

New South Wales

**NSW  
GOVERNMENT**

**SUBMISSION**

to the

**LEGISLATIVE ASSEMBLY  
NSW STANDING COMMITTEE  
ON  
PUBLIC WORKS**

**INQUIRY ON INFRASTRUCTURE PROVISION IN  
COASTAL GROWTH AREAS**

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## 1. Executive Summary

- (1) The NSW Government Submission to the Standing Committee on Public Works of the Legislative Assembly in response to the inquiry on Infrastructure Provision in Coastal Growth Areas has been prepared by the Department of Infrastructure, Planning and Natural Resources (DIPNR) in consultation with other Government agencies.
- (2) Demographic change is a feature of coastal local government areas outside of metropolitan regions. These areas have grown steadily in recent decades and projections to 2031 indicate more than 247,000 people may need to be accommodated. In the non-metropolitan coastal regions there will be a higher proportion of older residents. Population aged 65 and older will more than double over the next 30 years. It is expected that urban consolidation will continue along the NSW coast.
- (3) The Government's *Plan for Infrastructure* released in 2005 details current commitments to infrastructure expenditure of both State and local significance. Funds have been and continue to be spent over a range of projects including new and upgraded roads, the rail system, schools and TAFE, medical facilities, ports, water and energy and on the justice sector.
- (4) The future infrastructure needs of coastal regions are identified by the Government agencies. There is recognition that changes in population, together with the need for employment growth and adaptation to climate change, will require long-term commitments to investment across the range of Government sectors. Reviews are being undertaken by DIPNR on the provision of infrastructure to inform the coastal regional strategies.
- (5) The Government has implemented major reforms to better integrate land use, transport and key infrastructure development with infrastructure procurement.
- (6) Planning reform is a major initiative of the NSW Government. It is designed to provide a more consistent and strategic approach to planning. A major component of planning reform is the development of regional strategies especially in areas experiencing population growth. These strategies will bring together land use, natural resource and infrastructure planning. Six coastal regions are priority areas for strategy development over the next 2 years. They will inform the new generation of local environmental plans and ensure coordination of infrastructure investment on priority projects.
- (7) Infrastructure investment at State and local levels will be facilitated by changes to the administration of developer contributions through section 94 of the *Environmental Planning and Assessment Act 1977*. Opportunities for environmental/infrastructure levies and s94 contributions that cross council boundaries should assist in the provision of infrastructure where development is occurring.
- (8) Whilst there are examples of Federal Government investment to support the provision of infrastructure along the NSW coast (eg AusLink road program), there is no overall mechanism for cooperation with the State Government to address future infrastructure needs.
- (9) The NSW Government is engaged with coastal local councils and communities in finding better ways to improve regional planning and infrastructure investment. There will be a link to Catchment Action Plans and Water Sharing Plans to ensure that infrastructure needs to improve natural resource management in areas under population growth pressures are met. Similarly methods developed through the Comprehensive Coastal Assessment process will be applied at regional and local scales.

## 2. Introduction

On 4 March 2005, The Standing Committee on Public Works of the NSW Legislative Assembly advertised a public inquiry on Infrastructure Provision in Coastal Growth Areas. The Chair of the Committee Mr Kevin Greene MP wrote to the Ministers and Director-Generals of NSW Government agencies inviting them to provide a submission to the Inquiry. His letter sought information on certain specific matters from each agency. The Department of Infrastructure Planning and Natural Resources has prepared a coordinated response to the Inquiry.

The Standing Committee is investigating the effects of population growth on coastal areas and will examine planning and management methods for meeting the short and long term infrastructure needs of growing coastal communities. The Terms and Reference are:

- Key coastal population growth and urban consolidation trends in NSW;
- Short and long term needs of coastal communities for basic infrastructure (such as roads, power, water and sewerage) and human service infrastructure (such as hospitals, schools, aged care centres and sporting facilities);
- Coordination of commonwealth, state and local government strategies to deliver sustainable coastal growth and supporting infrastructure;
- Best practice methods to plan, manage and provide infrastructure to coastal growth areas; and
- Management of social, environmental and economic considerations associated with infrastructure provision in coastal growth areas.

In its overview of issues to be considered by the Inquiry, the Standing Committee has stated that coastal population growth and the increased residential and commercial development along the coast have placed significant demands on coastal communities. These include:

- Common infrastructure: roads, power, water and waste infrastructure;
- Social/community services: aged care, education facilities, health, social and policing services;
- Economic: creation of local jobs through increased economic planning and development;
- Environmental: prevention of coastal erosion and pollution and creation of sustainable communities that would protect the fragile coastal environment.

In the context of the Inquiry, the Committee notes that Governments are faced with addressing these challenges through planning and development on two fronts:

- Responding to the needs of growing communities in coastal areas;
- Directing and guiding growth into specific areas to ensure more sustainable coastal growth for the future.

It is seeking comments on the provision of infrastructure in coastal growth areas, as reflected in the Inquiry Terms of Reference.

In March 2005, the NSW Government released its *Plan for Infrastructure* (NSW Government 2005). This Plan provides a basic input for this submission to the Inquiry. It details projects of both State and local significance. A large number of smaller projects such as upgrades and maintenance work can be found in the reports and programs of individual agencies. The Plan is the first step in delivering more transparent infrastructure planning information in NSW.

In addressing the Terms of Reference of the Inquiry, this submission will build upon mechanisms outlined in the *Plan for Infrastructure* to improve the planning and delivery of infrastructure in NSW. These include:

- (i) the formation of the Department of Infrastructure, Planning and Natural Resources to better coordinate the planning and delivery of infrastructure across all Government agencies, especially through the use of regional strategies in areas of high population growth;
- (ii) reforms to the NSW Planning system to allow faster assessment and determination of both public and private projects, facilitating infrastructure development across the State; and
- (iii) the continued use of public/private partnerships.

The primary government policies governing infrastructure provision and management are summarised below.

### ***Total Asset Management***

The Total Asset Management (TAM) Policy was introduced to achieve better planning and management of the State's assets, both existing and newly acquired. TAM is a strategic approach to physical asset planning and management, including major infrastructure. It provides a structured and systematic approach by which an agency can align its asset planning and management practices with its service delivery priorities and strategies, within the limits of resources available. This is essential if services are to be delivered efficiently and effectively over the long term.

The asset management policy is an integral part of the State Budget process, which focuses on agencies' results and service delivery performance. An agency's asset response to its service delivery needs, as reflected in its Results and Services Plan, Statement of Corporate Intent and Statement of Business Intent, is defined in its Asset Strategy. Also, an agency's TAM plans (specifically the Asset Strategy and supporting Capital Investment Strategic Plan) are used by the Department of Infrastructure, Planning and Natural Resources to inform the development of State and regional infrastructure strategies.

TAM Policy applies to all government departments, statutory authorities, trusts and other government entities. State Owned Corporations under the State Owned Corporations Act are exempt although they are encouraged to adopt aspects of the policy that are consistent with their corporate intent.

### ***Economic Appraisal***

Economic appraisals must be completed for proposed capital projects and submitted in advance of agencies' annual Budget submissions, in accordance with the "NSW Government Guidelines for Economic Appraisal" (TPP 97-2).

