sports toward less structured activities requiring multipurpose and linear spaces. This has implication for access and linkage of land with environmental and aesthetic appeal, particularly in coastal and bushland locations; and the incorporation of recreational opportunity as an aspect of other land use.

The linear and dispersed nature of settlement along the Cradle Coast has implication for the provision of high order and specialist sport and recreation facilities. Recent research suggests the provision of sub-regional facilities in both Burnie and Devonport is preferable to a single regional facility in a central location.

The role of land use planning is to assist allocation of land in accessible locations and of appropriate characteristics to allow community use.

Directions for Liveable and Sustainable Communities

Regional settlements provide liveable and sustainable communities where –

- the growth and development of centres is contained to create compact places which optimise use of land and infrastructure services and minimise adverse impact on resources of identified resource, natural and cultural value
- the pattern of settlement provides a network of compact, well connected and separate centres each with its individual character and identity
- land supply is matched to need
- there is coordinated and equitable access to provision of regional level services
- each settlement provides an appropriate level of local development and facilities to meet daily requirements in employment, education, health care, retail, and social and recreation activity for its resident population
- each settlement provide a healthy, pleasant and safe place in which to live, work and visit
- there is diversity and choice in affordable and accessible housing
- people and property are not exposed to unacceptable levels of risk
- transport, utility and human service infrastructure is planned and available to meet the need
- energy and resource efficiency are incorporated into the design, construction and operation of all activities

5. Infrastructure – Supporting People and Economies

Infrastructure, and the manner by which it is planned, provided and utilised, is an essential factor for supporting a robust and diverse regional economy, for providing liveable, accessible and connected communities, and for maintaining a clean and healthy environment.

Infrastructure is generally associated with the organisational arrangements and physical structures (whether as single sites, nodes or corridors) that form the foundation for development and include systems for drainage and disposal of sewage and stormwater; water storage, treatment and supply; waste management; energy generation, transmission and supply; communication and digital information; passenger and freight transport and transit; and associated control facilities.

However, there are also infrastructure requirements associated with provision of community service facilities, including for education, health and community care. Community infrastructure may also involve arrangements for access to affordable and accessible housing, to cultural, open space and recreation opportunities, and for protection and conservation of natural and cultural assets. These soft infrastructure elements have been discussed in connection with natural system and settlement considerations.

Infrastructure has historically been provided by public agencies. However, more recent development has seen greater commercialisation and competition in many infrastructure services.

5.1 Integrated Infrastructure and Land use Planning

Infrastructure has wide community benefit and is a key consideration in measures of potential for economic prosperity and liveable communities.

The purpose of land use planning is closely linked to infrastructure provision and use. The allocation and disposition of opportunity to use and develop land is based on understanding of drivers for future need. It follows that planning for infrastructure should also be based on similar considerations.

Integration of the process of planning for settlement growth and development with the process of planning for infrastructure provision must be coordinated and concurrent. An integrated process will assist to ensure location of use and development and provision of infrastructure is commensurate to the Region's community and economic requirements and matched to demand. It will ensure reliable services are available at appropriate capacity and function to meet need and to justify investment.

Sound integrated planning can also assist to ensure use and developed will make optimum use of existing and planned function and capacity in infrastructure and services. It will avoid incremental and isolated demand for new, expanded and expensive provision.

Integrated land use and infrastructure planning systems –

- cater to the needs of all users in urban, rural, and remote areas
- provide access to key capacity and function in core transport, water and energy supply, waste management and digital communication services within and external to the Region
- are responsive to emerging industry and resource development trends and to population changes and growth, and enhance economic competitiveness

Cradle Coast Regional Land Use Planning Framework

- are socially, economically and environmentally sustainable
- actively manage settlement patterns and economic development to encourage the right activities in the right locations
- optimise use of existing function and capacity in accordance with strategies to maintain and improve efficiency of existing systems in preference to constructing alternate and duplicate systems
- ensure new and expanded infrastructure services are logical logically sequenced with the agreed plans for staging and release
- promote secure, safe, equitable and efficient provision by assisting settlement patterns locate
 use and development in areas with appropriate and adequate existing and planned services
 and infrastructure
- protect strategic assets and provide certainty for location of infrastructure corridors and sites
- consolidate and improve strategic infrastructure corridors, sites and linkages to increase efficiency

The Tasmanian Infrastructure Strategy 2010 and associated specific strategies and policies guide future infrastructure priorities and decision making for the planning, provision, and protection of infrastructure in Tasmania. The Tasmanian Infrastructure Strategy focuses on transport, energy, water and digital communication. However, the principles applying for these components are relevant for all forms of infrastructure provision.

The Framework to the Tasmanian Infrastructure Strategy links to allow better settlement and infrastructure investment decisions. The Framework acknowledges the broader social, economic and environmental purpose and benefits of public and private infrastructure provision. It specifically recognises the essential connections and need for integration and coordination between land use planning and infrastructure investment.

The Cradle Coast Region is not a high population or economic growth area. There are no immediate pressures to significantly expand capacity within existing or emerging settlement areas.

There is no contemporary and comprehensive assessment of regional infrastructure capacity, and no integrated regional infrastructure strategy. Infrastructure provision has sometimes been ad hoc and haphazard in response to development pressure.

There is an established network of core infrastructure capacity in transport, energy, telecommunication communication and water and waste water systems and in health, education and community recreation and support services.

While existing systems are generally competent to meet immediate regional and local needs, there are a number of issues relevant for land use planning –

- The majority of core infrastructure systems are fixed, long-term and high capital investments
 designed to a specific capacity and function and with limited flexibility to adjust for change in
 demand. It is important investment and maintenance decisions are made with a long-run
 strategic perspective
- In order to minimise inherent risk of inefficiencies it is important to coordinate and sequence planning for provision of new infrastructure in a Region with a small dispersed population base located in two major and five district centres, many smaller, often remote towns

Cradle Coast Regional Land Use Planning Framework

- There is on-going need to replace, upgrade, maintain, modify and rationalise existing infrastructure arrangements notwithstanding absence of demand for substantial increase in infrastructure capacity
- Climate change mitigation and adaptation strategies will require transition to low carbon emission practices and technologies and for efficient and renewable energy systems with implication for the pattern of settlements, transport modes and energy generation and recovery
- Major resource development investment is cyclic and location in dispersed and remote locations (particularly on the West Coast) and can create sudden and substantial demand for additional freight movement to access ports over road systems that present challenges from a road management perspective
- Emerging digital communication technologies will enhance participation and provide new opportunities for economic and social activity at a global scale
- Adjustment in public economic capacity will require rationalisation or alternative to many existing service delivery systems
- Obligations are emerging in response to climate change awareness to increase energy efficiency and to reduce carbon emissions
- There is a need to identify and protect investment in existing and planned major infrastructure corridors and sites against encroachment and threat to operation from other land uses and from exacerbation of natural hazards as climate change effects manifest, including –
 - primary road and rail freight routes between major production catchments and processing or export nodes
 - sea ports and air ports
 - energy and communication transmission corridors
 - water catchment and distribution systems
- Optimising existing function and capacity will assist to avoid unsustainable demand for new and expanded provision

Land use and infrastructure planning informs strategic decisions on need for future investment. It can also promote more efficient and effective use of existing infrastructure to bolster the capacity and efficiency of the system. Integrated planning and provision will ensure the Region's various infrastructure systems can continue to cater for growth and changing demand.

5.2 Transport – Moving Freight, Connecting People, Places and Activities

As with the rest of Tasmania, successful and sustainable human interaction and economic activity within the Region is reliant on an efficient and effective road, rail, air and sea transport system to provide connection and capacity to move freight and people both within and external to the Region.

The Transport modules of the Tasmanian Infrastructure Strategy 2010 and the Cradle Coast Integrated Transport Strategy 2006 reflect a common objective for the State's transport system to "deliver connected communities and efficient and safe movement of people and freight" in a manner that will "drive economic growth, social inclusion and meet climate change challenges".

Cradle Coast Regional Land Use Planning Framework

The Regional Land Use Planning Framework seeks to align with the State and Cradle Coast Transport Strategies to provide a strategic land use foundation for coordinated action on transport so as to ensure an integrated, safe, accessible and efficient transport system that will continue to meet needs of the Region's communities and industries.

Safe and efficient transport systems are critical for movement of resource, processed and manufactured products and for connection of the Region's dispersed and sometimes remote towns and communities. An ability to reach intra-state, inter-state and international markets and to enable individuals to access essential services and participate in their communities underpins prosperity and liveability of the Region.

The Region has an established and adequate system of transportation infrastructure, and is well connected, both internally and externally, by a network of linear transport infrastructure, sea ports and airports, and a range of transport services and modes.

The sustainable operation of these systems within the Region is affected by interactions across modes (particularly, road, rail and sea). Efficiency is influenced by geographic and commercial realities and economies of scale. These are affected by factors such as the dispersed location and small-scale character of regional industry and settlement, relatively low historic rate of growth, and by the interaction between primary transport corridors and sites and the use and development of adjacent land. The rising cost of fossil fuel, and the imperative to reduce carbon emissions, will impact the cost and availability of transport options into the future.

Investment in transport systems can be costly, and can have a long term impact on economic performance, community connectedness and environmental health.

Maintenance and protection of transport infrastructure already consumes a significant proportion of the total public infrastructure budget. As a result, long term asset management to optimise use and life-cycle of existing infrastructure is as important as providing new infrastructure. This includes better integration of transport planning with land use planning — by locating residential areas and employment centres closer together, to reduce trip lengths and to reduce the overall numbers of trips. Producers, processors and export points can be located closer to each other and connected by existing transport network.

These factors provide a number of planning considerations for maintaining strategic function and efficiency of key transport corridors and nodes. The following discussion addresses the relevant considerations for each transport mode.

5.2.1 Sea Transport

Ports are critical assets for economic activity reliant on external markets; and on imported energy, materials, machinery, and consumer products.

The Tasmanian Infrastructure Strategy 2010 recognises a system of accessible and efficient ports will "facilitate trade for the benefit of all Tasmanians".

The major ports of the Cradle Coast Region are critical to the trade activity of Tasmania. Burnie handled a total of 4.2m tonnes in 2008/2009 and Devonport handled 2.9M tonnes in 2008/2009. This is almost 50% of the State's total import and export tonnage and makes the two ports of State significance for freight movement. Continued growth is expected given the withdrawal of international shipping from Bell Bay and the demise of freight cargo at the Hobart port.

Burnie and Devonport support a daily freight service connection to Melbourne. Devonport is the terminal for the Bass Strait passenger ferry services.

Cradle Coast Regional Land Use Planning Framework

The Tasmanian Infrastructure Strategy Transport module indicates key projects include a review of the Burnie Port to upgrade of the rail access to create a roll-on/roll-off capacity and build capacity as the State's key bulk commodities port for timber, agricultural product and minerals.

Fishing fleet operations in the waters of the south west and Bass Strait are supported by ports at Strahan, Stanley, Smithton and Devonport and on King Island.

Strahan is a tour boat base for the Macquarie Harbour/Gordon River wilderness. Port facilities on King Island are essential to the island economy.

There is also a dedicated ore loading facility at Port Latta.

Port infrastructure must be developed and maintained to accommodate growth and change in freight requirements and to provide continued viability as assets of increasing State importance.

The level of investment and practical difficulties associated with constructing a new port, and in decommissioning existing ports, precludes relocation.

A key challenge for planning is to support continued viability of existing port operations. Planning must consider –

- Opportunity for future port expansion both the Burnie and Devonport ports are restricted in ability to increase land area in the absence of additional reclamation at Burnie or conversion of other land uses at East Devonport.
 - More efficient use of existing available land should be a priority. Measures are required to protect against encroachment by non-shipping uses into the port area and to assist location of inter-modal transport and storage nodes in close proximity, but external to the port.
- Conflict with surrounding land use will constrain port operations
 - Both the Devonport and Burnie ports are centrally located within the townships and immediately adjacent the respective central business areas. While proximity provides a sense of urban drama and place-setting; noise, light, transport movement, hazards and security risks have potential to impact on port operations and the appeal of adjacent areas for other uses.
 - Measures are required to buffer and protect new and intensified port development, against sensitive land uses which may impact on port operations.
- Freight access for road and rail

Port access currently involves a degree of shared use with local and regional road infrastructure and extension of rail operation beyond the immediate boundaries of the port area. The fixed and high capital cost of these assets, and the narrow opportunity for major relocation, make protecting function and safety a priority.

5.2.2 Air Transport

Air transport connections with the mainland and with King Island are essential for the movement of people and high value product. These connections have major implications for economic activity and for community health and wellbeing.

There are regular passenger transport and freight capacity airports at Wynyard and Devonport. The King Island Airport and smaller local airstrips in a number of locations including Strahan, and Smithton provide commuter and freight capacity.

Cradle Coast Regional Land Use Planning Framework

The importance of air services requires planning protect safety and function of airports against encroachment or conversion by other land uses.

The use of noise exposure footprints and obstacle limitation surface criteria to restrict sensitive use and building height is appropriate for land both within and external to the airport site.

Air security is now a compulsory consideration for airport operations. Regard must also be had to emergency access. Both considerations have implication for the use and development of land in immediate proximity to an airport.

Airports sites contain expansive areas of level land, a commodity in relatively short supply within the Region. They are also well located in proximity to established urban centres and road transport links. These factors have attraction for industrial and complimentary commercial purposes.

5.2.3 Road Transport

Transport demands for both intra and inter-regional and local freight and passenger movement will require a safe and efficient road transport network.

The State Infrastructure Strategy modules for road transport acknowledge a distinction between the two primary functions of the State's road transport system, being to –

- provide for the "integrated, efficient and safe movement of freight" in a manner that will underpin economic growth and facilitate trade for the benefit of all Tasmanians
- establish a safe, reliable and responsive passenger transport system that supports "connected, liveable and healthy, active communities"

The two priorities create need for differing planning response.

Freight volumes on major roads in the Cradle Coast Region represent the largest intra-regional movement in Tasmania and reinforce importance of the freight network to the economic activity of the Region.

The major factors to influence management of the existing road transport network will be increased in freight demand flowing from economic growth. Increase in passenger will be less significant and will be generated from population growth and self-drive tourists.

There is also an imperative to minimise fossil fuel use by road freight and passenger vehicles to meet the Tasmanian government's carbon emission reduction targets. Road transport contributes over 90% of transport related carbon emissions. The private car is the most significant contributor.

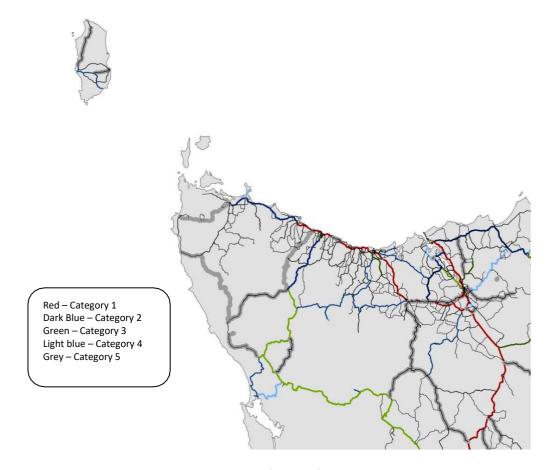
There is a need to recognise and protect function and capacity of investment in road transport routes.

The provision of road transport infrastructure is a responsibility divided between State and local government. The former manages a road network for connectivity at a State level through key corridors between towns, ports, and resource locations. Purpose of the network is to provide for economic and social benefit. Local government manages a road network that is integrated with the state system to provide district and local connection at lower volume and capacity.

The Region's State roads are to be managed in accordance with the Tasmanian State Road Hierarchy 2006. The Hierarchy provides a functional classification system to clarify the priority role for State managed roads within the Region. The purpose of the Hierarchy is to plan and manage

Cradle Coast Regional Land Use Planning Framework

roads which provide connectivity between main settlements, rural catchments and key transport hubs.



The Tasmanian State Road Hierarchy 2006 identifies the following road priorities –

• Category 1 - Trunk Route

Bass Highway west to Wynyard (A2) - Limited Access

The east-west coastal alignment of the Bass Highway provides the primary road transport capacity through the major coastal settlements to port and major centres, and has connection to the main population centres in the northern and southern regions.

The Highway has received significant investment in recent years. It is now dual carriageway between Burnie and Devonport to safely and efficiently link the two major centres. Upgrade has occurred to reduce safety risks over the Sisters Hills section.

The Bass Highway is designated as a Category 1 Trunk Route for that section between the Region's eastern boundary and Wynyard. The road is considered critical to State's interregional and intra-regional heavy transport and passenger capacity to support existing and future industry, commerce and community development.

The Bass Highway is largely separated from direct frontage to land use in urban centres. The inter-mix of heavy freight movements with local and tourist passenger traffic within the Burnie to Somerset section is a concern for efficiency, safety and amenity. Immediate prospect for an urban by-pass is low. Increased management of the land use and traffic relationships is crucial to retain intended function of the Highway.

Cradle Coast Regional Land Use Planning Framework

The primary function the Bass Highway is for heavy freight movement. The Bass Highway carries up to 2.9M tonnes of traffic between Burnie and Devonport, and some 3.9M tonnes per annum eastward from Devonport to the Illawarra Highway.

The road also has high importance for both local and tourist passenger traffic. Regulated restriction on frontage access is administered by the State.

• Category 2 – Regional Freight Routes

Bass Highway (Wynyard to Smithton) (A2) – Limited Access Ridgley Highway (Burnie to Waratah) (B18) – Limited Access

These roads link major resource production areas to the Trunk Road. They are the preferred heavy freight vehicle routes where alternate road links exist and are to carry large volumes of both heavy freight and passenger vehicles on both inter-regional and sub-regional movement.

Transport on the west coast link from Burnie exceeds 2.0M tonnes per annum.

The State Infrastructure Strategy identifies priority projects include upgrade of the Murchinson Highway.

As with Category 1 roads management priority retain function as a freight and passenger transport route.

• Category 3 – Regional Access Routes

Murchinson Highway from Ridgley Highway to Zeehan Highway (Waratah to Zeehan) (A10) – Limited Access

Zeehan Highway (Zeehan to Queenstown) (A10) – Limited Access Lyell Highway (Queenstown to Lake St Clair) (A10)

These are the heavy freight and passenger routes of strategic importance for connecting regional and local communities, and for tourist access. They provide an important link from remote towns at Rosebery, Zeehan, and Queenstown to major centres at Burnie and Hobart.