An economic appraisal assists efficient public sector resource allocation decisions, by systematically analysing all the costs and benefits associated with the various ways of meeting a service objective.

### ***Privately Financed Projects***

The NSW Government's *Working with Government* policy aims to improve the value-for-money, timeliness and quality of services it provides to the community by engaging the private sector to provide, where appropriate, supporting infrastructure and non-core services. The policy incorporates rigorous public interest and value-for-money tests.

The Treasury acts as the Government's centre of commercial, financial and legal expertise to assist agencies with privately financed proposals and to provide Government advice to the private sector.

More information on Privately Financed Projects can be assessed through the dedicated Working with Government web site (<http://www.treasury.nsw.gov.au/wwg/>).

### ***Procurement Policy***

The NSW Government's Procurement Policy is to ensure that government procurement activities achieve best value for money in supporting the delivery of government services. The Policy emphasises agency accountability for outcomes, and greater upfront planning and stronger linkage with the State Budget process prior to allocation of capital funding.

The Gateway review process is a key component of the procurement policy that uses independent experts to assess whether an appropriate level of discipline is being applied at key stages of the procurement cycle, without diminishing agency accountability. Reviews typically take three days or less to complete. The degree of reviewer independence can range from intra agency to fully external to the agency, depending on the potential risk and value of the procurement. Risk is assessed using a risk profile assessment tool, which is part of the Gateway process.

Treasury Policy and Guidelines Paper TPP04-1 contains the Government's Procurement Policy Statement and a more detailed explanation of its key elements and implementation.

### ***The Department of Infrastructure, Planning and Natural Resources***

The Department of Infrastructure, Planning and Natural Resources (DIPNR) is the lead agency responsible for advising Government on the strategic directions for urban and regional development and associated infrastructure priorities. This work is designed to ensure that future capital expenditure by agencies is in line with these strategic priorities.

To assist agencies, DIPNR provides guidance on matters including:

- Population projections at the State, Regional and local levels;
- Current and predicted transportation patterns based on demand forecasting models; and
- Strategies involving future plans and decisions, to manage future growth and change in the next 30 years. In this capacity, DIPNR leads whole of government initiatives in relation to coastal land use issues such as the Comprehensive Coastal Assessment.

This guidance enables agencies and the private sector to make more informed decisions and more generally develop medium and long term plans for growth in both greenfields and established areas. New capital expenditure can then be directed to locations that optimise infrastructure investment and the use of existing physical assets over the long term.

### **3. Key coastal population growth and urban consolidation trends in NSW (TOR1)**

#### **3.1 Current Situation (Past and Present)**

There are currently about 700,000 people living in non-metropolitan coastal regions<sup>1</sup> of New South Wales. This is about one out of every ten people in the State. Over the past two decades many coastal areas of New South Wales have experienced considerable population growth. Between 1981 and 2004 non-metropolitan coastal regions absorbed 20% of the State's total population increase. The combined population of the non-metropolitan coastal regions grew by 72% from 410,000 to almost 710,000, compared with a 26% increase in Sydney's population<sup>2</sup> during the same period.

An overview of coastal population change over the last 20 years masks temporal and geographic changes in growth patterns. Population growth in most coastal areas peaked during the 1980s. While growth rates in the coastal regions have diminished since that time, on the whole they still remain higher than the state average.

The non-metropolitan coastal local government areas that have had the largest population increases since the early 1980s were Shoalhaven, Tweed, Hastings, and Coffs Harbour. Therefore the largest increases have been in areas containing large regional centres and towns. A number of coastal areas have seen their populations more than double since the early 1980s. These included the areas of the Tweed, Eurobodalla, Byron, Ballina, Hastings and Great Lakes.

Recent growth in the Far North Coast has been driven by the urban areas of the Tweed; in the Mid North Coast by Hastings, Great Lakes and Coffs Harbour; and on the South Coast by the Shoalhaven.

Several areas have had static or declining populations at some time over the last 23 years. These include the northern areas of Kyogle, Lismore, Richmond Valley, and Grafton, Copmanhurst, and Bellingen. These are inland towns that serve a role as services centres to the coastal hinterland.

#### **3.2 What is Driving Population Growth Trends? – Demographic factors**

Population change is the resulting balance between births, deaths and migration into or out of an area. In recent years migration has been the biggest contributor to population change in most coastal areas. Most areas have net migration gains of people from other parts of Australia, but in a few instances (for example, Kyogle, Lismore) there has been a net migration loss. Migrants moving to coastal areas come from all over New South Wales and other parts of Australia. There are significant flows in both directions between northern coastal areas and Queensland, and areas in the South Coast have strong migratory links with the ACT and Victoria. However, the largest migration flows link coastal areas of New South Wales with Sydney.

The age profile of migration flows varies among coastal areas of New South Wales, but a consistent pattern across most coastal areas has been an ongoing net migration loss of young adults aged 15-24 years. The destinations of these young people have varied depending on where on the coast they were living. They appear to be heading to main regional urban centres on the coast or the larger metropolises of Sydney and Brisbane. As a counterbalance to this net loss of young people, many coastal areas have also had a net migration gain of people of retirement age (65 years and over), although the net flow was

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<sup>1</sup> For the purposes of this analysis, non-metropolitan coastal regions of New South Wales comprise the 20 local government areas that make up the three non-metropolitan coastal regions as defined by the Department of Infrastructure, Planning and Natural Resources. This area excludes Sydney, the Central Coast, Illawarra and Hunter regions. Refer to Table 1 for a complete list of these areas.

<sup>2</sup> The Sydney SD excluding the Central Coast.

often very small. For example, between 1996 and 2001 the net migration gains of older people to Kempsey, the former Richmond River, and parts of Coffs Harbour were fewer than twenty older people. This shows the continuing appeal of coastal regions as a retirement destination.<sup>3</sup> Many coastal areas also gain adults in their late thirties and forties and young children, suggesting a movement of families into these areas. Areas with a net migration gain of more than 1,000 people in these two groups between 1996 and 2001 included Coffs Harbour, Hastings, Ballina and Tweed.

These population dynamics, along with increasing longevity, changing childbearing patterns and the ageing population have resulted in a population that has had significant structural changes over the last twenty years. While the baby boom generation has helped delay the onset of population ageing in Australia, the aging of this group will make population ageing more pronounced in the near future.<sup>4</sup> The greatest growth has been in the older age groups (65 years and over). Changing age structures of coastal areas fall into one of three types:

- (i) Increases in virtually all age groups (eg Byron, Ballina); or
- (ii) Areas with increases in the youngest and oldest age groups (eg Tweed, Maclean); or
- (iii) Declines in many age groups (eg Grafton)

Most non-metropolitan areas have an hour glass-like structure (Fig.1), with relative deficits of people in the younger working age groups (15-35 years).