• Category 4 - Feeder Roads

Stanley Highway (Bass Highway to Stanley) (B21)

Henty Highway (Zeehan to Strahan/Strahan to Queenstown) (B24 and B27)

Cradle Mountain Link Road (Zeehan Highway to Sheffield) (C132)

Mole Creek Main Road (Cethana – Deloraine) (C138/B12)

Cethana Main Road (Cethana to Sheffield)

Stoney Rise Main Road/Sheffield Main Road (Devonport from Bass Highway to Sheffield) (B14)

Stoney Rise Main Road/Railton Main Road (Bass Highway to Railton) (B13)

Port Sorell Main Road (Bass Highway to Port Sorell)

Pardo Drive (Bass Highway to Devonport Airport (B74)

Frankford Main Road (Bass Highway to Frankford)

Currie to Grassy

These roads provide secondary intra-regional freight routes and links from higher category routes for passenger movement between towns for commercial and community interaction, to smaller resource bases, and to tourist destinations.

Cradle Coast Regional Land Use Planning Framework

Category 5 – Other Roads

Smithton to Marrawah (A2)

Waratah Main Road/Hermskerk Highway (Waratah – Savage River (B23) – Corinna (c247) – Balfour (C249) – Couta Rocks (C214))

Murchinson Highway (Somerset to Waratah) (A10)

Anthony Main Road (Tullah - Queenstown) (B28)

Zeehan to Reece Dam (C249)

These are local connection roads of comparatively low frequency and volume freight capacity for resource and agricultural activities, and provide local and tourist passenger links from higher category road to smaller settlement areas and tourist attractions.

There is also a category of roads outside the Tasmanian State Road Hierarchy 2006, being the local networks which service urban and rural centres and often connect to State roads. These include roads which link major activity spaces within an urban centre and the internal street systems which service individual activity spaces for residential, commercial and industrial use. They also include the extensive network of local rural roads servicing agricultural, resource and recreation areas.

In some locations State roads also provide local road function. These locations provide particular likelihood for conflict between primary purpose and local need. The Bass Highway through Burnie is the major section of dual function road.

The planning and management of both State and local road networks must seek to ensure a safe and efficient road system.

Roads with a high priority for safe and reliable least-cost freight connections between a resource or industrial area and a processing point or export port are higher-cost strategic investments with broad community benefit. These are mainly Category 1 and 2 roads. Major freight routes are to be managed to retain a strong movement function for a mix of heavy freight vehicle types with minimal intersections or direct property access, and a consistent high speed environment. Opportunity for direct access and close proximity of adjoining land use is to be restricted to minimise conflict and risk to primary function.

Roads where a reliable and efficient freight capacity is not a priority can be managed to allow increased pedestrian and parking activity, more road junctions and direct property access and lower speeds. These are generally Category 4 and 5 and local roads.

The primary challenge for land use planning is to locate opportunity for use and development of land in a manner that will assist to maintain design function and capacity of the road system. The volume and mix of traffic in traffic generating development and the sensitivity of use or development to proximity to traffic activity can have direct impact on efficiency, safety and operation of road networks and the convenience and attractiveness of urban and rural places.

Integrated land use and road transport planning requires –

- Major freight and passenger road transport corridors identified under the Tasmanian State
 Road Hierarchy 2006 for the Cradle Coast Region are recognised as a distinct land use category
 for protection of function and capacity and to enable road improvement and increase in freight
 traffic volumes including longer and higher-mass vehicles
- Restriction on junctions with local road networks and on direct property access between adjoining land and major freight and passenger roads in both urban and rural locations

Cradle Coast Regional Land Use Planning Framework

- Dispersed and ribbon development with frontage to major road transport corridors is avoided
- Major land use activities dependent on road freight transport services (including transport and storage, resource processing, and manufacturing) are located to integrate with the location and function of existing major freight routes. This will provide access to strategic transport infrastructure to maximise existing high volume freight capacity and minimise dispersed locations where upgrade or provision of new networks will be required
- Creation of compact and contained settlement areas within which requirement for shortdistance trips to meet daily needs are minimised by access to alternate transport modes, including walking, cycling and public transport
- Local area road networks provide a high level of accessibility and connectivity to local destinations, low speed environments, and safe, attractive, convenient and equitable opportunity for walking, cycling and access by public transport
- The nature and management of land use located adjacent to major road corridors is not sensitive to safety and amenity risk arising from traffic movements and will not impose constraint on the function or capacity of freight and passenger movement
- Traffic generating use and development make appropriate arrangements for local area traffic management, including safe arrangements for vehicular access, provision for loading and unloading and parking of vehicles attracted to a site or locality, for safe and convenient pedestrian and cycle movement, and for connection to public transport

5.2.4 Rail Transport

The Tasmanian Infrastructure Strategy 2010 recognises rail can provide "a viable competitor for road delivering our freight and underpinning economic growth".

The Region has freight rail connection to northern and southern Tasmania by the Western Rail Line which passes through Railton, Latrobe, Devonport, Ulverstone, Burnie and Wynyard and terminates at Wiltshire Junction near Stanley.

The line west of Burnie is currently non-operational and requires substantial investment if it is to be reopened.

There is also the Melba line connecting from Burnie to the west coast mining town at Rosebery. Upgrade is a key project under the Tasmanian Infrastructure Strategy.

The rail system primarily carries mineral and container traffic into the ports of Burnie and Devonport and assists to distribute imported general cargo into the rest of Tasmania.

Freight volumes and short-haul distances work against rail as a significant intra-regional transport option. However, likely future demand for more fuel efficient transport may promote greater rail freight use.

Passenger services were discontinued in the 1970's due to low patronage and competition from road based transport modes. The line is not currently suitable for passenger movement. Upgrade in rail, infrastructure and rolling stock to contemporary passenger standard would be substantial and is not part of the State Infrastructure Strategy. The relatively small and dispersed population work against reintroduction of a competitive, well patronised and cost effective rail passenger service.

Cradle Coast Regional Land Use Planning Framework

The Framework must be concerned to manage use of the rail system through minimising encroachment by activity into the rail corridor that could compromise safety or impose constraint on operation.

5.2.5 Active Transport

Cars provide the dominate form of passenger transport in the Cradle Coast Region. Most car journeys are relatively short distance trips for meeting daily needs.

Settlement in the Cradle Coast Region is characterised by dispersed, low density and separate urban areas (generally with a regulated internal segregation of land use) and many smaller outlying centres. The existing pattern creates journeys of distance for many daily needs, including employment, education, health care, retail, and socialising. There is a high level of car dependency encouraged by necessity as an attractive, fast and convenient transport mode. There is an absence of viable alternatives.

Notwithstanding, walking and cycling comprise 4.5% and 0.6% respectively of all trips to work in Burnie and Devonport.

State transport strategies²² aim to provide "a safe and responsive passenger transport system that supports improved accessibility, liveability and health outcomes for all communities, in the context of the challenges of climate change" with the objective of making public transport a first choice option and an effective low cost alternative to private car use. A number of key projects are identified in the Transport modules of the Tasmanian Infrastructure Strategy to improve bus services and passenger facilities, including bus stops, waiting areas and interchanges.

The State Strategies also support "active transport" systems under which walking and cycling are considered to be essential low cost and reliable transport options for all communities, particularly in urban centres.

The Active Transport Strategy seeks to assist transition to a low carbon emission community by substituting short car trips with opportunity to walk or cycle. The carbon emissions impacts of private car use could be significantly reduced if alternate transport modes such as walking, cycling and public transport were substituted for short-distance travel. The Strategy promotes increased walking and cycling as having benefit for building active and healthy communities.

The strategies also seek to create more liveable communities by increasing standards of accessibility to key local destinations for daily needs, and thus increase the attractiveness of a place for living, working and recreation.

Successful implementation of Active Transport strategies require land use planning policy provide urban settlements that reduce car dependency and overall distances travelled. The basic pattern of settlement and the form of urban centres must be adjusted to provide more compact, higher density mixed use areas with improved levels of internal connectedness and greater local accessibility to daily needs. It also requires avoidance of remote outlying housing development.

Planning policy must recognise the needs of pedestrians, cyclists, public transport users and recreational walkers are at least equal to the requirements supporting private car dependency. Urban spaces should enable people to walk and cycle in safety and with ease as part of their daily lives, including for journey to work, school and social engagements and exercise regimes.

²² Tasmanian Urban Passenger Transport Framework and Tasmanian Walking and Cycling for Active Transport Strategy 2010 Department of Infrastructure Energy and Resources

Cradle Coast Regional Land Use Planning Framework

Integrated transport and land use planning systems need to support sustainable strategic outcomes which support attractive low carbon transport modes, enable active and healthy communities, and which provide more pleasant places in which to live, work and play.

The Framework need take a long term approach to –

- Promote increased awareness, acceptance and usage of active transport options
- Consolidate population growth into more compact and contained settlement patterns which discourage outlying development and reduce distances between origin and destination for most daily trips
- Increased residential densities and a greater mix of land use (including co-location of housing types and education, shops, health and employment)
- Subdivision layouts which provide interconnected streets and adequate, accessible, linked and quality open-space systems to create direct, convenient and continuous walking and cycle routes (whether shared or dedicated) between key local destination and residential areas to encourage walking and cycling as an alternative to private vehicle use
- Safe and convenient infrastructure for pedestrian and cycle movement systems, including for cycle parking and change room facilities at major destinations
- Increased ability for access by public transport within and between population centres

5.3 Energy – Generation, Distribution and Supply

Energy is an essential ingredient in economic activity and the wellbeing of communities. A competitively priced and reliable energy base is critical for attracting and retaining business and industry.

Energy runs the economic production and transport systems which source, process and move goods and materials to markets. It also meets the lifestyle and mobility requirements of the workforce, and makes safe and convenient the centres in which they live.

The energy considerations for the Region are the same as those applying for Tasmania. Island and isolated status require enhanced independence, diversity and security in the energy base to provide fair priced choice and environmentally sustainable supply.

The Region has no independent fossil fuel resources. It imports all its petroleum, gas and coal requirements. A natural gas supply and distribution pipeline from a mainland source in the early 2000's provides an important energy alternative. Exploration continues in off-shore gas deposits, but the size and viability of these resources remains uncertain.

The primary energy challenge for regional communities in the immediate to long-term future is a need to reduce carbon emissions.

The Tasmanian Infrastructure Strategy indicates an aim for the State to become the leader in Australia's renewable energy future. Renewable energy is expected to play a key role in achieving the Tasmanian Government's target to reduce greenhouse gas emissions by 60% below 1990 levels by 2050, and in the State's policy objective to facilitate significant renewable development to become a net exporter of renewable and low-carbon electricity to the fossil fuel-dominated National Electricity Market (NEM).

Cradle Coast Regional Land Use Planning Framework

The Region has an established and potentially growing capacity in renewable electric energy through a long association with hydro-generation and more recent initiatives in wind generation at Woolnorth. However, recent prolonged periods of below average rainfall have reduced storages and the Region's electricity demands contribute to Tasmania being vulnerable to need for imported electrical energy.

There is potential for greater energy independence with expanded development of renewable sources with benefits for carbon neutrality, environmental improvement, reversal of imported energy needs, and increased export and employment.

The challenge for planning is to support a pattern of economic activity and settlement that will remain viable in an increasingly oil and carbon constrained society.

This requires a secure, long-term and sustainable renewable energy base at an affordable and competitive cost. It also requires a high level of energy efficiency and a corresponding reduction in consumption in the residential, commercial and industrial sectors, and a more innovative approach to energy generation and re-use.

Arrangements are required which protect and enhance energy generation, distribution and supply networks, and which allow alternate development standards to support energy efficiency in design and operation of urban systems, including in density, construction, waste and energy capture and micro-generation.

Other sections of the Framework have noted the existing dispersed patterns of settlement and economic activity contain a number of efficiency shortcomings. Many of the initiatives for improving efficient use of land and for creating more attractive and function spaces will have dividends for energy efficiency and reduction in carbon emissions.

5.3.1 Electricity

The primary land use planning issues for electricity are capacity and reliability of supply to meet urban and industrial demand and to maximise potential in renewable generation sources, including opportunity for export to mainland markets.

Outlooks for the electrical energy relevant to the Region include participation an increasingly national competitive market, increased investment in a range of renewable technologies, and introduction of a more distributed generation system including at a micro-generation scale, improved efficiency by end-users and a reduction in local consumption and return in Tasmania's generating capacity to an exporter of electricity into the national grid²³.

Land use planning has no direct responsibility for electricity generation or distribution of supply networks. However, it has potential to impact on location, security and expansion of essential infrastructure and emerging technologies through approval and land allocation processes.

a. Generation

The Region has a substantial established renewable energy source in hydro-electric generation. Catchments are in locations where rainfall is expected to increase under climate change scenarios. There are three generating catchments – Mersey Forth, Pieman, and King-Yolande which together constitute a major proportion of the State's total hydro generation capacity.

It has an embryo wind generation industry at Woolnorth based on Tasmania's world class wind resource, with indications for additional capacity and new locations, including on Robbins Island.

²³ Electricity in Tasmania A Hydro Perspective October 2009

Cradle Coast Regional Land Use Planning Framework

Investigation continues into potential to develop solar, bio-mass, geothermal, and marine energy sources.

Major generation facilities are generally in relatively remote and rugged locations where there are few immediate alternate land use pressures in immediate proximity. However, construction of hydro catchment storage facilities has created improved road access into remote locations and provides expansive water bodies with attraction for recreational boating and scenic use. Land use planning needs to work in cooperation with infrastructure and natural resource managers on arrangements for recreational access and facility development, including for housing.

Large-scale wind farm development is likely to occur on more open terrain in locations closer to established settlements. Placement of wind turbine structures can invoke concern for visual and noise amenity, particularly in landscapes considered of scenicvalue.

Transition to more renewable generation capacity may involve widely distributed application of a range of micro-generation facilities. It can reasonably be expected such generating systems will be located within settlement areas for residential, commercial, industrial and utility purposes. Placement of some forms of micro-generation systems, including wind- turbines and large-scale solar arrays, may also invoke concern for visual and noise amenity and safety.

Land use planning must adopt a policy environment which provides investment certainty and facilitates a pragmatic perspective recognising imperatives for transition to a renewable energy base.

b. Transmission

Transmission systems carry electrical energy across the landscape from point of generation to point of distribution.

The Region's transmission system is operated by <u>TasNetworks</u>.

The operation and configuration of transmission networks within the Region reflects the nature of the hydro-generation system to be dispersed with in remote and rugged terrain and environmentally sensitive areas.

The Cradle Coast network comprises a 220kV bulk transmission network with supporting 110kV transmission circuits for load transfer. Transmission is by aerial conductors supported on a variety of tower configurations. There are associated switching and transition stations, connection point substations, telecommunication and control facilities. The Farrell 220kV/110kV substation near Rosebery is the main connection point for more than 620MW of Hydro's West Coast generation, and for supply to the West Coast towns and mining sites. 220kV transmission occurs from Farrell to the main north-west supply point at Sheffield from where it links to a 220kV substation at Burnie, and to Launceston and Hobart. 110kV transmission occurs from Sheffield and Burnie to regional supply substations. The Region is connected to Tasmania's capacity to export renewable electrical energy into mainland Australia via the BassLink cable.

The current development program for the transmission system comprises work to augment and redevelop equipment at the Sheffield and Burnie 220kV and Emu Bay 110kV substations, and to augment the Burnie Sheffield 110kV transmission line. Purpose of the work is to improve security, reliability and capacity of the system.

The creation of new generation sites will present likely need for additional transmission corridors. It is also anticipated there may be need to strengthen connectivity within the backbone transmission system to improve efficiency, reliability and security.

Cradle Coast Regional Land Use Planning Framework

It is sometimes considered desirable that alignment of linear transmission corridors should be determined to avoid areas with high natural conservation and resource development value. However, this can be difficult because many renewable energy generation sites are located within or are access across an area of conservation value. There is also desire transmission lines should avoid urban and rural settlement areas for safety, health and amenity reasons. The objective creates an efficiency tension between the operational obligation on TasNetworks to develop and implement least cost, most technically acceptable long-term solutions and the desire for solutions based on environmental or social outcomes.

There is a need to protect vital electricity infrastructure sites and corridors against encroachment by sensitive forms of land use, and to avoid dysfunctional use of settlement land through necessity to form lots and erect structures around corridor alignments.

High voltage transmission corridors require a 50m width for 110kV lines and 60m for 220kV lines. Corridor widths provide for safety from dangers posed by conductor movement, electro-magnetic fields, and electrical induction. Permanent structures are excluded within the transmission corridor and vegetation is managed to prevent intrusion into the conductor zone.

While there are a variety of mechanisms for legal recognition of transmission corridors, they are generally not identified under a planning instrument. Security and certainty for the transmission industry could be improved by regulatory arrangements which recognise transmission corridors and accommodate development for construction, installation, modification, maintenance, removal and replacement of electricity transmission infrastructure as a matter of right.

c. Supply

Electricity is supplied to residential, commercial, industrial and other consumers from the transmission grid to consumers by a number of retailers using infrastructure operated by the utility provider. The distribution network comprises local reticulation systems supplying from 110kV substations using both aerial and underground lower voltage conductors and associated equipment.

Land use planning needs to coordinate with capacity of existing and planned systems. It need also consider cost efficiencies associated with safety and aesthetic requirements for underground reticulation, and with standards for lighting of streets and public places.

5.3.2 Natural Gas

Natural gas is piped into Tasmania across Bass Strait. A high-pressure supply main is aligned along the northern coastline from Georgetown and extends to Port Latta. Off-take points are provided for all major settlement and strategic industrial areas.

Gas is a relatively new and under-utilised industrial and domestic energy source in the Region. However, requirements to reduce carbon emission may increase demand in the immediate to short-term.

Planning has an obligation to manage land development within the defined gas pipeline corridor to maintain security of the line and to ensure safety for sensitive uses.

5.4 Water Supply

Protection and provision of a secure, reliable, safe and adequate water supply is critical for the health of natural, human and economic systems.

Cradle Coast Regional Land Use Planning Framework

The Cradle Coast Region has a comparative advantage in surface water resources given its multiple catchments, and high annual rainfall and runoff. These assets have been extensively utilised through hydro-generation, irrigation and urban water schemes.

There is a continuing and increasing demand and competition for water, driven by population growth, irrigation for agriculture, hydro-generation, change in catchment land use, rising community expectations regarding water quality and ecosystem protection, and uncertainty regarding implications of climate change. These factors manifest importance for prudent farsighted allocation and management of the Region's water resources.

The Tasmanian Infrastructure Strategy identifies two categories of water infrastructure for allocating and managing use of the Region's water resources as a priced commodity.

• Rural Water Supply – the objective for which is to sustainably deliver water to agriculture for its most productive use.

The strategy supports creation of additional rural water capacity by development of new regionally significant irrigation schemes as private-public partnerships under the auspices of the Tasmanian Irrigation Development Board (TIDB) to assist increased security and production in the agricultural industry.

There are three TIDB mooted projects for the northwest –

- Forth Irrigation Scheme to service communities at Kindred, Sprent, North Motton, Abbotsham, Sheffield, Barrington, Melrose with 19,000ML to irrigate 12,000ha
- Sassafras Wesley Vale Irrigation Scheme to service communities at Sassafras, Wesley Vale and Moriarty with 5460ML to irrigate 10,650ha
- Dial Blythe Irrigation Scheme to service communities at Cuprona, Natone, West Pine, Sulphur Creek, Riana, and South Riana with 3,000ML to irrigate 4,000ha

In addition, there is a number of existing irrigation arrangements, including the Togari Water Supply Scheme and the Montague River and Welcome Rive Water Improvement Schemes operating in the far northwest, and many individual and collaborative local on-farm schemes.

The land use planning system has a function to assist security for investment and use of rural water schemes. Lands identified to benefit from access to irrigation water are to be given priority for agriculture. Non-agricultural uses sensitive to safety and amenity impacts or which may constraint ability for more intensive agricultural activity are to be restricted.

Planning must also recognise arrangements for the provision and maintenance of storage, movement and application of irrigation water are development directly associated with agricultural use and are to be facilitated by approval and assessment processes.

• *Urban Water Supply* – the objective for which is to ensure healthy people and environments by managing water and sewage sustainably.

From June 2009 all local and bulk water supply and local waste water treatment responsibilities were transferred to the newly formed Cradle Mountain Water Corporation.

Cradle Mountain Water (now Taswater) has sole responsibility to source, store and treat raw water and distribute for domestic, commercial and industrial use. The Corporation operates 14 individual treated water supply systems, and maintains 1100km of reticulation pipeline to service all of the Region's major population centres and the majority of its smaller settlements.

Cradle Coast Regional Land Use Planning Framework

The Corporation also has sole responsibility to drain and treat urban waste water prior to discharge to receiving waters. It operates 29 waste water treatment plants and maintains 990km of drains.

There are no immediate demand stresses on the urban water system. There is a surplus in design capacity for the water and sewage systems in each of the major and secondary urban centres sufficient to accommodate an increase in residential demand. However, while the standard of potable water and waste water treatment is generally good, variation in age, provision and condition of individual schemes requires considerable capital investment to provide consistent compliance with environmental and public health obligations.

Land use planning can assist long-term security and sustainability of urban water supply –

- protect urban water catchment areas against development that will threaten water quality
- optimise use of existing and planned supply and drainage infrastructure through infill and redevelopment
- identify release areas in locations with access to existing trunk mains and ensure sequence and staging is coordinated with orderly and economic provision of new or expanded services
- enable water minimisation and re-use systems
- acknowledge the provision, improvement, maintenance and repair of reticulated water supply and sewage drainage systems is development incidental to urban activity

5.5 Telecommunication

The relatively remote geographic location of the Cradle Coast Region and the isolated nature of many settlements require reliable access to high speed and large capacity telecommunication systems to retain and build economic prosperity and liveable communities.

Telecommunication is the key to competitive economic activity. It can drive enormous efficiencies in the supply chain, link consumers and producers, and encourage innovation and responsiveness. Businesses without access to best available telecommunication systems will be competitively challenged in an economy increasing part of global markets.

Communities are increasingly serviced remotely through telecommunication systems for business, advice, health, education, information and entertainment activities.

It is essential for the social and economic sustainability of the Region that it is well positioned and prepared to take advantage of such technologies as they emerge.

The Tasmanian Infrastructure Strategy provides a module on digital communication with the objective to connect people with services, people with systems, and people with people. It envisages a thriving digital economy in which smart technology and a State-wide digital network underpins health, education, hazard management and other services to create a thriving digital economy and high levels of participation. The system is to be based on broadband fibre optic under the National Broadband Network, smart grids, and enhanced digital mobile services on a 4G network. Digital capacity will enable creation of virtual activity centres and interactions in which the Region can participate at global, national, regional, local and specialist levels.

The Cradle Coast Region is included in the early phase roll-out of the National Broadband Network.

Cradle Coast Regional Land Use Planning Framework

Several mobile carriers service the Region, and coverage is continually improving to include the remote south west and King Island.

The expansion of telecommunication networks usually involves the physical development of land to install communication towers, and change in the appearance of buildings and structures. Development may have impact on the character and amenity of local environments.

There are national standards applying for the location, placement and design of telecommunication infrastructure to manage safety and amenity impact on local circumstances, and to provide consistent approval processes and assessment requirements.

5.6 Waste Management – Solid and Liquid Waste

The health of human and natural systems is dependent on effective waste treatment and disposal methods.

The Region faces enormous challenges in dealing with domestic and industrial liquid and solid waste, despite increased involvement in waste reduction, re-use and recycling programs.

The Cradle Coast Regional Waste Management Strategy seeks to achieve coordinated action on solid waste reduction, disposal and recovery action through shared physical infrastructure and awareness and behaviour programs. The Strategy is a response to increasing standards and obligations on landfill, and has resulted in a progressive transition to more centralised waste disposal facilities at Dulverton and Port Latta as small-scale local facilities are phased out.

The Region faces particular challenges in waste recovery and recycling. The relatively small and dispersed population, and a low cultural base for re-use and recycling, and limited options for processing within the Region or Tasmania, hamper efficiency of waste recovery operations.

Land use planning can assist waste outcomes by enabling and buffering waste recovery, processing and disposal sites as a legitimate land use. It can also ensure development standards do not unnecessary restriction on the use of recycled materials and water in rural and urban activities.

Cradle Mountain Water (now Taswater) has responsibility to collect and treat liquid domestic and trade waste to an approved standard prior to release into receiving waters in accordance with State managed environmental conditions. There are 26 separate waste water treatment plants within the Region.

Directions for Infrastructure Provision

Development and settlement are underpinned by integrated land use and infrastructure planning to facilitate provision of adequate, appropriate and reliable infrastructure in a manner that —

- ensures infrastructure is planned and available commensurate with the use and development of land
- prioritises optimum use of existing infrastructure over provision of new or expanded services
- identifies and protects the function and capacity of existing and planned infrastructure corridors, facilities and sites

PART C

The Cradle Coast Regional Land Use Strategy 2010 - 2030

1. Implementation - Making it Happen, Keeping It Relevant

Effective implementation is the key to success of the Cradle Coast Regional Land Use Strategy.

Successful implementation will require that all levels of government, industry, and the community share responsibility and work together in a coordinated and collaborative way to deliver the policies and outcomes required by the Strategy.

1.1 Purpose of the Strategy

The Cradle Coast Regional Land Use Strategy is to guide the land use planning process within the Cradle Coast Region of Tasmania over the next 20 years and beyond.

The Cradle Coast Regional Land Use Strategy is a beginning. It is a framework for the future – an outline for what is desired and a description of intended future conditions.

The Strategy does not provide definitive actions for how to deliver the intended result – rather it expresses the principles and policies against which all future proposals for processes and prescriptions for land use planning are to be considered. The Strategy may be applied as a series of questions or reference points to be addressed when contemplating and making land use policy and regulatory requirements.

The Strategy is not a regulatory instrument for the purpose of individual use and development decisions. It has a statutory function to inform the purpose and content of local planning schemes.

The Strategy will allow for the immediate priority of the Tasmanian government for preparation of planning instruments which deal consistently with the foreseeable and the routine.

The Strategy will also have relevance for the statutory planning processes intended to deal with the consequences of change, with the unexpected, with the unusual, and with the regional significant²⁴.

1.2 Structure of the Strategy

The Cradle Coast Regional Land Use Strategy acknowledges complex interactions exist between environmental, economic and social issues in land use planning.

²⁴ Including for scheme amendment and the Project of Regional Significant

Cradle Coast Regional Land Use Strategy

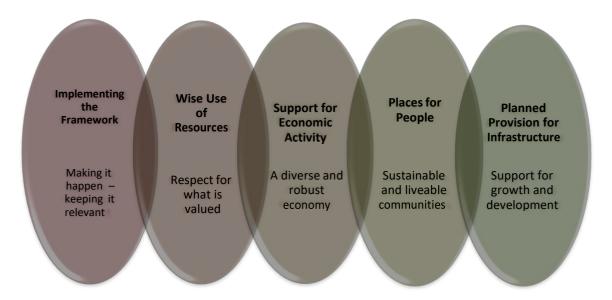
The Cradle Coast Regional Land Use Strategy supports a comprehensive, integrated and long-term approach to land use planning and recognises linkages among policy areas.

The regional profiles and the value understandings developed in the preparation of the Strategy allow convenient classification of land use planning considerations into five core groupings on which to build and execute the policies necessary to shape and guide future decisions.

The policy groupings are not mutually exclusive. They are intended to assist identification and understanding on requirements for shared action in land use planning and in other areas of policy and investment with capacity to both influence and direct social, environmental and economic positions.

Each category provides structure and coherent direction for the desired end-state on a particular class or focus of land use issues and considerations. Each category provides regional specific policies to support the declared State outcomes for land use planning.

The five policy groupings are -



1.3 Statutory Status

The Minister for Planning may declare a regional land use strategy in accordance with Section 5A of the *Land Use Planning and Approvals Act 1993*.

The Cradle Coast Regional Land Use Strategy must be reflected and delivered through the provisions of all subsequent local planning schemes applying for land within each of the municipal areas in the Region. Such schemes must be consistent with and further the objectives and outcomes of the approved regional land use strategy.

1.4 Strategic Outcomes

Land Use Outcomes for Implementation

The Cradle Coast Regional Land Use Strategy -

- Promotes regional land use policies that respect the natural environment, facilitate a robust and successful regional economy, provide liveable communities and a sustainable pattern of settlement, and guide new use and development toward a secure and prosperous future
- Consolidates and aligns land use planning with related strategies for economic, social, environmental, conservation and resource management applying for the Cradle Coast Region and places them into an overall context of an integrated regional land use strategy
- Provides a basis for the coordination of future actions and initiatives related to the growth and development of the Region and promotes arrangements which optimise benefit for regional communities
- Initiates a regional land use planning process to provide a strategic regional perspective and a coordinate framework for consistent regulatory action

1.5 Principles for Implementation

There is little purpose in preparing plans intended to direct and deliver community benefit which are not implemented.

The following principles are fundamental for implementing the Strategy in a manner that aligns the policies of the Cradle Coast Regional Land Use Strategy with Tasmania's and the Region's broader goals for a sustainable and prosperous future and with the statutory objectives for the Tasmanian resource management and planning system –

- a. All levels of government, industry and the community work collaboratively, share responsibility, and are accountable for sustainable land use
 - This is a core objective for the Tasmanian land use planning system. It requires all processes and decisions relevant for land and resource use must be consistent with the outcomes required for the resource management and planning system.
- b. Strategies, policies and decisions for land use are integrated across all levels of government, industry and the community
 - Land use policy must not be made in isolation. A regional perspective must apply, and actions must coordinate and be aligned with other management programs applying for the same resource, locality or issue, noting the unique circumstances that exist on King Island may justify policy variation.

Cradle Coast Regional Land Use Strategy

Land use planning must operate in concert with all of Tasmania's statutory and structural frameworks and is not to embellish, substitute or override the intentions, rules and requirements of other arrangements for managing social, economic and environmental outcomes for the State.

c. Land is a limited, non-renewable resource and is not wasted

Policies are to promote opportunities for use and development to accommodate future population and employment growth without unnecessary or unreasonable adverse effect.

Land is to be used in the manner best matched to its highest capability to support social, cultural and economic endeavour while always protecting health of the environment.

Policies are to identify the priority use for land and allow adaptability, flexibility and innovation in the rules and technical requirements applying for matters such as zoning, conforming land use mix, development density, site coverage and urban, building, utility and community service design and provision.

Land is to be provided for -

- Conservation
- Primary production
- Economic activity
- Housing
- Community purposes

Implementation requires repositioning on many established land use conventions. There must be an acceptance that progress, change and transition will continually occur within the established order of use and development.

d. Facilitate use and development

Land use strategy is to encourage use and development including the recognition of appropriate opportunities to consider and strategically plan for the sustainable growth of settlement areas. This requires consideration of the potential for adverse impacts on natural, economic and social systems so such impacts do not outweigh the benefits that the community may derive from the facilitation of use and development.

e. Improve the liveability and sustainability of communities

Planning policy assists to provide communities with pleasant, efficient and safe places in which to live, work and visit. Land use has a profound impact on liveability.

f. Land and resources are consumed at a rate sufficient to meets social and economic needs of the present generation without compromise to the ability of future generations to also meet their own needs

The principle of *sustainable development* is central to the Tasmanian land use planning system.

Sustainable development helps to enhance the long-term viability of urban and rural places.

Implementation action must have regard to the rate and efficiency of consumption and to the cumulative effect of use and development.

Cradle Coast Regional Land Use Strategy

Future benefit takes precedent over short-term expediency. The principle of intergenerational responsibility is to apply for all forms of land use. Decisions must be mindful of the long-run consequence on the economic, social and environmental capacity of land and resources for future generations.

The planning system requires a custodial responsibility to ensure land and resources remain available to be used into the future - whether or not for the same purpose.

g. Decisions and choices are informed by science and expert knowledge

Knowledge based decisions require authoritative and defendable information.

Implementation actions must focus on objective information and analysis of direct and substantive relevance.

There is an imperative to fill knowledge gaps and to ensure the currency and completeness of information on which strategies and policies are founded. Decisions with a subjective basis and unfettered discretion are avoided.

h. Consider the complete and cumulative effect of past, present and likely future use and development on the health or carrying capacity of a natural or human system

Assessment for the immediate impact of use and development on a proposal by proposal basis does not allow understanding on the combined impacts over time or identification of appropriate management requirements.

The principle of *Inter-generational equity* is encompassed within the notion of sustainable development. It warrants particular consideration in the context of regional land use strategy. From a land use perspective the principle implies that use or development should meet the needs of the present without compromising the ability of future generations to meet their own needs. In practical terms, this means that planning decisions should account for the impact not just on present generations, but also on generations to come.

i. Where there are threats of serious or irreversible social, economic or environmental damage the lack of scientific certainty is not to be used as a reason for postponing measures to prevent harm or degradation

The precautionary principle is an essential element in the concept of sustainable development. The principle requires that where the known likelihood of adverse effect cannot be ignored for the reason only that there is an absence of scientific certainty for the magnitude of such impact.

Implementation action must adopt a risk management perspective and ensure planning policy and decisions are made having regard to an acceptable level of risk and appropriate measures to avoid, remedy or mitigate risk of serious or irreversible damage.

j. Decisions are responsive to changing economic, environmental and social circumstance

Strategy policies reflect the current state of knowledge and an alignment with policy of relevance. The Strategy is not a static instrument. It recognises influences and circumstances of relevance within the region are dynamic.

Implementation actions must continually monitor and adjust policy content and response from a regional perspective as new data, understanding and direction emerge.

Cradle Coast Regional Land Use Strategy

Implementation actions must ensure land use planning does not reflect or retain conservative or out-dated models for economic activity, community development or environmental protection. Flexible, organic requirements are necessary.

k. Principles and policies are reviewed for possible correction, replacement or repeal where negative unintended consequences are identified

The appropriateness, adequacy, and continued relevance of policy and implementation action for all circumstances of the Region must be maintained and adjusted as required.

I. Maintain and enhance state, national and international connectedness and competitiveness

Extra-regional and global influences on Strategy must be recognised and considered.

The principle reflects a reality that the Region does not exist and cannot function in isolation from connection with the world beyond its boundaries.

The Strategy has a responsibility to ensure activity within the Region reflect and match trends and requirements necessary to remain relevant and productive from a global perspective. The Region has national and global responsibility for the consequences of its actions.

m. Assessment processes and decision criteria are specific, measurable, reasonable, robust, and attainable

Planning instruments derived from the Strategy provide certain, clear, consistent and credible outcomes which are not subject to political, economic or social expediency, and avoid unreasonable or unnecessary impost on the cost of development and compliance.

Rules and requirements are supported by clear jurisdictional authority and apply only to matters for which intervention is necessary and appropriate.

n. Market-based mechanisms and incentives are used as an alternative to regulatory control wherever feasible

Planning instruments are not always the only or most effective tool for delivering desired land use actions.

Implementation authorities must consider a range of alternate options.

o. Decisions and actions provide for broad community involvement on issues which affect them

The land use planning system intends a shared responsibility between government, industry and the community; and encourages public involvement in land use planning processes.

Implementation action must ensure opportunity is available for the community to be both aware of and included within issue identification, policy preparation and review so as to ensure land use planning process remains in accordance with objectives for the system.