### 3.3 Future Growth Projections

In mid-2004, the Department of Infrastructure, Planning and Natural Resources released official projections for New South Wales and its regions.<sup>5</sup> Populations are projected using a set of assumptions on future patterns of fertility, mortality, internal migration and overseas migration. These assumptions have been developed using demographic techniques to assess change in the different components of the population. For the medium or preferred projection series, it has been assumed that:

- Fertility will drop from 1.79 children per woman in 2000-01 to 1.66 children per woman by 2010-11, then remain constant;
- Life expectancy for males will increase from 77.3 years to 88.0 years between 2002 and 2051. Life expectancy for females will increase from 82.7 years to 91.3 years in the same period; and
- Overseas migration will be held constant at 42,000 from 2005-06; and interstate migration will drop from -24,400 to -17,900 between 2001 and 2051.

Over the next 30 years the population of NSW is projected to grow by almost 1.7 million to 8,271,900 by 2031; **more than 247,000 additional people may be living in non-metropolitan coastal regions by 2031.** Coastal areas are projected to have greater growth rates than the other areas of the State, but these growth rates may diminish over time. The slowing growth rates are a combination of declining fertility, changes in migration patterns and population ageing (see Table 3). Future population growth will vary among coastal areas, but is projected to be greatest in those containing large regional centres (see Tables 1 and 2). This includes areas such as the Shoalhaven, Tweed, Coffs Harbour and Hastings.

An important demographic issue facing coastal areas in NSW is population ageing (that is, an increasing proportion of the population in older age groups). The age structures of future

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<sup>3</sup> Garnaut, R., Connell, P., Lindsay, R. and Rodriguez, V. (2001) Country Australia: Influences on Employment and Population Growth. ABARE research report 2001.1 Canberra.

<sup>4</sup> For a discussion of population ageing refer to chapter 2 in the report Productivity Commission Economic Indications on Ageing April 2005.

<sup>5</sup> Further details on the methodology used to derive population projections for New South Wales are contained in the DIPNR report New South Wales State and Regional Population Projections 2001-2051, 2004 release and in a technical paper available from the website [www.planning.nsw.gov.au/tpdc/pop-projections.html](http://www.planning.nsw.gov.au/tpdc/pop-projections.html)



populations in coastal areas are expected to change significantly (see Figure 1 and Table 3). The population aged 65 years or older is projected to more than double over the next 30 years, while children under 15 will make up progressively smaller proportions of the populations. The Mid-North Coast is projected to have the highest proportion of older people (35 percent) by 2031.

Another issue facing some regional areas is an ongoing imbalance in the age structure. Regions such as the Far North Coast and South Coast will have significant ongoing deficits in the younger adult age groups (see Figure 1). The relative excess of people in the older age groups and relative deficits in the younger working age groups has significant implications for the social and economic fabric of coastal communities. These projected age structures are not a certainty and will only materialize if the demographic assumptions underlying the projections come to pass<sup>6</sup>.

### **3.4 Urban Consolidation**

While non-metropolitan coastal regions have experienced considerable growth over the last 25 years, the greatest population increases have been in towns and other regional centres of between 1,000 and 100,000 people. Populations of these centres increased by 60 per cent between 1976 and 2001. Rural area populations also increased, but not to this extent. This pattern points to an increasing urbanisation of the population in coastal regions, a trend also reflected nationally.

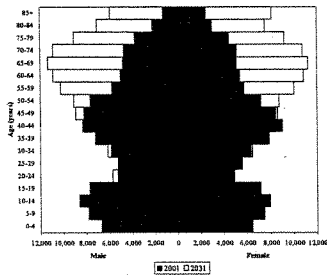
Of perhaps greater interest is how this population growth has impacted on the shape of the urban centres and towns in regional areas. In particular, what evidence has there been for urban consolidation as the populations have increased. While there has been considerable attention to this in the Sydney region, this issue required further investigation in regional areas. An initial overview of housing statistics in coastal regions shows that in 2001 at least 70 per cent of private dwellings were detached houses. In most areas there appears to have been little change in the dwelling mix in the ten years since 1991. Nevertheless there have been some marked increases in the numbers of semi-detached, row, terrace or townhouse style dwellings as demonstrated by apartment development at Forster and Port Macquarie.

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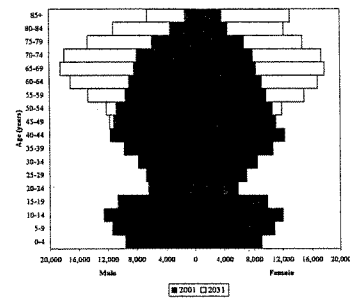
<sup>6</sup> The broader national and regional implications of the so-called "sea-change" phenomenon have recently been discussed in a Report for the National Sea Change Taskforce entitled *Meeting the Sea Change Challenge: Sea Change Communities in Coastal Australia*, March 2005, Planning Research, University of Sydney.

**Figure 1: Age structures for coastal regions excluding Sydney, 2001 and 2031**

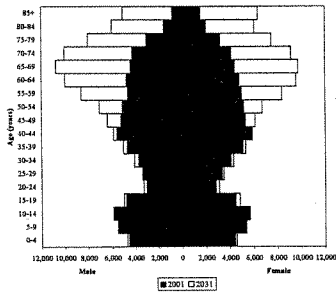
**Far North Coast**



**Mid-North Coast**



**South Coast**



Note: the 2001 age structure is shown in black; the age structure in 2031 is superimposed in white.

Source: Transport and Population Data Centre New South Wales Statistical Local Area Population Projections 2001-2031, 2004 Release. DIPNR

**Table 1: Total Projected Populations, Statistical Local Areas in Non-Metropolitan Coastal Regions of New South Wales, 2001-2031**

SLA	2001	2006	2011	2016	2021	2026	2031
<b>Mid-North Coast</b>							
Bellingen (A)	12,730	12,960	13,100	13,250	13,420	13,590	13,730
Coffs Harbour (C) - Pt A	46,100	50,520	54,650	58,830	63,130	67,470	71,710
Coffs Harbour (C) - Pt B	15,650	16,460	17,170	17,880	18,630	19,380	20,100
Copmanhurst (A)	4,570	4,920	5,240	5,580	5,920	6,280	6,640
Grafton (C)	17,430	17,150	16,760	16,380	16,030	15,680	15,290
Great Lakes (A)	32,200	35,510	38,460	41,440	44,440	47,390	50,220
Greater Taree (C)	44,740	45,390	45,760	46,160	46,630	47,100	47,460
Hastings (A) - Pt A	38,130	42,690	46,910	51,080	55,250	59,340	63,210
Hastings (A) - Pt B	27,250	29,340	31,230	33,100	35,000	36,880	38,630
Kempsey (A)	27,370	28,140	28,320	28,500	28,720	28,930	29,070
Maclean (A)	17,050	18,370	19,560	20,740	21,920	23,080	24,150
Nambucca (A)	18,170	18,560	18,820	19,080	19,370	19,640	19,850
Pristine Waters (A) - Nymboida	4,440	4,580	4,690	4,820	4,960	5,110	5,260
Pristine Waters (A) - Ulmarra	6,600	6,900	7,160	7,430	7,720	8,010	8,280
<b>Richmond-Tweed</b>							
Ballina (A)	38,160	40,920	43,650	46,300	48,970	51,640	54,190
Byron (A)	29,690	32,520	35,330	38,090	40,900	43,730	46,490
Kyogle (A)	9,820	9,670	9,520	9,360	9,220	9,080	8,940
Lismore (C) - Pt A	30,870	29,960	29,070	28,170	27,340	26,550	25,740
Lismore (C) - Pt B	12,190	12,000	11,800	11,580	11,390	11,210	11,010
Richmond Valley (A) - Casino	10,630	10,370	10,110	9,830	9,580	9,330	9,070
Richmond Valley (A) Bal	10,400	10,740	11,070	11,400	11,740	12,080	12,410
Tweed (A) - Pt A	46,950	53,640	60,200	66,540	72,840	79,040	84,970
Tweed (A) - Pt B	27,630	29,110	30,580	32,010	33,490	34,990	36,440
<b>South Coast</b>							
Bega Valley (A)	30,700	32,960	35,030	37,210	39,460	41,720	43,880
Eurobodalla (A)	33,950	37,240	40,310	43,470	46,660	49,810	52,760
Shoalhaven (C) - Pt A	30,170	32,020	33,560	35,030	36,510	37,990	39,400
Shoalhaven (C) - Pt B	57,480	63,570	69,060	74,350	79,650	84,940	90,060