1.6 Coordination

Implementation requires coordinated understanding that -

- a. The Strategy is to be read and applied in its entirety and all applicable policies are to be applied
- b. The Strategy is the agreed position of the nine councils of the Cradle Coast Region

Cradle Coast Regional Land Use Strategy

- c. Ministerial declaration as a regional land use strategy under Section 5A of the *Land Use*Planning and Approvals Act 1993 provides a formal policy context and a consistent position for land use planning processes and decisions for the Cradle Coast Region
- d. The planning schemes for each of the nine municipal areas within the Cradle Coast Region are important planning instruments for implementation of the Strategy
- e. Planning schemes deal with the type and scale of use or development which can reasonably be expected as routine or foreseeable and which are of local significance for each municipal area
- f. Planning schemes are to be consistent with the Cradle Coast Regional Land Use Strategy and further the policies of the Strategy
- g. The Strategy informs the planning processes for dealing with proposal which are unexpected or of a size and consequence beyond the immediate considerations of the local scheme, including projects of state or regional significance
- h. Each municipality of the Cradle Coast Region is to immediately revise or replace its existing local planning scheme to be consistent with the policies contained in the Cradle Coast Regional Land Use Strategy
- i. Each local planning scheme is to
 - i. reflect and deliver regional strategies and policies
 - ii. allocate appropriate zones to direct the priority purpose for use of land
 - iii. incorporate common provisions for managing land use or development issues of common significance across the Region
 - iv. ensure requirements for local circumstances do not conflict with any outcome required by the Cradle Coast Regional Land Use Strategy
 - v. provide objective assessment requirements which are clear, robust, reasonable and attainable
- i. The Strategy continues to apply after preparation and approval of complying planning schemes and must be considered in any subsequent initiative to amend a planning scheme, an interim planning scheme or to determine a proposal for use or development of regional significance
- j. The principles and policies of the Cradle Coast Regional Land Use Strategy represent general requirements and are not intended to prescribe the detail of assessment requirements for local planning schemes
- k. Where the Strategy indicates or implies further analysis or assessment is required but such analysis has not been completed all policies are to be implemented to the fullest extent possible and may be amended as further knowledge becomes available
- I. Unless otherwise stated, the boundaries and lines shown on any map included within the Cradle Coast Regional Land Use Strategy are indicative only and are not to be read to scale
- m. Consideration must be given to the unique economic circumstances that exist on King Island when weighing up the various relevant policies of the strategy

1.7 Continuous Improvement

Successful land use planning must be well informed and respond to changing circumstance.

The Cradle Coast Regional Land Use Strategy is a vehicle for continuous improvement. Policies must be adjusted and embellished to reflect and incorporate new information, to respond to the unexpected, and to eliminate unintended consequence.

The following is required to continue implementation –

- a. A regional economic development plan including policies for each relevant industry sector in conjunction with the State Economic Development Plan to confirm location, scale and nature of any future change and demand for employment land, housing and infrastructure requirements
- b. A regional infrastructure plan with sufficient authority to formally align the preferred settlement and growth strategy to arrangements for existing and planned community infrastructure and utility provision
- c. Identify locations of significant natural value outside of existing declared conservation areas as areas of restricted growth
- d. Catchment management planning
- e. Identify and confirm location of areas exposed to natural and human-made hazards and the appropriate standards for regulation, including for land susceptible to land slip, bush fire, or flood, and coastal locations likely to be inundated with rise in sea level or storm surge

1.8 Monitoring and Review

Monitoring and performance review are an important part of any successful venture. Land use planning is no exception.

It is inevitable that regional circumstances will change despite best endeavours to reasonably foresee. New knowledge and information, emerging opportunities, challenges and threats may impact on relevance and appropriateness of the outcomes proposed. Successful land use planning must have capacity to respond to changing conditions. The mechanisms for implementation must be dynamic and responsive in order for the Strategy to remain relevant

It is necessary to develop a set of indicators to measure results against the Cradle Coast Regional Land Use Strategy and to ensure that it is making real progress for land and communities.

It is also necessary to keep the Strategy under regular review at intervals of not less than every five years. There must be authority to adjust the Strategy in response to emerging trends and changed circumstance in order to ensure the principles and policies remain appropriate and practical to requirements of the Region.

Measuring performance and maintaining relevance of the Strategy will require rigorous and consistent evaluation of progress and result through the following mechanisms –

a. Structural arrangements and appropriate resources to implement, monitor and review the Strategy.

Cradle Coast Regional Land Use Strategy

- b. A system of monitoring, evaluation and reporting to determine whether the principles and policies of the Cradle Coast Regional Land Use Strategy are achieving the desired results.
- c. Standardised data collection, analysis and prediction processes and agreed metrics to ensure the information is collected, shared and applied consistently across the Region, including for population forecasts, land supply and take-up, and infrastructure capacity.

Systems are required that will -

- i. Build on existing information capture and sharing arrangements to ensure timely and accurate access to data
- ii. Review and improve protocols for information sharing, having regard to privileged and sensitive information
- iii. Provide comprehensive information on economic, community and environmental factor including cumulative effects
- iv. Provide practical and relevant information to support decision making
- v. Provide understandable information
- vi. Apply a forward looking perspective and make reasonable predictions on directions for change and likely future consequence
- vii. Allow ready adaptation to new knowledge, issues and systems
- d. Arrangements to monitor implementation of the Cradle Coast Regional Land Use Strategy performance indicators, emerging trends and threats, and new knowledge, in order to provide accurate, relevant, timely and accessible information.
- e. Structural arrangements and authority to initiate change where a monitoring and review may indicate need for adjustment, including for how the planning authorities of the Cradle Coast Region will abide by any decision to amend the Strategy or to make regional implementation requirements.

The Cradle Coast Regional Land Use Strategy is not in a position to propose or install any formal arrangement for conduct of the monitor, evaluation and review tasks.

The existing structural arrangements for land use planning within Tasmania and the Region do not provide by statute or agreement for a regional planning function. There is an imperative to address this shortcoming and to introduce a mechanism that will allow the regional planning process to establish practical status in accordance with the legislative intentions contemplated within the *Land Use Planning and Approvals Act 1993*.

1.9 Public Engagement

The people of the Cradle Coast Region are key stakeholders in the purpose and outcomes of the Cradle Coast Regional Land Use Strategy. The community will directly and indirectly have a key role in its implementation.

The State and the municipalities must work together to build community understanding of the Strategy and to facilitate involvement in the implementation processes.

Successful engagement during the implementation process enables the community may not have to scrutinise all subsequent permit proposals. Ambitions, intentions and concerns can be

Cradle Coast Regional Land Use Strategy

successfully identified and determined in the processes which lead to preparation of rules and requirements.

Implementation is to -

- a. Ensure on-going consultation with the community and stakeholders on the implementation of the Cradle Coast Regional Land Use Strategy
- b. Provide information to the community and stakeholders in order to build understanding of regional land use, and facilitate informed involvement in implementation
- c. Engage the community and stakeholders in local endeavours to implement the Cradle Coast Regional Land Use Strategy and provide the necessary information to ensure the informed involvement of the local community

THE CRADLE COAST REGIONAL LAND USE STRATEGY 2010 - 2030

2. Wise Use of Resources – Respect for What is Valued

2.1 Context

The Cradle Coast Region is blessed with unique, distinctive and irreplaceable natural features and landscapes, diverse renewable and non-renewable resources, an extensive marine coastline, and significant cultural heritage.

Fundamental to the Cradle Coast Regional Land Use Strategy is the principle that air, water, land, biodiversity, and cultural heritage are vital resources for the health, identity and prosperity of the Region. These attributes are at the core of a nationally important wilderness system and a resource based economy. They are central to the cultural values of the Region's communities.

The Region's natural and cultural resources must be acknowledged, respected, wisely used, and responsibly managed for economic and social benefit without compromise for their health and inherent capacity to support life in the long-term.

The management of natural resources and systems is not a function reserved to the land use planning process. There are multiple agencies with policy and regulatory responsibility for resource and conservation management. Land use planning strategies are required to align and coordinate with other statutory arrangements.

The focus of the Strategy is to address the relationship between land use or development and the objectives for natural resource management. The Strategy promotes measures to foster a culture of integrated conservation and continued access to resources of value for human and natural systems.

2.2 Strategic Outcomes

Land Use Outcomes for Wise Use of Resources

Use and development of natural and cultural resources in the Cradle Coast Region –

- safeguards the life supporting properties of air, water and land
- maintains and enhances the health and security of biodiversity and ecological processes
- provides sustainable access to natural resources and assets in support of human activity and economic prosperity
- recognises and respects natural and cultural heritage
- promotes the optimum use of land and resources

2.3 Land Use Policies for a Changing Climate

Land use recognises climate is a key factor in determining environmental character and the nature of processes upon which life and survival are dependent.

Land use recognises the climate is changing and that the consequence of such change can have both negative and positive implication for the Region.

Planning is to monitor the effects of climate change on the Region and apply an integrated mitigation, adaptation and risk management approach taking into account all relevant knowledge and available information.

Land use planning processes for mitigation and adaptation –

- a. Promote outcomes which reduce carbon emissions and increase energy efficiency in a manner consistent with and appropriate to furthering declared Commonwealth and State policies and targets
- Promote compact and contained settlement centres which allow reduced dependency on private vehicle use and the length of daily journeys by providing communities with ready local access to daily needs for employment, education, health care, retail and personal services and social and recreation facilities, including –
 - i. a greater mix and less dispersal or segregation in the nature and distribution of land use
 - ii. provision of local activity centres where there is a concentrated mix of activity for shopping, working, studying, recreation and socialising clustered at readily accessible locations
 - iii. improvement in the level of internal connectedness and convenience for pedestrian, cycle and public transport options
 - iv. increase in urban densities for residential and commercial use
 - v. location of employment opportunities within a greater number of centres and at a rate commensurate with local need
 - vi. minimise expansion at the urban fringe and creation of rural residential clusters in remote or poorly connected locations
- c. Facilitate opportunity for resource processing, manufacturing and utility development in locations which minimise distances for freight transport, energy distribution and journey to work. The mix and locations of these may need to be more flexible in remote locations isolated from reliable and accessible road and rail freight networks
- d. Promote energy efficient urban places and facilitate energy efficient buildings through design and construction requirements for subdivision layout, building disposition, and the use of materials and landscaping which maximise solar access and natural lighting, natural heating, cooling and ventilation, and the use of low energy and recovered materials, energy and resources
- e. Facilitate non-carbon energy alternatives, renewable energy and energy recovery projects which enhance transition to a carbon-neutral society, including —

Cradle Coast Regional Land Use Strategy

- stand-alone commercial scale installations in locations where there will be an acceptable level of impact on cultural, economic and natural resource values and on the amenity of designated sensitive use areas
- ii. installations forming a directly associated and subservient part of a use or development
- iii. domestic-scale installations in all locations
- f. Facilitate carbon capture and storage, including by geological sequestration, soil carbon in agriculture, reafforestation and control on the clearing of vegetation
- g. Apply sound risk management practices

2.4 Land Use Policies for Water Management

Land use assists the protection, conservation, improvement and restoration of water quality and quantity in natural streams and water bodies and in engineered storages.

- a. Use catchments as the ecological and hydrological unit of meaningful scale for planning and land management
- b. Identify the surface water and ground water features, hydrological function, and natural features and areas necessary for the ecological and hydrological integrity of catchments
- c. Require catchments, natural water courses and water bodies be adequately buffered against likelihood for resource development, economic activity, utilities and settlement to have adverse effect on
 - i. existing and known likely drinking water supplies
 - ii. surface water, ground water, and water bodies susceptible to impact due to extraction of water or the addition of nutrients, sediments and pollutants
 - iii. hydrological function of water, including its chemical and physical properties, and its biological interaction with the environment
- d. Limit modification of natural drainage systems, including change in channel alignment and in the nature of the stream beds and flow rates
- e. impact on water quality by runoff from adjacent use or development
- f. Promote sustainable water use practices including water harvesting and recycling such as Water Sensitive Urban Design for stormwater and waste water
- g. Require retention and rehabilitation of native vegetation within riparian and foreshore areas
- h. Require urban and rural land use or development incorporate measures to manage diffuse and point source pollution from storm water and waste water discharge in accordance with the Tasmanian State Policy on Water Quality Management 1997 and the Tasmanian State Stormwater Strategy 2010

2.5 Land Use Policies for Land

Land use recognises the health and integrity of natural systems and the prosperity and sustainability of human cultural and economic systems within the Region is inextricably connected to land.

Land use planning processes -

- a. Recognise land is an land is an irreplaceable and exhaustible resource
- b. Ensure the sustainable use or development of land in accordance with capability to provide the greatest economic and social for the region's communities benefit at least cost to natural values
- c. Identify land for
 - i. protection and conservation
 - ii. primary production
 - iii. economic activity
 - iv. settlement
 - v. community, transport and utility infrastructure
 - vi. tourism and recreation

2.6 Land Use Policies for Air

Land use planning processes recognise the importance of clean air to climatic and biological health and –

- a. Maintain standards for natural air quality within the Region
- b. Promote development which satisfies or exceeds applicable regulatory standards for air quality
- c. Buffer development with potential to create adverse effects by nuisance and pollutant emissions from settlement areas

2.7 Land Use Policies for Conservation

A majority proportion and expansive tracts of land within the Region is land reserved under statute for conservation purposes in support of biodiversity, ecological process and geological heritage.

- a. Acknowledge natural conservation value is inherent in all terrestrial and aquatic environments
- b. Recognise land is declared under the legislation of the Commonwealth and of the State of Tasmania for –

Cradle Coast Regional Land Use Strategy

- comprehensive, adequate and representative natural areas are given long-term protection in formal reserves for the maintenance of biological diversity, ecological process and geological feature
- ii. areas outside formal reserves which compliment, link or enhance areas of conservation status, regional identity or local character are managed to retain natural values and function
- iii. settlement and development on land adjacent to areas of conservation value is sited and managed to avoid adverse effect on natural values and processes
- c. Require use or development of land within or in the vicinity of a declared conservation area is to be consistent with the outcomes intended in the applicable statutory management plan for such reserve, including as from time to time applying for
 - i. Tasmanian Wilderness World Heritage Area
 - ii. Savage Rive National Park
 - iii. Rocky Cape National Park
 - iv. Cradle Mountain/Lake St Clair National Park
 - v. Franklin/Gordon Wild Rivers National Park
 - vi. South West National Park
 - vii. Narawntapu National park
 - viii. Arthur Pieman Conservation Area
 - ix. The Nut Reserve
 - x. Dial Range Reserve
 - xi. Lavinia State Reserve incorporating Ramsar wetlands
- d. Promote settlement and land use decisions which integrate with the Cradle Coast Natural Resource Management Strategy
- e. Support sustainable economic use of bio-resources occurring in native forests, water ways and aquatic environments
- f. Require settlement development and growth has regard to likely adverse effect on areas of natural conservation value, including remnant vegetation, waterways and water bodies, and coastal systems
- g. Restrict land clearing and disturbance of intact natural habitat and vegetation areas, including areas of forest and non-forest vegetation communities declared under the Nature Conservation Act, coastal wetlands, and remnant and appropriate cultural vegetation within settlement areas
- h. Avoid fragmentation and bisection of areas of identified natural conservation value and retain appropriate connecting habitat corridors between individual areas of natural conservation value
- i. Consider the likely impact of climate change on areas of natural conservation value, including need for measures to –

Cradle Coast Regional Land Use Strategy

- i. retain and expand areas of remnant native vegetation, biological corridors, contiguous waterways, and off-stream wetlands
- ii. address the exposure and vulnerability of natural systems to future or enhanced levels of risk from the consequences of climate change, including provision of additional areas for habitat migration

2.8 Land Use Policies for Coastal Management

Land use recognises the Region's extensive coastline and coastal processes are critical for meeting diverse environmental, cultural, social and economic need.

Land use planning processes -

- a. Place limits on the expansion of urban and residential use and development within the coastal zone to avoid linear settlement patterns and encroachment onto areas of intact coastal environment
- b. Require new use or development within areas of intact coastal environment are dependent on a coastal location for operational efficiency
- c. Minimise or avoid use or development in areas subject to high levels of coastal hazard
- d. Protect ecological and cultural values of foreshore, coastal reserve, wetland, dune, and
 estuary areas from adverse effect and encroachment by development on land in the vicinity,
 including RAMSAR wetlands and significant coastal wetlands such as Robbins Passage and
 Boullanger Bay
- e. Require intensification and redevelopment within established settlements ensure continued and undiminished physical and visual public access to beaches, headlands and waterways

2.9 Land Use Policies for Cultural and Historic Heritage

Land use acknowledges protection and conservation of historic and cultural heritage assists community identity and connection with places, events and the evolution and continuity of society.

- a. Recognise and conserve the importance of natural geological and biological heritage for both indigenous and European communities
- Recognise and promote understanding of Aboriginal heritage, including places, features, landscapes and items of spiritual and cultural significance and identify measures to consider and resolve values of importance for Aboriginal communities in accordance with statutory requirements
- c. Recognise and promote understanding of the Region's historic cultural heritage places, including significant buildings, structures, works, relics, towns and localities
- d. Rely on the scope and accuracy of statutory archaeological and heritage registers to identify all buildings, items, landscapes, places, precincts and relics of scientific, aesthetic, architectural

Cradle Coast Regional Land Use Strategy

- and historic interest or otherwise of special cultural value of national, state and local significance
- e. Facilitate sympathetic re-use of historic heritage assets through planning incentives and design requirements
- f. Promote settlement and development compatible with the under-lying heritage values of a location

THE CRADLE COAST REGIONAL LAND USE STRATEGY 2010 - 2030

3. Support for Economic Activity – A Diverse and Robust Economy

3.1 Context

A strong and resilient regional economy is essential to sustaining settlement and liveable communities in the Cradle Coast Region. A prosperous community is also of prime importance for protection of the natural environment.

The economy of the Cradle Coast Region is not self-contained and self-supporting. It is dependent on economic flows at the inter-regional, national and global levels, and on the policies and decisions made by governments and markets with a wider than regional interest.

Recognising and responding to this connectivity and interdependency is essential to the effective and successful economic development strategies.

The Cradle Coast Regional Land Use Strategy is not an economic development plan.

The promotion and success of regional economic development initiatives will be closely tied to the strategies and actions of the State as may be expressed through the proposed Tasmanian Economic Development Plan. Unfortunately, the final State Plan will post-date the timeframe for completion of the Regional Land Use Strategy. The Strategy must therefore remain sufficiently flexible to accommodate emerging priorities for regional components of the Economic Development Plan.

The economy of the Cradle Coast Region remains strongly connected to resource development in forestry, fisheries, mineral, and agricultural activity for export into domestic and international markets.

Both renewable and non-renewable resources retain significant unrealised potential and can leverage a range of geographical and climate advantages for sustained performance.

There are an established and strategically significant processing industry value-adding resource products and a boutique manufacturing sector exporting to external markets. There is also a robust trade and service function supporting core economic activity and local communities to maintain self-sufficiency in construction, fabrication, repair, and maintenance.

The business, retail, service and community support sectors are well established and significant employers, although performance is largely dependent on population growth, demographic characteristics, and strength of the local economy.

Tourism and visitor services and renewable energy generation are established and evidence emerging strengths; although considerable infrastructure development and secure access to reliable markets is required.