**Table 2: Average Annual Growth Rates, Statistical Local Areas in Non-Metropolitan Coastal Regions of New South Wales, 2001-2031**

SLA	2001-06	2006-11	2011-16	2016-21	2021-26	2026-31
<b>Mid-North Coast</b>						
Bellingen (A)	0.4	0.2	0.2	0.3	0.3	0.2
Coffs Harbour (C) - Pt A	1.8	1.6	1.5	1.4	1.3	1.2
Coffs Harbour (C) - Pt B	1.0	0.8	0.8	0.8	0.8	0.7
Copmanhurst (A)	1.5	1.3	1.2	1.2	1.2	1.1
Grafton (C)	-0.3	-0.5	-0.5	-0.4	-0.4	-0.5
Great Lakes (A)	2.0	1.6	1.5	1.4	1.3	1.2
Greater Taree (C)	0.3	0.2	0.2	0.2	0.2	0.2
Hastings (A) - Pt A	2.3	1.9	1.7	1.6	1.4	1.3
Hastings (A) - Pt B	1.5	1.3	1.2	1.1	1.0	0.9
Kempsey (A)	0.6	0.1	0.1	0.2	0.1	0.1
Maclean (A)	1.5	1.3	1.2	1.1	1.0	0.9
Nambucca (A)	0.4	0.3	0.3	0.3	0.3	0.2
Pristine Waters (A) - Nymboida	0.6	0.5	0.5	0.6	0.6	0.6
Pristine Waters (A) - Ulmarra	0.9	0.8	0.7	0.8	0.7	0.7
<b>Richmond-Tweed</b>						
Ballina (A)	1.4	1.3	1.2	1.1	1.1	1.0
Byron (A)	1.8	1.7	1.5	1.4	1.3	1.2
Kyogle (A)	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Lismore (C) - Pt A	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
Lismore (C) - Pt B	-0.3	-0.3	-0.4	-0.3	-0.3	-0.4
Richmond Valley (A) - Casino	-0.5	-0.5	-0.5	-0.5	-0.5	-0.6
Richmond Valley (A) Bal	0.6	0.6	0.6	0.6	0.6	0.5
Tweed (A) - Pt A	2.7	2.3	2.0	1.8	1.6	1.5
Tweed (A) - Pt B	1.1	1.0	0.9	0.9	0.9	0.8
<b>South Coast</b>						
Bega Valley (A)	1.4	1.2	1.2	1.2	1.1	1.0
Eurobodalla (A)	1.9	1.6	1.5	1.4	1.3	1.2
Shoalhaven (C) - Pt A	1.2	0.9	0.9	0.8	0.8	0.7
Shoalhaven (C) - Pt B	2.0	1.7	1.5	1.4	1.3	1.2

**Table 3: Key Statistics, Statistical Local Areas in Non-Metropolitan Coastal Regions of New South Wales, 2001-2031**

Region Statistical Local Area (SLA)	Median age		Aged 0 - 14 years %		Aged 65+ years %		Sex ratio		Dependency ratio	
	2001	2031	2001	2031	2001	2031	2001	2031	2001	2031
<b>Mid-North Coast</b>										
Bellingen (A)	41	56	22.6	14.0	16.6	35.3	101.2	97.5	64.5	97.4
Coffs Harbour (C) - Pt A	38	51	21.1	15.0	15.9	31.8	95.1	100.3	58.6	88.1
Coffs Harbour (C) - Pt B	39	55	23.6	14.7	14.0	34.0	100.2	99.2	60.4	95.0
Copmanhurst (A)	39	54	22.3	15.1	12.8	33.2	109.0	106.1	54.2	93.5
Grafton (C)	38	52	22.0	15.2	17.3	33.5	95.3	97.5	64.7	94.9
Great Lakes (A)	47	58	17.6	12.7	25.0	38.4	98.7	103.0	73.9	104.9
Greater Taree (C)	40	55	22.0	14.5	17.9	35.2	97.1	96.2	66.4	98.6
Hastings (A) - Pt A	43	56	19.1	13.5	22.6	37.1	91.6	99.9	71.7	102.4
Hastings (A) - Pt B	43	57	20.4	13.5	20.5	37.2	98.1	101.7	69.2	103.1
Kempsey (A)	40	54	22.7	14.8	15.9	34.2	98.9	96.8	62.8	96.3
Maclean (A)	44	58	19.5	14.4	22.4	37.9	101.3	103.3	72.1	109.5
Nambucca (A)	42	57	20.9	13.2	20.4	38.0	98.6	98.2	70.2	104.9
Pristine Waters (A) - Nymboida	38	50	25.4	16.3	9.3	28.5	104.0	109.0	53.1	81.4
Pristine Waters (A) - Ulmarra	39	54	24.2	14.1	12.4	32.0	106.8	105.1	57.8	85.7
<b>Richmond-Tweed</b>										
Ballina (A)	41	52	19.9	14.4	18.9	31.7	95.3	100.5	63.4	85.4
Byron (A)	38	48	21.1	14.7	12.0	23.7	99.6	102.6	49.4	62.4
Kyogle (A)	39	52	24.2	15.9	14.3	31.4	105.4	103.6	62.5	89.7
Lismore (C) - Pt A	35	46	20.9	16.0	14.1	29.0	91.9	96.7	54.0	81.7
Lismore (C) - Pt B	38	50	23.5	15.4	8.8	27.3	104.5	100.5	47.7	74.5
Richmond Valley (A) - Casino	38	50	22.6	15.8	18.2	31.6	92.9	97.1	68.7	90.1
Richmond Valley (A) Bal	38	50	24.0	17.2	15.3	30.5	105.9	104.4	64.7	91.1
Tweed (A) - Pt A	45	56	17.5	12.6	25.6	38.0	94.7	100.9	75.9	102.5
Tweed (A) - Pt B	38	50	23.2	15.3	14.3	29.5	99.9	101.7	59.9	81.1
<b>South Coast</b>										
Bega Valley (A)	41	56	21.4	13.7	17.2	34.9	98.7	104.9	63.0	94.6
Eurobodalla (A)	44	57	18.8	12.2	21.8	37.0	98.1	107.9	68.4	97.1
Shoalhaven (C) - Pt A	35	49	23.8	15.8	14.0	30.4	97.2	98.9	60.9	85.6
Shoalhaven (C) - Pt B	44	56	19.8	13.7	22.0	35.3	99.0	100.6	71.8	96.3

Source: Transport and Population Data Centre New South Wales Statistical Local Area Population Projections 2001-2031, 2004 release. DIPNR.

#### **4. Short and long term needs of coastal communities for basic infrastructure (such as roads, power, water and sewerage) and human services infrastructure such as hospitals, schools aged care centres and sporting facilities (TOR2).**

##### **4.1 Background**

The NSW population is changing. It is getting older and fewer people live in each home. The economy is growing and developing. As a result, NSW is investing more than ever in infrastructure. \$50 billion has been spent since 1995-96 to the present and a record allocation of \$34.7 billion is being invested in infrastructure over the next four years. This budgeted investment is a 30% increase from the previous four years and continues an upward trend on prior years.

Since 1995, major social and economic infrastructure investment in the non-metropolitan coastal areas of NSW includes<sup>7</sup>:

- ⇒ The North Coast – a minimum \$2.048 billion (for 12 LGAs)
- ⇒ The South Coast – a minimum of \$417 million (for 7 LGAs)

##### **4.2 Major Completed Projects and Current Works for Coastal NSW<sup>8</sup>**

###### ***North Coast***

Completed health infrastructure includes: \$80 million on the redevelopment of the Coffs Harbour hospital; major redevelopments totalling nearly \$50 million at Byron Bay, Grafton Base, Tweed Health hospitals and the development of a \$3.3 million detoxification unit at Lismore hospital. Health facilities have been also been built or expanded at Bellbrook, Murwillumbah and Dorrigo (totalling \$6.8 million) along with redevelopment of the Kyogle Health Multi Purpose Service (\$9.4 million). Current projects include a \$28.2 million redevelopment of the Richmond Clinic at Lismore Base Hospital.

Investment in education infrastructure includes two new public schools at Pottsville Beach and Bogangar; upgrades including: Kingscliff High, Macksville High, Maclean High, Murwillumbah High, Woodburn Public and Dorrigo High (\$29.1 million), Frederickton Public School, Mullumbimby High School and Tweed River High School as well as three TAFE facilities upgraded or expanded at Grafton, Kingscliff and Wollongbar (\$22.8 million). Current projects include construction of a new high school at Banora Point (\$7.3 million) and upgrades to Bulahdelah Central School and to Lismore, Port Macquarie, Wauchope and Grafton TAFE facilities.

A total of \$802.2 million has been invested (including Federal funding) on major upgrades to the Pacific Highway since 1995. Current projects include the Bruxner Highway Alstonville Bypass (Federal and State Funding) \$36.5 million; and Pacific Highway - Brunswick Heads to Yelgun Dual Carriageways (Federal and State Funding) \$209 million. Planning is continuing for further Pacific Highway upgrades and has commenced for the Oxley Highway Upgrade from Wrights Road to the Pacific Highway plus the Summerland Way, Second Bridge over the Clarence River at Grafton.

###### ***South Coast***

\$12.5 million has been spent on projects including hospital infrastructure in Bowral and Goulburn, improving the ambulance centre in Bowral and enhancing community health

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<sup>7</sup> The NSW Government Plan for Infrastructure, March 2005, regional data includes the total cost of completed works and works in progress as of March 2005, excluding energy and water (see below).

<sup>8</sup> Budget Papers 2005-2006, Infrastructure Statement, Budget Paper 4, The NSW Government Plan for Infrastructure, March 2005.

facilities in Nowra. Current projects include the Batemans Bay Hospital Emergency Department (\$2.6 million) and the Milton Ulladulla Hospital redevelopment (\$7 million).

Completed education projects include Colo Vale and Hill Top Primary Schools (\$8.5 million) and new special education facilities at North Nowra Primary School. Current projects include upgrades at: Milton (Stage 1 \$3.8 million) and Merimbula (Stage 1 and 2, \$7 million) Public Schools, Bega High School Stage 2 (\$5.1 million). Further works to Milton Public School (Stages 2 and 3) are to be undertaken in 2005-06.

\$13 million has been spent on the Princes Highway. Current projects include \$10 million for Pambula Bridge and approaches (Federal and State funding) and \$80 million on Main Road 92 between Nowra and Nerriga (Federal, State and Local funding).

### **4.3 Major Network Based Economic Infrastructure**

For major network based economic infrastructure, the NSW Government has invested around \$10 billion in energy infrastructure and over \$6 billion in water infrastructure across NSW<sup>9</sup>. Since 1995 the Government has delivered over \$2.2 billion in savings for NSW electricity consumers.

The Government's reforms to the electricity supply industry have joined the State's power system to the National Electricity Market. Under these arrangements, over \$7 billion has been invested by Government-owned electricity businesses during the last 10 years on electricity related infrastructure.

The Government's reforms to the natural gas industry since 1995/6 have opened the State's gas market to competition, creating a more competitive market and providing greater security of supply.

NSW households and businesses are estimated to be enjoying more than \$500 million in energy savings over the life of the measures implemented through these programs. Over \$620 million has been committed to investment in cleaner energy supply and energy efficiency. Committed emissions abatement exceeds 20 million lifetime tonnes of carbon dioxide equivalent.

Under the Country Towns Water Supply and Sewerage Program \$639.2 million has been spent installing and expanding water and sewerage services. This includes 33 new sewerage schemes at locations including Coopernook and Hat Head; 87 water supply schemes including Nimbin and 70 sewerage expansions including Shoalhaven.

Through State Water, \$98.9 million has been invested securing water supplies.

### **4.4 Defining Future Needs**

Information provided in this submission highlights the need to address future infrastructure requirements of coastal regions in the context of population change. There is a growing dichotomy between the demands of these communities to maintain and protect their natural environment and way of life, and their concurrent needs and expectations for services, infrastructure and economic activity, particularly tourism development.

However, NSW is better placed to address this dichotomy through the implementation of major reforms to planning, total asset management, procurement, privately financed projects, developer contributions through section 94, regional planning and associated infrastructure.

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<sup>9</sup> Budget Papers 2005-2006, Infrastructure Statement, Budget Paper 4, The NSW Government Plan for Infrastructure, March 2005.

This enables the Government to respond to some specific requirements to cater for growth:

- (i) Sustainable economic development in rapidly growing coastal regions will require adequate infrastructure for business development, particularly in areas such as land transport, telecommunications, water and ports.
- (ii) The Resource Distribution Formula designed to estimate the relative future health needs of Area Health Services, largely driven by the projected future population profile. The implications of this are that relatively more resources should be allocated to those Area Health Services with higher health needs. Changing age profile will also have implications for the type and quantum of community based services.
- (iii) Addressing the ageing population – including supporting people with a disability. Current trends show coastal areas have higher concentrations of older people and populations are expected to age more rapidly.
- (iv) Large urban developments requiring new schools, however ageing characteristics of future new residents will moderate the extent of growth amongst young persons in these areas.
- (v) High population and household growth will have an impact on the demand for housing.
- (vi) Providing access to services from rural coastal areas. Services are predominantly clustered around the major population centres.
- (vii) The ongoing maintenance of maritime assets such as breakwaters and training walls and occasionally river entrance dredging for navigation.