Increasing capacity in digital communication will assist to diminish isolation and provide the Region with competitive equality and opportunity for new business ventures to enhance and extend existing advantage and established capacity.

The Region's economy has been relatively stable over recent years. However, it remains vulnerable to external influence and volatility, and loss of local control. Decline in traditional sectors through change in global economies and markets; competition in manufacturing and

Cradle Coast Regional Land Use Strategy

processing sectors; absence of a high-level skills pool; and minimal population growth, may continue to stress regional economic health with impact across all sectors.

There is an imperative for the Region to build on advantage, and to future diversify and expand economic activity in order to remain competitive and secure. The relative diversity of the Region's economic base and the small-scale nature of its businesses provide internal weakness and inherent resilience, flexibility and responsiveness.

The Strategy can support economic activity by recognising a strong connectedness between the success of economic endeavour and security of access to land and resources, an attractive lifestyle, and health of the environment. It acknowledges the compliance costs for business and the risk of constraint on competition that arise from unnecessary regulatory intervention. It also recognises the increasing importance of new technology and business systems, including a ubiquitous broadband connectivity with construction of the National Broadband Network, to inform and support existing sectors of economic activity to improve production, supply chains and market access, and to expand and grow new business and revenue opportunities. It also recognises that the economy of King Island functions differently due to the isolation of the island and supports unique outcomes for a diversified economy identified in local strategies for the island.

3.2 Strategic Outcomes

Land Use Outcomes to Support Economic Activity

Prosperity and liveability of the Cradle Coast Region is achieved through economically, socially and environmentally sustainable development. Land use planning —

- facilitates regional business through arrangements for the allocation, disposition and regulation of land use which promote diversification, innovation and entrepreneurism and avoid unnecessary restrain on competition and cost for compliance
- promotes use and development which maximises the Region's economic potential in key sectors with deep capacity and potential for sustained growth and economic return or a clear strategic advantage
- improves the social and environmental sustainability of the State and regional economy by allowing economic development and employment opportunities in a range of locations while respecting the link between a healthy environment and a healthy economy
- supports and grows liveable regional communities through coordinated action aligned with State and regional economic development plans specific to the issues, challenges and opportunities of the Region

3.3 Land Use Policies for Economic Activity and Jobs

Land use recognises a prosperous economy and liveable communities rely on availability for opportunity to undertake economic activity requiring use, development and protection of land and infrastructure.

3.3.1 Economic Activity

- Facilitate supply of employment land in all settlement areas for industrial, business and institutional use including in residential locations and recognise the unique economic circumstances that exist on King Island
- b. Recognise the implication of enhanced capacity in digital communication to diminish location dependencies for economic activity and provide the Region with competitive equality and opportunity for new business ventures in non-traditional sites
- c. Ensure locations for employment use accommodate new forms and changing patterns of economic activity
- d. Promote provision of employment land in locations where
 - i. land is physically capable of development
 - ii. transport access and utilities can be provided at reasonable economic, social and environmental cost
 - iii. there is an access to resource, energy, communication, and workforce
 - iv. sufficient separation can be provided to buffer impact on natural values, economic resources and adjoining settlement
 - v. local strategy on King Island identifies a need for alternative approaches to recognise the unique circumstances of the local island economy
- e. Protect designated economic activity and employment lands against intrusion by alternate forms of use or development
- f. Indicate necessary infrastructure must be planned or available and protected to support current and forecast employment needs
- g. Convert employment land to non-employment use only where
 - i. the land is not required for the employment purpose for which it is designated; or
 - ii. the land is incapable of effective use for employment purposes over the long-term; and
 - o conversion will not adversely affect the overall efficiency of other employment land in the vicinity;
 - o there is a need for the conversion; and
 - o the land is suitable for the proposed alternative purpose

Cradle Coast Regional Land Use Strategy

- h. Regional level activity will locate where subject to one or more of the following factors:
 - i. there is convenient and equitable access by the consumer population
 - ii. it complements the incumbent strength and collective drawing power of existing development of a like kind
 - iii. it relies on a major inter-regional, national or inter-national transport node
 - iv. it is dependent on a specific geographic location or on a local resource; capacity advantage
 - v. there is a sufficient local population to support the development
 - vi. it is required by the policies of government or an external agency
 - vii. it is approved as a Project of State Significance or a Major Project
 - viii. it will not have adverse effect on the sustainability of services provided from another location

3.3.2 Natural Bio-Resource Production

Land use planning processes -

- a. identify land significant for bio-resource use
- b. limit encroachment or intrusion by use or development that will compromise efficiency for -
 - habitat for wild fisheries such as tidal, inter-tidal and freshwater wetlands, estuaries, seagrass and marsh areas and other fish breeding and nursery grounds, including the aquaculture and marine farming operations at Macquarie Harbour, Smithton and Port Sorell
 - ii. timber production in State forests, Private Timber Reserves, and plantation forests, including for transition from old growth production
 - iii. adventure and nature based tourism
- c. support multiple use of forest areas for production, recreation and nature based tourism and conservation
- d. provide for land based support and processing activity in connection with off-shore aquaculture and marine farming
- e. promote land-based aquaculture development where there are low levels of environmental risk

3.3.3 Agricultural Production

Land use planning processes -

a. identify land significant for agriculture in the Region as not less than the entirety of the land which is currently available to and developed for agriculture

Cradle Coast Regional Land Use Strategy

- b. exclude use or development that has no need or reason to locate on land significant for agriculture. Notwithstanding, and with regard to King Island, the local unique circumstances of the King Island economy require a nuanced approach, and that approach is to be consistent with the State Policy on the Protection of Agricultural Land 2009
- c. indicate agriculture dependent on the soil as a growth medium is the priority use on land significant for agriculture
- d. facilitate new forms and changing patterns of agricultural use on land that is not significant for agriculture, including controlled environment and feed lot agriculture
- e. protect and buffer agriculture against incompatible use which may conflict and constraint potential for sustainable production
- f. ensure industries which support and service agricultural production are able to diversify, adjust, innovate and value-add
- g. land significant for agriculture is not excluded from agricultural use unless for
 - i. settlement in accordance with an approved settlement strategy; or
 - ii. an alternate economic use where
 - necessary to operational efficiency;
 - the impact on loss of land for agricultural use and on adjacent agricultural use is minimal; and
 - there is no reasonable alternate location which would avoid agricultural land or allow location on agricultural land of a lesser classification

3.3.4 Minerals, Construction Aggregate and Stone Resource Extraction

Land use planning processes –

- a. identify areas of known and prospective significant mineral and aggregate resources in consultation with Mineral Resources Tasmania
- b. exclude use or development with likelihood to preclude or hinder development of the resource for reasons of public health, safety or environmental impact from land in the vicinity of an identified extraction resource unless extraction is not feasible

3.3.5 Sustainable Tourism

- a. facilitate tourism operations and facilities in locates that
 - i. leverage attraction and uniqueness of authentic experience in natural and wild places, including iconic destinations
 - ii. integrate with other economic activity, including agriculture and mining
 - iii. capitalise on natural and cultural heritage and landscapes
 - iv. provide choice and diversity in character, distribution and scale

Cradle Coast Regional Land Use Strategy

- b. protect attributes which attract and enhance tourism experience in the vicinity of designated tourist trails, identified points of interest and high value environmental, cultural and scenic sites
- c. promote nature based and cultural tourist orientated development in conservation and natural value locations
- d. promote tourism incidental to resource, industrial and settlement activity
- e. require tourist facilities are environmentally and socially sustainable with appropriate standards for transport, water supply and waste water infrastructure
- f. integrate tourist experience and infrastructure into settlement centres to support and reinforce economic function
- g. avoid alienation and displacement of local communities and significant change in local character, function and identity
- h. ensure regulatory requirements and approval processes do not unduly direct or restrain the location, nature and flexibility of tourism operations and visitor accommodation

3.3.6 Visitor Accommodation

Land use planning processes -

- a. facilitate a range of visitor accommodation options
- b. locate high-capacity accommodation in major settlement centres and key tourist locations
- c. designate sites for camping, caravan and mobile home use
- d. restrict permanent settlement within designated tourist sites and facilities

3.3.7 Energy Generation

Land use planning processes -

- a. promote energy generation and co-generation facilities for alternative energy, renewable and micro-generation
- b. avoid requirements to unreasonably manage visual and nuisance impact of micro-generation systems

3.3.8 Manufacturing and Processing

- a. recognise distinction between industry with an export focus and industry required to service and support local settlement areas
- b. cluster manufacturing, processing, and bulk storage and handling in locations where there is clear advantage for industry through
 - i. availability of large suitable land sites

Cradle Coast Regional Land Use Strategy

- ii. proximity to resource or workforce
- iii. secure access to available or planned transport and utility infrastructure
- iv. established pattern of industrial use
- v. reasonable ability to buffer against impact on other land uses
- c. promote transport and storage activities in locations with access to strategic transport infrastructure and high productivity vehicle access freight corridors, including sea and air ports, major road junctions and rail yards and avoid further dispersal onto new or underdeveloped networks
- d. enable new discrete sites only where there is need for processing close to source or for significant separation from other activity
- e. rationalise and reduce fragmentation of existing industrial land locations to increase efficiency of use and to reduce impact on adjoining lands
- f. provide land for service and support industries, including trade, construction and fabrication, maintenance, repair, distribution and transport in all settlementareas
- g. segregate local service industries from large-scale manufacturing, process and transport activities
- h. locate new industrial land to avoid adverse impact on other land uses and natural or cultural values or high volume transport routes or facilities and buffer against encroachment
- i. restrict intrusion by development that may displace industry through competition for cheaper land or by use conflict, including for bulky good and large format retailing and recreation
- j. promote small scale value adding industries that compliment primary production, including packing, processing, storage, and tourism
- k. promote on-site energy generation and waste recovery systems
- I. promote flexibility in development requirements to accommodate new forms of manufacturing and processing and change in existing arrangements

3.3.9 Business and Commercial Activity

- a. facilitate convenient access in each settlement area to food and convenience goods retailers and services
- b. promote the distribution of higher order retail goods and services throughout the Region in a manner consistent with recognised settlement patterns and at a scale, type and frequency of occurrence appropriate to settlement size, local consumer demand, and relationship to the wider regional market.
 - In this regard Devonport, Burnie, Latrobe, Sheffield, Ulverstone, Wynyard, Queenstown, Smithton and Currie will provide regional or district business and commercial service roles in addition to meeting local demand.

Cradle Coast Regional Land Use Strategy

- c. facilitate retail and service provision to complement and enhance the collective drawing power of existing retail and service areas but which does not involve location of major attractors for the express purpose of capturing market share in excess of that warranted by settlement size and relative function in a regional context
- d. promote integration of neighbourhood retail and service provision into residential areas at a scale, location and disposition suitable to service local need
- e. maintain the integrity, viability and vitality of established centres by locating new business and commercial development onto land within or immediately contiguous with existing town centres and commercial zones
- f. promote increased mix of land use, including for housing, within accessible business centres to encourage viability and vitality
- g. prevent linear commercial development
- h. prevent leakage of commercial and retail activities from preferred locations by restricting retail sales in other land use areas
- i. provide designated locations for bulky goods and large format retailing, including for vehicle, building and trade supply, and home improvement goods
- j. restrict sale of food, clothing and carry away consumables through bulky goods and large format retail outlets located outside town centres
- k. require proposals for major business or commercial development outside designated town centres be supported by need, absence of suitable alternative sites and of potential for immediate, incremental or cumulative adverse affect on established town centres and the regional pattern of retail and service provision

3.3.10 Micro-Enterprises

- a. facilitate location in association with other land use, including home-based business in housing areas where scale and nature will not adversely affect domestic character
- b. promote opportunities for lifestyle and creative enterprise
- c. require micro-enterprise to locate on designated industrial or business land only where of a scale or nature inappropriate for alternate areas

CRADLE COAST REGIONAL LAND USE STRATEGY 2010 - 2030

4. Places for People – Liveable and Sustainable Communities

4.1 Context

The Region's long-term prosperity, environmental health and community well-being depend on wisely managed growth and change in the places provided for people.

Sustainable land use and settlement patterns support complete and inclusive communities and provide healthy, safe and pleasant places where people want to live, work, play and invest.

The settlements of the Cradle Coast Region are small in size, geographically dispersed and separate, but are also physically, economically and socially well-connected. The exception is King Island which remains more isolated and consequently warrants a more nuanced approach to the form and nature of land use to provide for its prosperity consistent with its unique economic, social and physical characteristics.

Each settlement has a distinctive identity. Located within a variety of wilderness, rural and coastal landscapes, settlements offer an enviable association with land and nature and a high standard of community and culture.

The Cradle Coast Region has many attributes which offer a high degree of liveability.

Liveability is increasingly recognised as a driver to building the health, stability, well being and economic prosperity of communities and is a key consideration in location decision making.

The Strategy can assist to build and protect liveability through policies which balance sustained economic activity, environmental protection and provision for people. In particular, the Strategy can promote land use outcomes which enhance accessibility to amenity features such as open and natural spaces. It can encourage the arrangement, design and construction of the built environment to provide attractive, clean, convenient, efficient, enjoyable, healthy, safe and well connected places which enable active and inclusive lifestyles and convenient local access to daily needs in employment, education, health, social, culture and recreation for all people regardless of age, background or physical ability. It can maintain the individual identity of settlements and the health of natural environments without compromise for capacity to grow and change, and to be adequately serviced with utilities and well connected for passenger and freight transport and the communication of information, knowledge, advice and social contact.

There are few immediate pressures for additional settlement land to meet population and economic growth or to promote significant change in the existing patterns and structures of settlement. This provides opportunity to direct Strategy priorities toward improvement in the level of protection and delivery of those attributes which are positive for liveability, and to address those matters for which there is a failing or shortcoming.

The Cradle Coast Regional Land Use Strategy takes a deliberate position against linear growth and lateral expansion of settlements and proposes short to medium-term growth and development will primarily occur within the boundaries of existing settlement areas. It seeks to maintain local identity and characteristic setting and built form. The strategy promotes contained and compact urban centres and settlement nodes. New growth and development will occur through a balance of intensification to optimise use of designated and serviced urban land, and expansion in

Cradle Coast Regional Land Use Strategy

locations where the rate a sequence of growth is consistent with need, land capability and the availability of infrastructure services.

The Strategy affirms and leverages lifestyle attractors and assets inherent in the Region's evolved pattern of settlement. It seeks to address the several challenges which result from fragmented employment opportunities, high levels of personal mobility, absence of a single major centre, and encroachment and constraint on natural and economic systems.

The Strategy promotes settlement outcomes which improve ability for all communities to access regional standard services. It also recognises the traditional role and value of small towns and rural communities as liveable places by encouraging a greater mix of jobs and housing to allow people opportunity to work and access daily services in locations closer to where they live.

4.2 Strategic Outcomes

Land Use Outcomes for Liveable and Sustainable Communities

Regional settlements provide liveable and sustainable communities where

- the growth and development of centres is contained to create functional places which optimise use of land and infrastructure services and minimise adverse impact on resources of identified economic, natural or cultural value
- the pattern of settlement provides a network of compact, well connected and separate centres each with individual character and identity
- land supply is matched to need and there is a balance of infill and expansion
- there is coordinated and equitable access to provision of regional level services
- each settlement provides an appropriate level of local development and infrastructure facilities to meet locally specific daily requirements in employment, education, health care, retail, and social and recreation activity for its resident population
- each settlement provide a healthy, pleasant and safe place in which to live, work and visit
- there is diversity and choice in affordable and accessible housing
- people and property are not exposed to unacceptable levels of risk
- transport, utility and human service infrastructure is planned and available to meet local and regional need
- energy and resource efficiency are incorporated into the design, construction and operation of all activities

4.3 Land Use Policies for Managing Growth and Development

Land use planning manages sustainable growth and development of settlements and localities within the Cradle Coast Region and allocates land for housing, industry, commerce and community purposes in accordance with current and reasonably foreseeable need, land capability, and the availability of infrastructure services.

The aim is to build on established centres in order to support local and regional communities and economies, concentrate investment into the improvement of infrastructure and services, and to maintain and enhance identity, character and quality of life without compromise to health of natural systems and significant economic resources.

Opportunity for expansion will be restricted to locations where there is demonstrated need and the scale, form, and sequence of the release is justified under local strategy.

Plans must identify locations and sequence for growth and redevelopment in accordance with land capability and infrastructure capacity, and match land supply to evidenced demand.

Local settlement management plans should ensure compatibility with local identity and established character, and create centres which are functional, attractive and sustainable. Local plans should consider appropriate opportunities for higher density development, and requirements to address function, attractiveness and sustainability of centres.

Subsequent local planning for individual settlements will consider opportunities and constraints at a site-specific scale.

4.3.1 Urban Settlement Areas

A settlement management strategy is applied through Table 4.3 and indicates growth scenarios and settlement management strategies for the settlements of the Region at the time of drafting.

Mechanisms to carefully monitor and regularly review forecasts and land supply are integral to ongoing implementation of the settlement management strategy.

A number of both internal and external factors support a settlement pattern featuring containment of existing towns over creation of new centres. No new discrete settlements are supported. The concept of containment does not exclude new land releases. Rather it seeks to balance growth and development through infill and redevelopment, higher population densities, and the planned and sequenced release of new land in areas experiencing higher rates of growth.

Expansion elements of the contained strategy for existing urban settlements must be managed to avoid ad hoc and dispersed release of new land remote from available or planned infrastructure and services, and which may contribute to decline of other settlements. Additional land for urban development may be considered where contemporary land supply and demand analysis indicates that more land should be made available to accommodate additional urban growth.

Cradle Coast Regional Land Use Strategy

Settlement	Growth scenario	Settlement Strategy
Boat Harbour	Low	Stable
Burnie - Somerset	Medium	Contained
Cradle Mountain	Nil	Stable
Currie	Low	Stable
Devonport	Low	Contained
Forest	Low	Stable
Forth	Medium	Contained
Gawler	Medium	Contained
Grassy	Medium	Stable
Heybridge	Low	Stable
Irishtown	Low	Stable
Latrobe	Medium	Contained
Marrawah	Low	Stable
Narracoopa	Low	Stable
Natone	Low	Stable
Penguin	Low	Stable
Port Sorell	Medium	Contained
Queenstown	Low	Stable
Railton	Low	Stable
Ridgley	Medium	Contained

Settlement	Growth scenario	Settlement Strategy
Rosebery	Low	Stable
Sassafras	Low	Stable
Savage River	Low	Stable
Sheffield	Low	Stable
Sisters Creek	Low	Stable
Smithton	Low	Stable
Stanley	Low	Stable
Strahan	Low	Stable
Sulphur Creek	Low	Stable
Tullah	Low	Stable
Turners Beach	Medium	Contained
Ulverstone	Medium	Contained
Waratah	Low	Stable
Wesley Vale	Low	Stable
Wilmot	Low	Stable
Wynyard	Low	Contained
Yolla	Low	Stable
Zeehan	Low	Stable
All other settlements	Low	Stable

Table 4.3 - Cradle Coast Settlement Management Strategy

Land use planning processes for urban settlement areas are to –

- a. Promote established settlement areas as the focus for growth and development
- b. Promote optimum use of land capability and the capacity of available and planned infrastructure service
- c. Match land supply to need and provide sufficient land within the designated urban settlement boundaries of each centre to meet forecast need for a time horizon of not less than 10 years but not exceeding 20 years, unless a contemporary land supply and demand analysis demonstrates that additional urban land should be made available to accommodate growth
- d. Accommodate growth and development for each of the settlements as identified in Table 4.3 through either
 - i. A *Stable Strategy* which restricts new development to existing land supply within the designated urban boundary without priority for intensification; or
 - ii. A *Contained Strategy* which promotes a mix of intensification and strategically planned expansion to retain compact urban form and provide a mix of development and growth opportunities. The mix does not need to occur in balanced proportion. The approach allows for optimum use of available and planned infrastructure in both established and new release areas.
- e. Notwithstanding the categorisation listed in Table 4.3, where a contemporary land supply and demand analysis indicates that additional land should be made available to accommodate growth, the designated growth scenario or settlement strategy may be varied where
 - The land supports urban consolidation or is contiguous to established urban areas;

Cradle Coast Regional Land Use Strategy

- ii. The land will service any shortages identified in a land supply and demand analysis;
- iii. Growth is identified in any current local land use strategies or settlement structure plans endorsed by the Council;
- iv. The land can be supplied with reticulated water, sewerage and stormwater services;
- v. Growth is aligned with the capacity of transport and road infrastructure and minimises impacts on the efficiency and safety of road and rail networks;
- vi. Regard is given to minimising the potential for land use conflicts; and
- vii. Regard is given to the accessibility to social infrastructure, such as health and educational facilities, and its capacity to provide for the intended growth.
- f. Provide a pattern of settlement which maintain
 - i. Separated towns, villages and communities
 - ii. Visual and functional transitional space between each individual centre
 - iii. Absence of linear development or expansion aligned to coastline, ridgeline, or river or road frontage.
- g. Implement structure plans and regulatory instruments for each centre which
 - Identify arrangements for intensification through infill, redevelopment and conversion of vacant and under-developed land, including for intensity of buildings and density of population
 - ii. Identify arrangements for the expansion of urban boundaries when
 - a. There is insufficient capacity within existing designated land to accommodate forecast growth
 - b. Areas of expansion are contiguous with established settlement areas
 - c. Sequence of release is progressive from established settlement areas and consistent with the capacity and orderly provision of infrastructure services
 - d. Compact urban form is retained
 - iii. Embed opportunity for a mix of use and development within each centre sufficient to meet daily requirements for employment, education, health care, retail, personal care and social and recreation activity
 - iv. Avoid encroachment or adverse impact on places of natural or cultural value within the designated urban boundary
 - v. Avoid exclusion or restraint on areas significant for natural or cultural value, resource development or utilities in the vicinity of the designated urban boundary
 - vi. Minimise exposure of people and property to unacceptable levels of risk to health or safety
 - vii. Promote active and healthy communities through arrangements for activity centres, public spaces, and subdivision layout which facilitate walking and cycling
 - viii. Buffer the interface between incompatible use or development

Cradle Coast Regional Land Use Strategy

- ix. Facilitate any agreed outcomes for future character
- x. Facilitate reduced carbon emission and improved energy efficiency through requirements for the orientation and placement of lots and buildings, access to solar energy and daylight, and the application of energy generation and efficiency technology and construction techniques
- xi. Acknowledge the transient and cyclic nature of resource-based activity in towns such as Rosebery, Zeehan and Grassy and require the legacy of new development for housing, commercial, community, recreation and utility infrastructure does not unreasonable burden the permanent population
- xii. Acknowledge the specialist role of centres such as Cradle village, Strahan, Stanley and Waratah as tourist destinations and require new development be consistent with this purpose without alienation or disadvantage to ability for the centre to remain a liveable community for the permanent resident population.

Notwithstanding those matters listed in (a) through (g) above, the local unique circumstances of King Island require a nuanced approach. That approach must be consistent with the *State Policy on the Protection of Agricultural Land 2009*.

4.3.2 Rural-Residential Settlement Areas

Rural-residential is a legitimate housing option and should be located without –

- creation or increase in demand for inefficient infrastructure and service provision;
- compromise for future urban settlements;
- unreasonable risk to people or property; and
- unreasonable impact on resource development, natural and cultural values.

Land use planning processes for rural-residential settlement areas –

- a. are to formally designate land for rural residential land use based on established rural-residential land use patterns;
- b. where providing opportunity for rural-residential growth, are to prioritise the intensification of established rural-residential areas over their expansion or the creation of new rural-residential areas;
- c. in addition to the requirements of a. and b. above, may consider opportunities for intensification and/or expansion of existing rural-residential settlements to provide for growth where –
 - i. a contemporary demand and supply analysis indicates that additional land should be made available to accommodate growth;
 - ii. the growth is identified in a current local land use strategy or settlement structure plan endorsed by the Council;
 - iii. the land is in proximity and accessible to existing settlements with an activity centre, that provides service for the convenience requirements of residents;
 - iv. consideration is given to the accessibility to social services;

Cradle Coast Regional Land Use Strategy

- v. there is existing infrastructure capacity to support growth or that capacity can be reasonably provided;
- vi. consideration is given to achieving land use efficiencies, such as through consolidating gaps in established rural-residential land use patterns;
- vii. the land is suitable for on-site waste water systems;
- viii. consideration is given to the impact on natural values and cultural values, or the potential land use limitations as a result of those values;
- ix. the impact on agricultural land and potential for conflict is minimised;
- x. the impact on water resources required for agricultural and environmental purposes is minimised;
- xi. natural hazards can be managed;
- xii. additional rural residential land use contributes to the housing mix available in a locality, in support of settlements;
- xiii. potential future requirement for the land for urban purposes is not compromised; and
- xiv. consideration is given to the ability to achieve positive environmental outcomes through rezoning.

Notwithstanding those matters listed in a., b. and c. above, the local unique circumstances of King Island require a nuanced approach. That approach is to be consistent with the *State Policy on the Protection of Agricultural Land 2009*.

4.3.3 Rural Land

Land use recognises rural land as sparsely settled areas for primary production and utility purposes with diverse operational requirements and visual characteristics and a mix of open, cultivated, or highly modified landscapes resulting from process of industrial character and scale for agricultural, forestry, mining and utilities development, intermixed with small settlement centres, residential clusters and areas of remnant vegetation and undisturbed natural landform.

- a. Make primary production the priority purpose
- b. Limit use or development that does not have a need or reason to be located on rural land. Notwithstanding, and with regard to King Island, the local unique circumstances of the King Island economy require a nuanced approach, and that approach is to be consistent with the State Policy on the Protection of Agricultural Land 2009
- c. Facilitate use or development that is directly associated with and subservient part of a rural resource use
- d. Restrict use or development likely to interfere or conflict with a rural resource use. Notwithstanding, and with regard to King Island, the local unique circumstances of the King Island economy require a nuanced approach, and that approach is to be consistent with the State Policy on the Protection of Agricultural Land 2009
- e. Protect areas of natural or cultural significance

4.4 Land Use Policies for Protecting People and Property

The Region's long-term prosperity, environmental health and social well-being depend on reducing the potential for risk to people, property and the environment from natural or human induced hazards.

Land use planning is to direct the places where people live and work away from areas where there is an unacceptable level of risk for the health and safety of people, property, and the environment from natural or man-made hazard.

Land use planning processes for risk management –

- a. Recognise land exposed to future or enhanced risk is a valuable and strategic resource that should not be sterilised by unnecessarily excluding use or development
- b. Establish the priority for risk management is to protect the lives of people, the economic value of buildings, the functional capacity of infrastructure, and the integrity of natural systems
- c. Avoid new essential service, sensitive or inappropriately located use or development on undeveloped land exposed to or affected by a high level of an existing, likely future or enhanced risk, including from inundation and erosion by the sea, flooding, bush fire or landslip
- d. Limit opportunity for expansion of existing essential service, sensitive or inappropriately located use and development onto land exposed to or affected by an existing, likely future or enhanced level of risk
- e. Limit opportunity for redevelopment and intensification of existing essential service, sensitive or inappropriately located use or development on land exposed to or affected by an existing, likely future or enhanced level of risk unless the impact can be managed to be no greater or less than the existing situation
- f. Promote guidelines and technical measures that which will assist to reduce impact of an existing, likely future or enhanced level of risk and make existing strategically significant places, uses, development and infrastructure assets less vulnerable, including provision for protection, accommodation and abatement, or retreat
- g. Require a hazard risk assessment for new or intensified use or development on land exposed to an existing, likely future or enhanced risk, such assessment to address the nature and severity of the hazard, the specific risk factors for the proposed use or development, and the measures required to mitigate any risk having exceedance probability of greater than 1% at any time over the life of the development
- h. Ensure current and future landowners and occupiers are put on notice of the likelihood for a future or enhanced level of risk
- Are to incorporate appropriate arrangements in use and development for managing risk, including measures for avoidance, adaptation and mitigation, and for protection or retreat. In this regard –
 - i. reliance on the availability of emergency service response is not an acceptable measure to mitigate, manage or avoid risk
 - ii. priority is to be given risk protection measures which do not involve provision of hard engineered and structural defence systems
 - iii. use or development will avoid need for future expenditure of public funds to ameliorate the impacts of increase in the level or exposure to risk

Cradle Coast Regional Land Use Strategy

- iv. interference with or modification of natural processes must not occur in order to reduce risk
- i. Should avoid use and development on lands where there is an unacceptable level of risk unless there is an established pattern of settlement or use and it is intended to allow for the continued viability of the established uses and to address any significant social and economic hardships to the community that would result from strict adherence to the policies concerning use and development on hazard prone land, and provided
 - i. it is not intended to allow for new or intensified use or development
 - ii. there is no feasible opportunity for such development outside the hazard prone area
 - iii. the use or development is limited to uses which by their nature must locate on hazard prone land
 - iv. development involves minor additions or passive non-structural works which do not exacerbate risk
 - v. the effects and risks to public safety are minor and can be addressed in accordance with endorsed standards for protection, mitigation or management,
 - vi. new hazards are not created, and existing hazards are not exacerbated
 - vii. no adverse environmental impact will result
- k. Should not provide for use and development where there is an unacceptable level of risk for -
 - sensitive use or development including housing, hospital, community facilities or schools where there are threats to the safe evacuation of people as a result of a natural hazard or the failure of a hazard management measure or protection works
 - ii. strategic infrastructure and emergency service, the operation of which would be impaired in an emergency
 - iii. uses associated with the disposal, manufacturing, treatment or storage of substances which are normally considered to pose a danger to public health, safety and the environment

4.5 Land Use Polices for Facilitating Access to Business and Community Services

Liveability of the Region is dependent in part on local or convenient and equitable access to a range of business and community services to meet both daily and specialist requirements.

- a. Require each settlement area facilitate a mix of use and development of a nature and scale sufficient to meet for basic levels of education, health care, retail, personal services and social and economic activity and for local employment opportunities for the convenience of the local resident and catchment population
- b. Locate business and community service activity reliant for operational efficiency on a regional-scale population or on a single or limited number of sites at Burnie or Devonport, and at Latrobe, Ulverstone, Sheffield, Wynyard, Smithton, Currie and Queenstown

4.6 Land Use Policies for Housing Land – Places to Live

Land use planning promotes equitable provision, choice and distribution of housing which is adequate, affordable and suitable to meet requirements of the Region –

- a. Identify at all times the ability to accommodate forecast housing demand for a minimum future period of 10 years through either, or a combination of
 - i. infill, redevelopment or increased densities within each settlement area
 - ii. land designated for settlement growth and immediately available for residential development under the planning scheme
- b. Facilitate choice and diversity in location, form and type of housing to meet the economic social, health and well-being requirements and preferences of all people
- c. Direct development for new housing into locations where appropriate levels of employment, business, infrastructure and community service facilities are available or planned
- d. Promote higher dwelling density to optimise use of land and infrastructure and community service facilities
- e. Rationalise or remove opportunity for housing in locations where oversupply is identified, and in locations where access, servicing, safety or impact are unacceptable.
- f. Require housing land is separated from and buffered against adverse effect from existing and potential adjacent non-residential use
- g. Provide land for housing development requirements which do not unreasonably or unnecessarily constrain
 - i. efficient use of land and infrastructure
 - ii. housing market or supply
 - iii. location of housing outside designated residential estates
 - iv. tenure, including for public housing, rental and temporary accommodation
 - v. accessibility and affordability
 - vi. diversity in type, mix and density within a single urban locality as appropriate to lifestyle preference and changing housing needs
 - vii. housing for the elderly, disadvantaged and disabled
 - viii. orientation, configuration, design, materials and technologies
 - ix. inclusion of housing in business and mixed use areas
- h. Facilitate housing forms which incorporate climate sensitive design, the use of low energy materials, reduction in waste and emissions, and technologies which encourage efficient water and energy use
- i. Provide opportunity for housing in rural areas where
 - i. Required as part of a rural resource use. Notwithstanding, and with regard to King Island, the unique circumstances of the King Island economy require a nuanced

Cradle Coast Regional Land Use Strategy

- approach and that approach is to be consistent with the *State Policy on the Protection* of Agricultural Land 2009
- ii. There is no adverse effect for access to and use of rural resource land, including to land significant for agriculture
- iii. There is no adverse effect on key natural resource values, including areas of biodiversity significance and landscape aesthetics
- iv. Adequate arrangements are available for transport and there is convenient access to basic retail needs, community services, and employment opportunities, whether or not in an alternate settlement area
- v. There is no restraint on options for settlement expansion or provision of employment land
- vi. There is an acceptable level of risk from exposure to natural or man-made hazard
- vii. Capacity is available to meet basic utility needs at reasonable cost or there is capacity for self-sufficiency in on-site generation, collection and disposal without risk to human or environmental health

4.7 Land Use Policies for Healthy and Educated Communities

Liveability requires access to facilities which enable opportunity for an active, healthy, informed and inclusive community.

Land use planning processes -

- a. Align to State and regional health, education, community support and recreation strategies, policies and programs
- b. Focus community services dependent on a regional or sub-regional catchment or a single or limited number of sites into locations where there is a high degree of accessibility and a synergy with existing facilities of a like kind, including at Burnie and Devonport
- c. Facilitate local development of community service facilities in locations accessible and convenient to the population they serve
- d. Facilitate education and training facilities within residential, business and industrial locations
- e. Facilitate co-location, integration and shared use of community service facilities including schools, medical centres and local recreation spaces on land allocated for housing and business purposes
- f. Restrict new housing development until there is adequate available or planned community service capacity to meet requirements from new development

4.8 Land Use Policies for Active Communities

Land use planning assists provision of active, connected and healthy places which are attractive to residents and visitors.

Cradle Coast Regional Land Use Strategy

- a. Assist implementation of the Tasmanian Open Space Policy and Planning Framework 2010 and the Cradle Coast Regional Open Space Strategy 2009 and other related sport and recreation plans and strategies endorsed by government agencies and planning authorities
- b. Recognise recreation, leisure and well being opportunities are integrated with settlement activity and do not always require a discrete land allocation, such as urban trails and walkways as detailed in the North West Coastal Pathway project
- c. Facilitate equitably distribution of accessible built and natural settings in a variety of locations for formal and informal recreation, including for unstructured and structured physical and contemplative activity, sport, personal enjoyment, positive social interaction, spiritual wellbeing and the achievement of human potential
- d. Facilitate opportunity for recreation and open space land within all settlement, nature conservation and resource areas in accordance with population requirements and environmental capacity
- e. Require adequate open space and recreation capacity is available or planned to meet requirements from new development applying a process consistent with that outlined in Appendix 3 of the Tasmanian Open Space Policy and Planning Framework 2010

THE CRADLE COAST REGIONAL LAND USE STRATEGY 2010 - 2030

Planned Provision for Infrastructure - Support for Growth and Development

5.1 Context

Secure and reliable access to appropriate infrastructure is critical for regional prosperity and liveability.

70% of the region's population live within the central northern coastal area. However, the individual and discrete nature of settlement and considerations of distance and landform present challenges for efficient physical provision and equitable access to infrastructure services.

The Cradle Coast Regional Land Use Strategy cannot of itself deliver infrastructure outcomes.

It can promote improved coordination and consistency in infrastructure planning, investment and use between all levels of government and providers by identifying directions for growth and development.

The Strategy seeks to align policies for infrastructure planning with the objectives and actions detailed in the Tasmanian Infrastructure Strategy, The Cradle Coast Regional Transport Strategy, the Tasmanian Health Plan, and State policies for education.

The Strategy has a particular function to achieve integrated land use and infrastructure planning to ensure processes which allocate land for development are coordinated with processes for provision of infrastructure. Integrated planning assists to make optimum use of existing and planned infrastructure and enables appropriate capacity and function is available to match demand.

5.2 Strategic Outcomes

Land Use Outcomes for Integrated Land Use and Infrastructure Planning

Economic prosperity, liveable settlement and environmental health is underpinned by integrated land use and infrastructure planning to facilitate provision of adequate, appropriate and reliable infrastructure in a manner that —

- ensures infrastructure is planned and available commensurate with the use and development of land
- prioritises optimum use of existing infrastructure over provision of new or expanded services
- protects the function, capacity and security of existing and planned infrastructure corridors, facilities and sites

5.3 Land Use Policies for Integrated Land Use and Infrastructure Planning

Land use recognises the purpose of land use planning is closely linked to infrastructure planning and provision.