Besides population growth there is also the issue of the seasonal impact of tourism on coastal environmental conditions. Future growth in tourism is likely to occur. The effects of highly-seasonal visitation can place pressure on local infrastructure and services. Specifically, during the summer holidays, both Crown caravan parks and private parks operate at full capacity and place pressure on the health of the nearby waterways especially where they are not connected to adequate sewerage facilities.

Steps taken by Government and water authorities in recent years have helped to reduce pollution on coastal waterways. Introduction of planning controls under the NSW Coastal Policy and SEPP71 Coastal Protection as well as septic system regulations by the Department of Local Government are other mechanisms now in use. Ongoing monitoring is essential to ensure public health is protected in sensitive coastal areas, to avoid a repeat of pollution incidents experienced at Wallis Lake and Lake Conjola.

Besides population and tourism growth, another factor which must be addressed in the provision of future infrastructure is climate change. The NSW Greenhouse Office has released a brochure on coastal impacts prepared by the CSIRO in association with the Australian Greenhouse Office. Projected changes in climate and sea level that may affect the NSW coastline are discussed. Adaptation strategies are highlighted and future scientific challenges are proposed. The report is based on research from Australian and overseas scientists, including assessments undertaken as part of the Intergovernmental Panel on Climate Change.

The research points to globally averaged warming of 1.4°C to 5.8°C by 2100 relative to 1990, and a sea level rise of between 0.09 and 0.88mm by 2100 or 0.8 to 8.0mm per year. Between 1897 and 1998 sea level has risen at Sydney at a rate of  $1.38 \pm 0.18$ mm per year.

Although there exists levels of uncertainty associated with these projections, the CSIRO concludes that coastal communities and urban infrastructure will be affected by future changes in sea level and extreme weather. More frequent high-intensity rain in some areas will also increase the risks of landslides and erosion, particularly in the urbanised catchments on Australia's east coast.

CSIRO also notes that with population growth, there will be increased demand for water and energy. Changes in the timing and amounts of peak seasonal energy loads are likely as



warmer conditions mean less energy demand for winter heating and more energy demand for summer cooling.

Water supplies may also be affected. Persistent drought has at times lowered intermittently closed coastal lakes to levels unacceptable to some communities. This has required an infrastructure investment to maintain an open entrance in one case (\$4m committed in 2003-2004 by State and local councils for the northern breakwater at Lake Illawarra). Supplies for drinking and other purposes may need to be reassessed in the light of climate change, an issue for consideration by all water utilities.

Telecommunications is a vital area of infrastructure relevant to the future economic and social well-being of coastal growth areas. Although regulation is largely a Commonwealth responsibility, it will be critical to explore telecommunications issues in each regional strategy. Future ease of telecommuting, more older people seeking internet access, as well as educational needs, will all place growing demands on telecommunication systems.

In order to obtain a clearer understanding of future infrastructure needs, DIPNR is currently documenting and reviewing infrastructure provision on the Far North Coast and South Coast.

The reviews include:

- the location, capacity, and strategic plans for, existing infrastructure;
- the condition of infrastructure identified;
- the adequacy of the existing and planned infrastructure to serve projected population and settlement patterns to 2031;
- possible benchmarks and criteria for when upgraded infrastructure and/or new infrastructure is required;
- generic requirements and locational criteria for infrastructure that support residential development; and
- infrastructure lifecycle management issues.

The aim of these reviews is to inform the coastal regional strategies. Infrastructure strategies contained in the regional strategies will be linked to the State budget process through agencies' asset management strategies and Capital Investment Plans. These regional strategies are being developed and coordinated by DIPNR as part of an innovative mechanism to manage growth under the Government's Planning Reform Program (see below Section 5 for more detail).

## 5. Coordination of commonwealth, state and local government strategies to deliver sustainable coastal growth and supporting infrastructure (TOR3)

### 5.1 Planning Reform

Since September 2004, the NSW Government has undertaken a major overhaul of the NSW planning system to make it simpler, more efficient and more effective. The process of planning reform will involve:

- (i) reduction in the number of *local environmental plans* (LEPs) from 5500 to 152 – one for each local government area;
- (ii) introduction of a *standard template* for LEPs to ensure more consistency in definitions and zoning categories (with consequential amendments to EP&A Act);
- (iii) *returning to councils* some 60 percent of developments that previously required Ministerial approval;
- (iv) placing in one document all those major *State significant projects* that are significant to the State on social, environmental or economic grounds (a new State Environmental Planning Policy - State Significant Development); and
- (v) making local developer contributions under Section 94 (EP&A Act) more flexible (see below 5.4).

The NSW is also in the process of developing a series of regional strategies aimed at aligning development with population growth, demographic change, climate change, infrastructure investment, and protection of natural resources and high-value environmental assets.

Planning reforms are a complex “shake-up” of the planning system, beginning with an improved focus on strategic planning. Key reforms of local and regional planning are designed to *concentrate on outcomes and strategy* rather than detail and individual developments.

The reforms will build on planning achievements of the Carr Government since 1995. The reforms will incorporate provisions of policies and plans that are relevant to strategic planning and revision of LEPs (eg NSW Coastal Policy 1997; SEPP71 – Coastal Protection). But the reforms will remove those out-of-date LEPs and REPs which are inconsistent with State policies and community expectations. Legislation recently passed gives the Minister for Planning and Infrastructure powers to require draft plans to achieve or give effect to particular principles, aims, objectives or policies.

Regional strategies are a new concept integrating land use planning, natural resource management and infrastructure investment. They will *not* be a statutory instrument. However, they will contain information to guide and where necessary direct the revision of LEPs, and inform the agencies infrastructure strategies. Regional strategies must therefore be seen as an on-going, evolving mechanism that will shape the character of areas undergoing demographic, economic and environmental change.

Regional strategies will be developed in areas of high population growth. The regions are defined by collections of local government areas. In addition to Metropolitan Sydney, there are six regions for which strategies will be produced on the NSW coast, consisting of 27 LGAs.

- |                   |   |   |
|-------------------|---|---|
| • Far North Coast | : | Tweed, Byron, Ballina, Kyogle, Lismore, Richmond                                    |
| • Mid North Coast | : | Clarence, Coffs Harbour, Nambucca, Bellingen, Kempsey, Hastings, Taree, Great Lakes |
| • Lower Hunter    | : | Newcastle, Port Stephens, Lake Macquarie, Maitland, Cessnock                        |
| • Central Coast   | : | Gosford, Wyong  |
| • Illawarra       | : | Wollongong, Shellharbour, Kiama   |

- South Coast : Shoalhaven, Eurobodalla, Bega

Far North Coast and Lower Hunter strategies are well advanced. Both regions have undertaken biophysical constraints and structure plan mapping to determine areas that have the capacity to absorb development. Infrastructure options are being assessed in these regions. Work has also commenced on strategies for Central Coast, Illawarra and South Coast (for details on content of regional strategies see below 5.3).

## 5.2 Context for Coastal Regional Strategies

The Minister for Planning and Infrastructure at the NSW Coastal Conference in November, 2004, outlined the need for an overarching coordinated approach to the development of coastal regional strategies. Five key points were made:

- (i) protect high value environmental assets that make the NSW coast such an attractive place to live and visit;
- (ii) encourage economic and employment growth;
- (iii) make places on the coast better places to live and work;
- (iv) provide for water and energy efficiencies especially in the face of climate change; and
- (v) reform the planning system to better integrate local government plans, natural resource planning (eg those involving the coastal Catchment Management Authorities), and infrastructure planning.

Conservation and management of natural resources is now linked to other new Government initiatives such as the establishment of Catchment Management Authorities and the Natural Resources Commission. Amendments to the *Threatened Species Conservation Act 2004* provide a mechanism for biodiversity conservation and certification involving cooperation with the Department of Environment and Conservation and local councils. The certification process should provide more certainty in the development assessment process. Expansion of coastal national parks is recognised as a major achievement of the Carr Government with an additional 26,400 hectares since 1995. The *Coastal Lands Protection Scheme* has added 664 hectares since 1995 and the Minister announced a doubling of annual investment to the Scheme at the Conference.

Encouraging employment and economic growth is a major initiative of the Carr Government. Planning for employment lands will be an important part of each strategy as will be the identification of infrastructure needed to assist economic development (eg telecommunication upgrades).

Minister Knowles in his November 2004 speech referred to the need for water and energy efficiencies. An important initiative of the Carr Government has been the introduction of BASIX (Building Sustainability Index). This is seen as a revolutionary approach to development approval to ensure more sustainable residential building and reflects the Government's commitment to a reduction in water consumption and greenhouse gas emissions.

BASIX is a web-based planning tool used to assess and certify proposed residential development against stringent criteria for sustainable homes. From 1 July, 2004, new housing in NSW must use 40% less potable water and produce 25% less greenhouse gas emissions than average NSW homes of the same type. The target for energy consumption will increase to 40% from 1 July, 2006. DIPNR is continuing to develop and expand the tool to other housing types and to regional conditions.

What is innovative about regional strategies is the intent to have infrastructure planning integrated with land use and natural resource planning. There is clearly a need to invest in advance in many cases to ensure provision of services as the region changes. How the infrastructure will be paid for will be discussed below (see 5.4).

### 5.3 Content of Regional Strategies

Work undertaken over the past 12 months within DIPNR, in consultation with DEC, local councils and community representatives, is providing a model for the development of coastal regional strategies. The model has similarities with that developed for the Metropolitan Strategy, components of which were announced in late 2004. It is a model which is heavily reliant on cooperation with local government, and has involved the establishment of regional reference groups as a means of communication and stakeholder input.

Each strategy will build on past achievements in planning at the regional level (eg Northern Rivers Regional Strategy – A Framework, 1997). A vision for each region will be articulated recognising those distinctive values and characteristics that exist and need to be enhanced as population grows. A regional infrastructure plan will set beside other components of the regional strategy. As strategies will look ahead 5-10 years and be updated over time, the Government will be better informed to address the needs of growing regional communities.

### 5.4 Infrastructure Investment and New Legislation

In May 2005, the *EP&A Amendment (Development Contributions)* Bill passed through Parliament. As noted above, this is one of the key initiatives of Planning Reform.

The new legislation was described in detail in the second reading speech in the Legislative Council (6 May 2005). In that speech the Minister noted that Section 94 of the *EP&A Act* had been under review for some time. Councils and the development industry supported a more flexible approach with more choice in the ways developer contributions can be used in dealing with the changing patterns of settlement and rates of development. The legislation will dramatically improve the efficient delivery of facilities and infrastructure to communities and widens the range of public purposes (through the voluntary planning agreement scheme) for which developer contributions can be obtained.

Key aspects in the legislation include:

- (i) developer contributions for a public purpose can be made through voluntary planning agreements;
- (ii) councils' ability to expend funds in a timely manner is improved within a stronger legal framework;
- (iii) there is now an ability to obtain a fixed development consent levy;
- (iv) there is now scope for cross council boundary contributions;
- (v) borrowing is now possible between s94 accounts; and
- (vi) contributions and how they are to be used will be more open, transparent and consistent.

Further consultation with stakeholders will occur as DIPNR finalises the supporting regulations and guidelines.

On 25 May, the Minister for Infrastructure, Planning and Natural Resources gazetted a new State environmental planning policy that will help deliver the NSW Government's \$34.7 billion infrastructure program, Metro Strategy and other regional strategies. The new SEPP for State significant development outlines in a single instrument (rather than 85 separate ones) what types of developments need the Minister's approval. At the same time, certain developments will return to local government for approval. This is a much clearer process for councils, investors and the community to follow. The SEPP also provides for the Minister to oversee land use provisions for nominated State significant sites important to environmental and strategic planning.

The EPA Amendment (Infrastructure and Other Planning Reform) Bill 2005 passed through Parliament in June 2005. This Act provides a streamlined and integrated development

assessment and approval system for major infrastructure and other projects of State significance.

## **5.5 Cooperation with the Commonwealth Government**

There are many facets to the relationship between Commonwealth, State and local government on ways in which coastal growth is managed, including arrangements and agreements between the Federal Government and the NSW Government on the delivery of infrastructure.

There are several joint support programs that do assist with the provision of infrastructure. Examples include:

- (i) The Home and Community Care (HACC) Program is a joint State/Australian Government program that provides basic support services to frail older people, people with a disability and their carers to assist them to remain in their homes, and to prevent the premature or inappropriate movement into residential care.
- (ii) The RTA works closely with other agencies such as DIPNR, the Commonwealth Government and local councils to plan roadworks to meet the needs of coastal communities.

In the case of roads, the RTA, with the help of Federal Government funding, is upgrading the Pacific Highway to the Queensland border through the AusLink Program. This massive project will serve coastal communities from Newcastle to Tweed Heads. The upgrading to dual carriageways is a slow and expensive undertaking with projects being scrutinised by communities along the northern coast for their preferred options.

Commonwealth funds (\$253m over 5 years) also have been made available to fund the link of the F3 Freeway at Seahampton to the New England Highway at Branxton. This is seen as a vital project to support the economy of the State, but further funds are needed from the Commonwealth. However, there is an issue of the upgrading of the Princes Highway, which is outside the AusLink Program. In the 05-06 Budget, the State Government has provided an additional \$18m to continue work on the North Kiama bypass with no Commonwealth support.

In the area of housing assistance, funding from the Commonwealth under the Commonwealth-State Housing Agreement (CSHA) has declined over recent years.

The NSW Government has reaffirmed its commitment to public housing with an extra \$397m above CSHA commitments over the last four years.

An area of concern has been the decline in Federal expenditure in coastal infrastructure under the Natural Heritage Trust (NHT). In the first period of NHT funding (NHT1), under the Coast and Clean Seas Program, the Commonwealth spent approximately \$30m on water management facilities in NSW. This was part of a tripartite agreement between Federal, State and local governments. However, under the regional delivery model of NHT2, there has been a substantial decline in joint investment projects in coastal works managed by local councils. A survey of local councils in late 2003 by the then NSW Coastal Council concluded that a serious decline has occurred in funds to help councils improve water quality, ensure water reuse, manage wetland habitats and restore eroding foreshores. To date, alternative Federal programs under the Coastal Catchment Initiative or the National Water Initiative have not had an impact in NSW coastal regions, although discussions are occurring.