- a. Are integrated and coordinated with strategies, policies and programs contained in or derived from the Tasmanian Infrastructure Strategy planning processes
- b. Recognise existing and planned infrastructure provision for services and utilities
- c. Promote compact contained settlement areas to
 - i. Assist climate change adaptation and mitigation measures
 - ii. Optimise investment in infrastructure provision
- d. Direct new and intensified use or development to locations where there is available or planned infrastructure capacity and function appropriate to the need of communities and economic activity
- e. Require the scale and sequence of growth and development be in accordance with arrangements for the provision of infrastructure
- f. Require use or development optimise capacity and function in available and planned infrastructure services and utilities
- g. Restrict use or development in locations where provision or upgrade in capacity or function of infrastructure services and utilities cannot be economically or sustainably provided
- h. Recognise strategic and substantial infrastructure assets such as airports, railways, major roads and seaports as a distinct land use category
- i. Protect infrastructure assets, corridors, facilities sites and systems from use or development likely to create conflict or interference to the operational capacity, function or security of services and utilities, including for road and rail corridors, airport and seaport land, energy generation and distribution corridors, and water catchment and storage areas
- j. Minimise permit and assessment requirements for works involving replacement or improvement in the capacity, function or safety of existing infrastructure
- k. Limit use or development which has no need or reason to locate on land within an infrastructure corridor, facility or site
- Promote infrastructure corridors, sites and facilities that
 - i. Minimise adverse effect on areas of natural or cultural value
 - ii. Minimise adverse effect on the amenity, health and safety of designated settlement areas
 - iii. Minimise exposure to likely risk from natural hazards
 - iv. Collocate services and facilities

5.4 Land Use Policies for Transport Systems – Moving Freight and People

Land use safeguards the operational efficiency, functional capacity and safety of transport systems and networks within the Cradle Coast Region to move freight and people for the benefit of all communities.

5.4.1 Integrated Planning

Land use planning processes -

Are aligned to the Tasmanian Infrastructure Strategy and the Cradle Coast Integrated Transport Strategy 2006 goals to deliver connected communities and efficient and safe movement of people and freight in a manner that will drive economic growth, social inclusion and meet climate change challenges

5.4.2 Sea Transport

Land use planning processes -

- a. Recognise the strategic significance to Tasmania of the Burnie and Devonport ports for freight movement in import and export trade
- b. Recognise the regional importance of ports at Port Latta, Strahan, Stanley, Smithton and King Island for resource development, tourism and servicing of local communities

5.4.3 Air Transport

Land use planning processes -

- a. Recognise the strategic significance of air transport for movement of people and specialist freight into and out of the Region
- b. Protect the operation of airports by ensuring
 - i. development for residential and other sensitive use is not exposed to excessive noise intrusion due to operation of the airport
 - ii. use and development does not create a hazard to air navigation from obstacles such as height of buildings or structures or to activity which may increase likelihood of the hazards such as bird strikes to aircraft

5.4.4 Road Transport

- a. Recognise the strategic importance of major road freight and passenger transport corridors identified in the Tasmanian State Road Hierarchy 2006; and
 - i. Limit access between priority roads and adjoining land and
 - ii. Limit creation of junctions with local roads
 - iii. Avoid ribbon development aligned along frontages to major transport corridors

Living on the Coast

Cradle Coast Regional Land Use Strategy

- iv. Direct use or development dependent on high volume freight capacity to locations with ability to readily integrate with major freight routes
- v. Restrict use or development dependent on high volume freight capacity in locations where there is not an appropriate standard of road freight capacity
- b. Require local road networks provide a high level of accessibility and connectedness to local destinations, including for pedestrian, cycle and public transport
- Require traffic generating use or development make arrangements for vehicular access, freight and passenger handling, parking of vehicles, pedestrian and cycle access, and connection to public transport
- d. Promote mixed use communities and use of communication and digital technologies to minimise frequency and distance of travel for daily requirements for employment, education, health care, retail and personal services, and social and recreation activity

5.4.5 Rail Transport

Land use planning processes -

Recognise the strategic significance for Tasmanian import and export trade of the regional rail links to Western Junction and Melba for freight movement

5.4.6 Active Transport

Land use planning processes -

Recognise policies for improved pedestrian, cycle and public transport forms as an alternative to personal car travel contained in the Tasmanian Walking and Cycling Active Transport Strategy.

5.5 Land Use Policies for Energy Systems – Generation, Distribution and Supply

Land use recognises reliable, secure and sustainable energy is an essential ingredient for economic activity and the wellbeing of communities.

Land use planning processes -

- a. Recognise strategic importance of inter-State connections via BassLink and the Natural Gas Pipeline for the import and export of energy
- b. Facilitate commercial-scale renewable energy generation
- c. Facilitate small-scale renewable energy generation and energy efficiency technology and practices in domestic, commercial and industrial use or development

5.6 Land Use Policies for Water Supply

Land use acknowledges a clean, reliable and secure water supply as a fundamental resource for the Region's environmental, economy and human systems.

Living on the Coast

Cradle Coast Regional Land Use Strategy

Land use assists arrangements for capture, storage and distribution of urban and rural water supplies and the collection, treatment and disposal of waste water

Land use planning processes -

- a. Require growth and development has secure access to water supply and waste water disposal system that
 - i. are sustained by the water resources upon which such services rely
 - ii. are economically viable
 - iii. protect human and environmental health
- b. Facilitate water conservation and water use efficiency including water sensitive urban design, stormwater and waste water re-use, and on-site water storage
- c. Require reticulated water supply and waste water disposal systems as the priority arrangement for servicing of settlement areas unless
 - i. reticulated services are not available or planned or are not of sufficient capacity
 - ii. alternative water supply and/or waste water disposal systems that provide are at least as effective as a reticulated system; and
 - iii. site conditions are suitable for long-term operation of alternate systems, without human or environmental health impact
- d. Facilitate arrangements under designated irrigation schemes for water storage and distribution for agricultural use

5.7 Land Use Policies for Information Technology – Moving Data, Information, Knowledge and Services

Land use supports arrangements for the provision and utilisation of telecommunication and digital networks as facilities critical to economic prosperity and liveable communities.

Land use planning processes -

- Facilitate installation and upgrade of digital communication infrastructure in accordance with the statutory requirements for telecommunication infrastructure and the National Broadband Network
- b. Recognise application of cyber infrastructure may displace conventional arrangements for use and development of land and require flexibility to accommodate economic, community development and service and social activity within a virtual rather than physical location

5.8 Land Use Policies for Waste Management

Land use supports waste management principles for reduction, recovery and reuse.

Land use planning processes facilitate -

a. waste minimisation

Living on the Coast

Cradle Coast Regional Land Use Strategy

- b. recovery and reprocessing
- c. reuse of waste materials in use and development

5.9 Land Use Policies for Community Services

Land use accommodates arrangements for community service facilities appropriate to meet the needs of the local and regional population.

Land use planning processes -

- a. Align to State strategies, policies and plans for provision of health, education and community support programs
- b. Facilitate community service activity and facilities in locations for housing and business

Glossary of Terms

adverse effect - includes one or more of -

- i. the impairment of the quality of the natural environment for any use that can be made of it
- ii. loss, injury or damage to property or plant or animal life
- iii. material discomfort of any person
- iv. any impact on the health of any person or the environment
- v. impairment in the safety of any person, property or the environment
- vi. rendering any land, development, plant or animal unfit for human use
- vii. loss of reasonable enjoyment of normal use of land or development
- viii. interference with normal conduct of business

alternative energy system – sources of energy or energy conservation processes that significantly reduce the amount of harmful emissions to the environment when compared to conventional energy systems

biodiversity – the assortment of life on earth – the variety of genetic material in all living things, the variety of species on earth and the different kinds of living communities and the environments in which they occur

capability – the ability of a an air, water or land system to sustain use or development without risk of harm to the health and safety of people, property or the environment or without unacceptable levels of stress or degradation

community service (facilities) – land, buildings, structures and arrangements, whether or not provided by a public agency, that support the quality of life for people and communities by providing services for health, education, recreation, physical activity, sport, social, cultural, security and safety, and include affordable and special needs housing

conservation – the responsible preservation, management and care of land and the economic, natural and cultural resources

crown land – all State and Commonwealth owner land.

cumulative effects – the combined effects of past, present and reasonably foreseeable activities over time

designated growth area – land within a settlement area designated by a planning instrument for growth over the long-term but which has not yet been fully developed; and includes land for housing and employment

ecological process – the interaction between organisms, including humans and their environment. Ecological health and integrity refers to an adequate structure and functioning of an ecosystem, as described by scientific information and societal priorities.

economic – relating to the wealth of a community or region

economic activity - any activity associated with -

- i. natural resource development, including but not limited to extraction of minerals and harvesting of timber or wildlife
- ii. the use of a natural resource for the cultivation of animals or plants or for the generation of energy
- iii. the activities associated with production or processing, including manufacturing, fabrication, or assembly, warehousing, processing, or refining; business, commercial and retail undertakings
- iv. services in knowledge provision, education, health and community support; hospitality, tourism and visitor services
- v. infrastructure for provision of water and energy, passenger and freight transport, information transfer and communication, and waste management

employment land – areas designated in a planning scheme for clusters of industry, business and other economic activity; including but not limited to manufacturing and processing, transport and storage, business and retail, institutional, resource development and tourism

environment – the components of the earth – including air, water, all layers of the atmosphere, all organic and inorganic matter and living organisms, and all their interacting natural systems for biodiversity and ecological process

heritage - any works of nature or of humans that are primarily of value for their paleontological, archaeological, prehistoric, historic, cultural, natural, scientific or aesthetic interest and includes Aboriginal, historic cultural and geological heritage

infrastructure – the organisational arrangements and physical structures, whether as single sites, nodes or corridors, that form the foundation for development and include systems for drainage and disposal of sewage and stormwater; water storage, treatment and supply; waste management; energy generation, transmission and supply; communication and digital information; passenger and freight transport and transit; and associated control facilities

Intensification — development of a land at a higher density than current exists through processes of redevelopment, development of vacant or under-utilised land, infill development, and the expansion or conversion of existing buildings

land – the entire complex of surface attributes, including air, water and the solid portions of the earth, and includes building and other structures permanently fixed to the land, land covered with water, water covering land, and any lawful entitlement to the ownership or benefit of land.

land use – the purpose for which land is used, including for agriculture, forestry, conservation, recreation, tourism, mining, utilities, transportation, cities, towns, and industrial

land significant for agriculture – land not within a settlement or conservation area which has State, regional and local importance for agricultural use

liveable communities (liveability) — settlement areas which meet people's individual and collective needs for active, healthy and safe daily living and personal and social development throughout an entire lifetime, including for employment, housing, health, education, social inclusion and recreation; and which provide attractive, convenient, functional, secure and sustainable places

natural resources – biological and air, water and land resources that occur in nature and include native forest, wild fish, wildlife, minerals, soil, water, and wind.

non-renewable resources – natural resources that are in fixed supply and cannot regenerate such as minerals and soil.

Cradle Coast Region – the geographical area declared as a regional planning unit in accordance with Section 30C *Land Use Planning and Approvals Act* 1993 and comprising the municipal areas of Burnie City, Central Coast, Circular Head, Devonport City, Kentish, King Island, Latrobe, Waratah Wynyard and West Coast

regional level activity - a business or community service reliant for operational efficiency on a regional or sub-regional scale population or on a single or limited number of sites within the Region including for –

- i. higher order administrative and civic functions
- ii. services in health care, education, and social support
- iii. retail and activities involving speciality shops such as major department stores, large format retailing, home improvement centres, or direct factory outlets
- iv. strategic regional business and commercial support activities, including branch and central office function
- v. major cultural, entertainment, recreation, sporting and tourist facilities
- vi. higher density employment activities that attract regional, state and nationally significant employment uses
- vii. specialty housing

renewable energy – production of energy from a renewable resource

renewable resource – resources that are replenished by natural processes; including but not limited to biomass, geothermal, solar, water, and wind

rural – areas located outside settlement areas that are significant for economic development of naturally occurring resources and where there is a lower concentration of people and buildings than in urban areas; and typically involves large scale areas modified for primary production by agriculture, forestry, and mining and other resource development or utilities, and may incorporate low density residential communities

sensitive use – buildings, places and spaces where routine or normal activities are vulnerable to adverse effect from activity or conditions on adjacent land; including uses in part of the natural or built environment

settlement area – land designated under a planning instrument for concentrated occupation by human activity in urban and rural areas and which may contain a mix of land use. While predominantly connected with the development of cities, towns and villages, settlement areas also includes the modification of natural landscapes to provide for a mix of land uses which are not reliant upon natural resource, such as rural residential, utility and industrial uses

social – relating to society or its organisation, including living in organised communities and related factors such as culture, health, well-being and safety

sustainable development – development that meets the needs of the present without compromising ability of future generations to also meet their needs from the same resource

sustainability – relates to understanding the requirements for positive interconnections and continuity of economic, environmental and social aspects of human endeavour and the natural environment

transport corridor – a linear transport system including the land required for aright-of-passage and any associated buffer

urban – areas where there is an organised concentration of activity, people, improvement, including buildings, roads and other activity spaces, to provide a permanent multi-purpose location such as a city, town or village

urban expansion – enlarging the footprint or extending a defined urban centre beyond the existing designated legal and policy boundaries, and generally involves the conversion of land from another use

infrastructure or utility corridor – a linear strip of land required for the transmission by pipeline or cable of energy, telecommunication, water or waste, and includes the land required and any associated buffer

vulnerability— conditions inherent in land or development that can be easily changed or impacted to result in harm by reason of proximity to threatening or encroaching activities or events or by the creation of permissive pathways between such activities and the land or development

Acknowledgements

Cradle Coast Regional Planning Initiative Steering Committee

Charles Arnold (Chair) - Mayor, King Island

Cathy Shaeffer (until 2008) - General Manager, Central Coast Council

lan McCullum (from 2008) - General Manager, Devonport City Council

Paul Arnold (from 2009) - General Manager, Burnie City Council

Peter Fischer (until 2009) - Tasmanian Land Use Planning Branch

Greg Alomes (from 2009) – Tasmanian Planning Commission

Louise Wilson - Department of Premier and Cabinet

Roger Jaensch - Cradle Coast Authority

Project Team

Patrick Earle - Project Manager

Ian Sansom (until August 2009) - Project Officer

Preparation of the Cradle Coast Regional Land Use Strategy has been assisted throughout by the constructive involvement of the elected representatives, senior management, and planning officers for each of the participant councils.

Special thanks for assistance and contribution from Janelle Allison and Robyn Eversole of the Institute for Regional Development – Cradle Coast Campus; and from Tony Norton of the Tasmanian Institute of Agricultural Research.

The Project has also been assisted by the Joint Data Project Team coordinated through the Tasmanian Planning Commission for the provision and analysis of data.

Appendix 1

Cradle Coast Region Residential Land Demand And Supply Analysis

The Cradle Coast Regional Land Use Planning Framework proposes land supply be matched to demand

Demand may be characterised as *underlying demand* (driven primarily by population growth and household type) or *effective demand* (the demand actually expressed in the housing market and reflecting a range of market factors such a price and preference in addition to underlying demand).

Underlying Regional Demand

The resident population of the Region in June 2006 was 106,129.

The majority of dwellings are single detached houses (88.2% compared to a national rate of 74.8%). 69.3% of houses are owned or being purchased (national rate is 64.8%).

a. There were a total of 47,683 dwellings at June 2006, of which 42,198 were occupied (11% vacancy).

Supply systems are said to work best where there is some redundancy in occupation rates. The National Housing Supply Council allows a 5.9% vacancy rate to account for renovation, redevelopment and dwellings held as second or holiday homes.

If this methodology is applied for the Cradle Coast Region then the available housing stock at 2006 can be assumed as 44,870 dwellings.

b. The occupancy rate was then 2.52 persons per occupied household (compared to a Tasmanian rate of 2.4 persons).

If the Tasmanian projection for a decline in occupancy rate to 2.1 persons per dwelling by 2060 holds true for the Region there will be a continuing demand for new housing even in the absence of population growth.

Decline in household size to 2.1 persons by 230 could create need for 8649 new dwellings on the available 2006 base if vacancy rates are set at 5.9%.

Assuming transition to full occupancy of both the total 2006 and new housing stock the change could require an absolute minimum of 2,860 new dwellings. However, if occupancy remains at 2006 levels of 89%, the worst case scenario is a requirement for 9260 new dwellings by 2030.

c. Population growth will increase housing demand.

The medium projected growth to 2030 is 7,500 on an estimated base of 110,085 in 2007. The outcome is a 2030 population of 117,500.

Assuming occupancy rates of 2.1 persons per dwelling, the growth in population will create need a minimum further need for 3,570 dwellings.

The number increases to 3,780 if a vacancy rate of 5.9% is applied or 3965 if an 11% vacancy rate is used.

- d. If adjustment is made for both declining household size and projected population growth a minimum increase in housing stock is required by 2030 of—
 - 6430 new dwellings assuming full occupation
 - 12,430 new dwellings assuming 5.9% vacancy
 - 13325 new dwellings assuming continuation of the 2006 11% vacancy

This suggests an increase on housing stock in a range between 6,430 and 13,325 new dwellings by 2030 to avoid a housing shortfall.

The forecast translates to a steady rate provision of 540 new dwellings per year from 2007 to 2030 on the 5.9% vacancy scenario. Alternatively, the rate is 280 per annum on the somewhat unrealistic full occupancy rate and 580 per annum on the higher 2006 vacancy rate.

The 5.9% vacancy rate is adopted by the Framework for land supply analysis.

The current distribution of housing is 77% in urban centres, 18% as rural residential and 6% as housing associated with a rural use.

Assuming no growth in rural housing and the proportion of rural to rural residential housing remaining constant at 4.3 to 1, then 81% of new dwellings will be within urban areas and 19% as rural residential development.

This indicates an underlying demand for an increase of 10,070 dwellings in urban housing, and a rural residential increase of 2362 dwellings.

The land supply required to meet *urban housing* demand will depend on housing density.

The Framework proposes a regional approach to defining urban housing density. In this regard a net urban housing density of 30 dwellings per hectare is appropriate to provide for a low density urban mix of single and low scale multiple dwellings to support core residential infrastructure. It is normal to add a 25% land component for roads, service, open space and difficult land elements. On this scenario, the Region will be required to provide a minimum of 420ha of urban residential land to meet underlying demand.