## **6. Best Practice methods to plan, manage and provide infrastructure to coastal growth areas (TOR4).**

### **6.1 Planning Reform Initiatives**

The introduction of planning reforms in 2004, and the progressive introduction of those reforms in 2005, constitute an innovative and transforming mechanism for the better management of infrastructure in coastal growth areas. Details of the NSW Government's initiatives in planning reform have been outlined above in section 5.1 and 5.4. What is critical to these reforms is their capacity to *integrate* the provision of infrastructure with land use and natural resource planning. It is in the coastal growth areas where all three areas of planning achieve prominence given demographic change, the need for more employment opportunities and concern over future impacts of global warming.

An innovative aspect of regional strategies will be their on-going role to feed into the State budget process. Communities will be informed through forward commitments which can be adjusted to meet emerging needs. Long-term requirements, such as those driven by potential impacts of climate change, can be identified well in advance through this process.

DIPNR is also examining its seniors living policy (former SEPP5) in order to obtain a closer link between housing location, medical and transport services.

### **6.2 Regional Governance and Management Arrangements**

Planning reform opens the way for more effective decision-making at the regional level. This can build upon existing arrangements such as regional organisations of councils (ROCs), and regional economic boards.

Regional governance will be enhanced by the role of Catchment Management Authorities established under the *CMA Act 2003*. There are now five such entities in coastal NSW:

- Northern Rivers
- Hunter-Central Rivers
- Hawkesbury Nepean
- Sydney Metro
- Southern Rivers

These authorities are developing close links with local councils in the management of natural resources on both private and public lands. Through 2005, the CMAs are working with communities, local councils, state agencies and the Federal Government in producing their Catchment Action Plans. These plans will lead to significant on-ground investment of federal and state funds which will improve landscape health and productivity.

Reference groups have been established in most regional strategy areas consisting of local councils and senior staff, CMA chairs and staff, and representatives of other stakeholders. These reference groups are supported by local technical panels. They provide input into each integrated strategy. In particular, work on the Far North Coast strategy has developed methods for improving decision-making at both regional and local government levels. The Metro Strategy has also assisted the capacity of regional teams in DIPNR, and the reference groups and panels, to better manage and plan for growth.

Several examples can be cited. First is analytical work which underpins land release strategies in the northwest and southwest sectors of the Metro region. There is also work being undertaken on urban consolidation by the Metro team which can benefit coastal areas.

Second, changes in the way Section 94 contributions can be used will directly aid councils in delivery of regional infrastructure outcomes (see above 5.4) This will also be assisted by the way councils can jointly receive support from the Minister for Local Government in their requests for introducing environmental and infrastructure levies.

Third, is the use of methodologies developed as part of the Comprehensive Coastal Assessment (CCA) for application at local council and regional levels. The CCA was an initiative of the NSW Government under the *Coastal Protection Package 2001*. It has used Tweed Shire as a test LGA in developing a decision-support methodology to assist in local government planning. Multi-criteria analysis (MCA) techniques are used to evaluate impacts arising from different population growth scenarios. CCA analyses can be scaled up to a regional level; it has helped define biophysical constraints for Far North Coast structure plan. It is expected that CCA methodologies will be used in all coastal growth areas.

### 6.3 Water Planning

Changes were made to guidelines for the Country Towns Water Supply and Sewerage Program in 2004. The local water utility is required to fund that component of works for assets catering for growth, asset replacements or increasing community or regulator standards. The local water utility is also responsible for all operational, maintenance and administrative costs. Accordingly any water supply or sewerage infrastructure to be provided to Coastal Growth Areas will not be eligible for funding under the current Country Towns Water Supply and Sewerage Program.

What will replace this program is investment based on *integrated water cycle management* at a regional level. This will involve consideration and implementation of water sharing plans, regional water distribution networks, application of BASIX (and its associated methods for demand management), and water recycling. Volumes of water available for town water supplies will be a key consideration in developing regional strategies. This use will be one of several to be considered in the strategy process given the importance of extraction for agriculture and maintaining environmental flows. A big factor in this planning will be demand for water and sewerage at peak tourist periods. The current upgrade at Byron Bay of its Sewerage Treatment and Effluent Reuse Program is an example of what may be needed for coastal settlements. In the Shoalhaven, the so-called REMS program demonstrated the value of multi use of small town recycled effluent to support irrigation during dry summer months.

In section 5.4, the need to consider the impact of climate change was noted in planning for future infrastructure. This is especially the case for water supplies. In a report to DIPNR in 2004, prepared by the Department of Commerce<sup>10</sup>, it was concluded:

Outside metropolitan systems, only a small proportion of NSW's coastal water resources are being used. The off-river storage policy adopted by many local government councils over the last 30 years has avoided the need to dam rivers, has minimised environmental impacts and has been very cost effective. In nearly all the coastal river basins there is potential to provide extra system capacity by providing additional off-river storage to meet needs during droughts (p.iv).

However, they add that climate change represents a "wildcard", which could lead to significant impacts on water supply systems. These impacts were not factored into the system expansion costs in the Department of Commerce report. Use of BASIX and other methods to reduce demand; enlarging existing storages; increasing transfer capacities; and in some areas constructing additional off-river storages consistent with water sharing plans, should "cater for additional 100,000 population over and above the 2051 projections" (p.iv).

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<sup>10</sup> *State of the Future Project; Evaluation of Future Water Supply Projects*, Working Paper for DIPNR prepared by the Department of Commerce, 2004, 38 pages.

The conclusion is that application of integrated water cycle management could meet coastal growth needs despite current local difficulties facing some water utilities (eg Eurobodalla, Nambucca). What is needed as best practice will be identification of infrastructure needs facing growing coastal communities as part of regional strategy development in combination with water sharing planning. Climate change impacts will progressively become better known and factored into the planning.

#### **6.4 Other Best Practice Methods**

There are a range of methods which should help more effective and efficient delivery of infrastructure in coastal growth areas. One example is the use of *Total Asset Management*. It provides a structured and systematic approach by which an agency can align its asset planning and management practices and strategies, within the limits of resources available.

Modelling tools are used to help plan for changes in demographic profiles. An example is the Resource Distribution Formula (RDF), which is a population needs-based funding model that the Department of Health uses as a guide in allocating recurrent resources between Area Health Services. The projected population growth and health needs in coastal Area Health Services are taken into consideration in the RDF, with these Area Health Services receiving a progressively increasing share of resources to increase/develop services to meet the health needs of increased population growth.



## **7. Management of social, environmental and economic considerations associated with infrastructure provision in coastal growth areas (TOR5)**

Infrastructure provision is closely linked to the work programs of many NSW Government agencies. The management of those assets is a core part of their business including how an agency works with local government. Similarly, the joint council-state coastline and estuary management programs supported by funds from DIPNR, and the NSW Coastal Bicycle Program administered by DIPNR, offer local communities grant support to boost council expenditure on agreed projects.