As an alternative, the Framework indicates the approximate current gross density is less than 12 dwellings per hectare. The current rate is the minimum effective urban density. If applied across the Region it could increase land demand to a maximum of 839ha.

Rural residential supply can be estimated on an average density of one dwelling per hectare. Accordingly, there is need for some 1830ha of new rural residential land opportunity.

Underlying demand models are simplistic and do not account for variations in the nature of population and demographic change or for market and economic factors. As a result they may over or under-estimate demand against the reality of supply.

Effective Regional Demand

Housing land supply can be estimated by reference to activity within the housing market, including take-up rates and building approvals.

There is no comparable data on land creation and take-up rates for the Region. Calculation of effective demand need rely on building approvals.

For the period 2005 to 2009 the average annual approval rate for dwellings in all categories for the Region was 570.

These data reflect a relatively buoyant housing approval period. Caution must be had to assuming continued performance given historic variation in building approvals.

Flat line projection on the 2005 to 2009 average indicate total building approvals from 2006 to 2030 could provide up to 13680 new dwellings and contribute to a total housing stock of 61,360.

There is a relatively close correlation between the underlying demand and the effective demand data. Both data suggest a new housing demand in the order of 555 per annum plus or minus less than 5%.

Any increase or decline in building approval activity will have effect on supply. A modest 1% increase (consistent with that applying for population growth) from 2009 compounded across the period to 2030 will increase annual average approvals from 570 in 2009 to 695 by 2030.

Assuming the same urban/rural distribution and the same land allocation criteria, effective demand models creates need for a minimum of 460ha to a maximum of 925ha of new urban residential land subject to density of development, and a requirement for 2,275ha to 2,515ha of rural residential land.

Assuming a vacancy rate of 5.9% and a 2030 household size of 2.1 persons, the total 2030 regional housing stock could accommodate a resident population of between 122,380 and 124,890.

The demand analysis produces a range of likely dwelling demand and land supply requirements reflecting a degree of uncertainty in predictions for future rates of growth and housing activity. However, there is a reasonably close correlation between underlying demand assuming a 5.9% vacancy and the effective demand calculated from current building approvals.

Housing data is variable over time as a variety of factors emerge or decline. Accordingly, Framework policy requires housing demand factors be monitored.

Supply of Residential Land

The demand analysis does not establish supply.

Subject to demand method, there is need for between 325ha and 925ha of residential land to accommodate demand for increase in housing stock to 2030 at an average of 16.5ha to 45ha per annum.

It cannot be assumed this requirement will be met by new land created through expansion on existing settlement boundaries. Imperatives to for better use of land and resources, a more distributed responsibility for funding urban infrastructure, and a movement to more connected and liveable communities will drive a greater balance between infill and fringe development.

The dispersed pattern of small-scale settlements and variable change in local economic circumstance make it difficult to project distribution of future demand. Population projections indicate discontinuity between centres. However, the very small degrees of anticipated change are vulnerable to fluctuation in both a positive and negative direction.

Framework policy is to manage residential activity so as to protect land which has economic resource and natural value. It also seeks to minimise increase in residential development in outlying areas so as to reduce consumption of carbon fuels and to encourage settlement patterns which are more compact and liveable. Implementation of Framework policy may have consequence in the distribution of rural to urban housing supply, with a shift to a greater increase in urban housing.

Existing research and anecdotal evidence suggests there is no immediate shortfall in available residential land supply for most centres in the Region.

The following data and assumptions apply for residential land supply in the larger population centres. The analysis assumes the smaller settlements will not experience growth pressures to warrant contemplation of residential land supply plans –

Burnie is a contained major centre, merging at its western boundary with the settlement of Somerset to create a combined population in excess of 22,000.

A 2008 examination of residential land supply within the Burnie city area considered both vacant infill and new subdivision potential for land already zoned to allow residential development; and applied assumptions for both effective demand (trend-line, static average, and a 3% growth rate) and underlying demand (population growth and occupancy rate).

The study concluded a total existing land supply in excess of 240ha equates to a minimum yield of 2,900 lots at 12 lots per hectare or 5400 dwellings at a net density of 30 per ha.

The existing designated land stock has capacity to accommodate an additional population in the range 6,000 to 11,300. The Burnie residential land stock is therefore a minimum of 2.3 times that required to meet the median municipal population growth forecast for the period to 2032.

Alternatively, Burnie has a vacant designated residential land supply equivalent to 40% of regional need to 2030.

The study allows conclusion there is an existing 20 to 40-year residential land supply within Burnie. There is no requirement to anticipate additional land releases through rezoning in the short to medium term.

The study excluded potential to increase residential supply from land within the urban footprint which could be converted by rezoning to residential use. It did not account for intensification and higher dwelling yield through redevelopment on existing occupied lots.

Devonport is contained urban centre of population 24,250.

Growth forecasts show a net increase of 1245 people by 2032, with a corresponding underlying housing demand of 600 dwellings or 25 per annum.

The urban land area within Devonport provides approximately 5 years forward residential supply, predominantly at Ambleside and East Devonport.

Expansion options are highly constrained by proximity to productive agricultural land and other land use allocations for industrial and rural residential.

Internal housing growth will need to be accommodated through infill and consolidation.

Alternatively, residential growth will transfer into the adjacent municipalities of Latrobe, Central Coast and Kentish.

Central Coast is a predominantly rural municipality with a total population of 21,000.

Main settlement areas are focused on Ulverstone/West Ulverstone, Penguin and Turners Beach, and in smaller centres at Forth, Leith, Sulphur Creek, Heybridge and Gawler.

Growth projections to 2032 are static to declining. Individual settlement forecasts are not available.

There are significant areas of vacant residential land within *Ulverstone*. There is also opportunity to rationalise boundaries to provide some additional land at the margins both north and south of the Bass Highway. Framework objectives to retain compact settlements

and to avoid linear and merging centres impose limit on the physical footprint of most coastal settlements, including Ulverstone.

Penguin provides opportunity for infill development between the Bass Highway and Bass Strait. There is limited vacant land at *Turners Beach*, although there is some capacity south of the Highway.

Growth in smaller centres is not anticipated as substantial. There is opportunities for infill by increased densities subject to infrastructure capacity, an option under consideration at *Forth*.

Latrobe municipality comprises two major population centres at Latrobe and Port Sorell.

The municipality has the highest growth prospect within the Region, with an anticipated increase of 2,600 on a 2006 base of almost 9,000.

Latrobe is the main centre and serves a strong dormitory function for Devonport. There is capacity to provide some 750 additional residential lots on existing designated urban land, which is approximately 25 years supply at the current take-up rate of 30 single dwellings per annum.

Port Sorell is the fastest growing locality in the Region, with a large retirement population.

The Port Sorell Strategy contemplates a population of 7,700. Structure and staging plans have been prepared for rezoning to meet residential land requirements with a supply sufficient to meet effective demand over a 25 year horizon.

Kentish is largely rural residential community within commuter distance of Devonport.

Population centres at Sheffield and Railton share in almost equal part about one-third of the municipalities 6000 residents, with a smaller centre at Wilmot, and tourist resort development at Cradle Mountain.

Predictions for growth are positive, with an increase to 2032 of 1690, or 28% on 2006.

Opportunity for infill exists in both centres, although lateral expansion for Sheffield is restricted by proximity of high production agricultural land. Upgrade in water and drainage infrastructure capacity and quality is required.

The major portion of residential growth is anticipated as rural residential dwellings on zoned land at Acacia Hills and Nook.

Waratah Wynyard is a rural and urban municipality, with major centres at Wynyard and Somerset, and smaller coastal settlements at Boat Harbour and Sisters Beach, and inland settlements at Waratah and Yolla.

Predictions for population growth are not positive.

Wynyard is the largest centre. There is considerable vacant zoned and potential residential land in the wide arc north of the Bass Highway between Seabrook and the Inglis River. This area could provide in the order of 500 lots subject to improvement in sewerage capacity, which is a land supply well in excess of 25 years.

Somerset provides some opportunities for further residential development. Close proximity to Burnie suggest residential land supply be considered in conjunction with that centre.

Coastal settlements at *Sisters Creek* and *Boat Harbour* provide highly desirable but constrained residential and holiday locations. However, issues of access and infrastructure capacity, hazard

vulnerability and coastal values require careful examination before decisions for significant growth can be considered.

Inland settlements at Yolla and Waratah each contain a large vacant land reserve relative to base population and evidenced demand. Existing settlement boundaries can provide a residential land supply well in excess of a 25-year forecast.

The Wynyard municipality does not make formal provision for rural residential housing despite evidenced demand. This matter needs to be addressed in local planning regulation.

Circular Head is a rural community with Smithton as its major centre and smaller rural or vacation settlements including Stanley, Rocky Cape, Redpa, Irishtown, Marrawah and Arthur River.

There are infrastructure capacity issues relevant for all population centres. Projected population growth is positive must extremely low.

All centres have a generous allowance of both vacant subdivided and undeveloped rural residential or residential land.

Rural residential land is estimated to provide a supply in excess of 100 years at current rates of development.

Vacant subdivided urban residential land has an immediate supply capacity for almost 10 years, and a residual potential for some 600 new lots.

Municipal planning policies seek to constrain further rural residential development and increase proportion of new dwellings in urban locations. On a worst case scenario the municipality can provide supply for at least 14 years.

West Coast settlements are small and isolated at Queenstown (3,400), Strathan, Rosebery, Zeehan and Tullah, with smaller vacation settlements in coastal locations.

Population growth projections are barely positive, and in large part depend on investment in mineral and tourism development.

Settlement areas are generally under-developed and contain pockets of vacant land inviting infill sufficient to provide residential land supply well in excess of forecast need over the next 25-years.

There is limited likelihood for expansion in the existing boundaries of any West Coast settlement.

King island is discrete from the main land mass of the Region, and is an island community dependent on agriculture, fishing, mining and tourism activity.

The municipality has an ambitious strategy to double the resident population to 3,500 through growth of existing centres. Growth will be subject to existence of sustainable economic and lifestyle attractors, and will require upgrade in core utility capacity. There is an undefined timeline and no structure plan to deliver this objective.

It is noted there is an existing housing shortage on the Island.

Conclusion

There is steady demand for new housing within the Region driven by internal demographic change and a low rate of inward migration for between 560 and 600 dwellings per annum. However, the rate of demand is differential between municipal areas, and may be variable from year to year.

Housing land supply to meet demand in the period to 2030 is estimated to be between 460ha and 930ha of urban land dependent on the form of housing provided and the dwelling density achieved; and some 2,000ha of rural residential land.

Analysis suggests that for most centres there is sufficient designated vacant and under-developed urban land to meet housing land demand into the medium-term without need for expansion if containment and intensification policies apply to lift dwelling densities. The situation will alter for some centre in the longer-term dependent on rates of growth and level of intensification. It is noted most centres are constrained in capacity to continue urban expansion by land availability and policy obligations to address climate change and optimise infrastructure provision.

Bibliography

Antarctic Climate and Ecosystems (2010) Climate Futures for Tasmania

Australian Bureau of Statistics (2006) Household and Family Projections 2001 to 2026 (3236.0)

Bureau of Meteorology (2009) Climate of Tasmania

Burnie City Council (2007) Settlement and Investment Strategy

Central Coast Council (2008) Strategic Framework for Settlement and Investment

Central Coast Council (2009) Strategic Plan

Circular Head Council (2005) Stanley Guided Development Plan

Circular Head Council (2009) Strategic Plan

Commonwealth Department of Climate Change (2008) *Climate Change – Potential Costs and Impacts – Tasmania*

Cooperative Research Centre for Forestry (2009) *Technical report 199 socio-economic impacts of the plantation industry on rural communities in Tasmania*

Council of Australian Governments *National Partnership Agreement to Deliver a Seamless National Economy*

Cradle Coast Authority (2009) Regional Waste Management Strategy: Five Year Strategy 2009 - 2013.

Cradle Coast Authority and Department of Economic Development (2003) *Cradle Coast Tracks Strategy*

Cradle Coast Authority and Department of Infrastructure, Energy and Resources (2006) *Cradle Coast Integrated Transport Strategy*

Cradle Coast Natural Resource Management (2010) Cradle Coast NRM Strategy 2010 - 2015

CSIRO (2009) Water availability for the Arthur-Cam Region – Report 3 Tasmanian Sustainable Yields Project

CSIRO (2009) Water availability for the Arthur-Cam Region – Report 3 Tasmanian Sustainable Yields Project

CSIRO, Hydro Tasmania, University of Tasmania & TPAC (2006) *Tasmanian Climate Change: Fact Sheet – April 2006*

Demographic Change Advisory Council (2009) *Population projections* (http://www.dcac.tas.gov.au/, accessed 22/07/09)

Department Infrastructure Energy and Resources (2010) Tasmanian Infrastructure Strategy

Department Infrastructure Energy and Resources (2010) *Tasmanian Walking and Cycling Active Transport Strategy*

Department of Climate Change (2009) *Climate Change Risks to Australia's Coasts.* Department of Economic Development (2006) *REDI Report*

Department of Economic Development (2007) Industrial Land Project

Department of Economic Development and Tourism (2008) *Industrial Land Demand Tasmania:* short to medium term overview (SGS Economic Planning)

Department of Economic Development and Tourism (2008) REDI Map

Department of Economic Development Tourism and Arts (2010) *Jobs and Growth – securing our sustainable future - Economic Development Plan Discussion Paper December 2010*

Department of Economic Development Tourism and Arts (2010) Tasmanian Economic Profile

Department of Economic Development, Tourism and the Arts (2009) Cradle Coast Region Profile

Department of Environment, Water, Heritage and the Arts (2008) Australia's Ramsar Sites

Department of Health and Human Services (2007) Tasmania's Health Plan

Department of Infrastructure, Energy and Resources (2006) *Tasmanian Transport Infrastructure Investment Strategy 2006/07*

Department of Infrastructure, Energy and Resources (2007) Tasmanian State Road Hierarchy

Department of Infrastructure, Energy and Resources (2010) *Tasmanian Urban Transport Framework*

Department of Justice (2007) Compendium of State Interests in Land Use Planning

Department of Police and Emergency Services (2008) Forging Links – Emergency management for local government

Department of Premier and Cabinet (2008) A Social Inclusion Strategy for Tasmania

Department of Premier and Cabinet (2009) *Mitigating Natural Hazards through Land Use Planning: Roles and Responsibilities Discussion Paper.*

Department of Premier and Cabinet Tasmanian Framework for Action on Climate Change

Department of Primary Industries and Water (2008) Climate Change and Asset Vulnerability: An Audit of Tasmania's Coastal Assets potentially Vulnerable to Flooding and Sea Level Rise

Department of Primary Industries, Parks, Water and Environment (2009) *Tasmania's Groundwater Resources*

Department of Primary Industries, Water and Environment (2002) *Environmental Guidelines for the Use of Recycled Water in Tasmania*

Department of Primary Industries, Water and Environment (2004) Tasmanian Wetlands Strategy

Department of Primary Industry, Parks, Water and the Environment (2010) *State Stormwater Strategy*

Department of Resources, Energy and Tourism (2010) *Tourism Planning Guide – a good practice approach*

Department Primary Industry Water and Environment (2003) *The State of Growth – a better approach to developing Tasmania's primary industries*

Devonport city Council (2009) Strategic Plan

Heart Foundation (2009) Healthy by Design

Hydro Tasmania (2008) King Island: Towards a Sustainable, Renewable Energy Future

Institute for Regional Development – Cradle Coast Campus (2009) – Values Framework

Institute for Regional Development – Cradle Coast Campus (2009) *Knowing Our Place – profile of the Cradle Coast Region*

Kentish Council (2009) Strategic Plan

King Island Council (2008) King Island Strategy Plan

Latrobe Council (2006) Strategic Plan- creating opportunities

Latrobe Council (2008) Port Sorell and Environs Strategic plan Review

Latrobe Council (2009) Latrobe Township and Environs Strategic Plan

Maddocks (Lawyers) (2007) Planning policy and practice: The right mechanism to tackle climate change?

Natural Resource Management – Cradle Coast (2005) *Cradle Coast Regional Weed Management Strategy*

Natural Resource Management – Cradle Coast (2006) Our Regions Priorities: Water

New South Wales Department of Primary Industry (2007) *Living and Working in Rural areas – handbook for managing land use conflicts on the NSW north coast*

Norton T. (2010) *Mapping of Agricultural Land: Draft Report (Phase 2 Report)*, prepared for the Cradle Coast Regional Land Use Planning Initiative, Tasmanian Institute of Agricultural Research, University of Tasmania, Burnie

Norton, T. (2009) *Mapping of Agricultural Land: Draft Report (Phase 1 Report)*, prepared for the Cradle Coast Regional Land Use Planning Initiative, Tasmanian Institute of Agricultural Research, University of Tasmania, Burnie

Ozcoasts (2009) Glossary M-P

Ozcoasts (2009a) Smartline Maps

Parks and Wildlife Service (2009) *Nature Recreation Areas* www.parks.tas.gov.au/index.aspx?base=5714, 5718, 5722, 5726, 5730, 5734, 5738 and 5742, accessed 29/07/09

Parks and Wildlife Service Tasmania (2008) Reserve Listing

Productivity Commission (2011) Planning, Zoning and Assessments

Sharples, C. (2006) *Indicative Mapping of Tasmanian Coastal Vulnerability to Climate Change and Sea-Level Rise: Explanatory Report*, 2nd Edition

Sport and Recreation Tasmania (2009) Cradle Coast Open Space Plan

Sport and Recreation Tasmania (2010) draft Tasmanian Open Space and Planning Framework

Tasmanian Agricultural productivity Group and Tasmanian Farmers and Graziers association (2005) The Contribution of Agriculture to the Tasmanian Economy Tasmanian Government (2007) Trails Tasmanian Strategy

Tasmanian Planning Commission (2009) State of the Environment Tasmania

Tasmanian Planning Commission (2010) ABS Agricultural Census Data Analysis for State of Region Reporting Part 1 and Part 2

Tasmanian Planning Commission (2010) Unpublished *Tasmanian Coastal Inundation Mapping Project*

Tourism Tasmania (2009) Tasmanian Visitor Survey: Year Ending June 2009

Tourism Tasmania and Tourism Industry Council Tasmania (2007) *Tourism 21 Strategic Business Plan 2007 - 2010*

Waratah Wynyard Council (2009) Strategic Plan

West Coast Council (2010) Strategic Plan

