

**Port Stephens  
Local Emergency  
Management Plan  
(EMPLAN)  
October 2016**




## Part 1 – Administration

### Authority

The Port Stephens Local Emergency Management Plan (EMPLAN) has been prepared by the Port Stephens Local Emergency Management Committee in compliance with the State Emergency & Rescue Management Act 1989.

APPROVED

  
.....

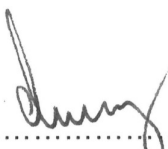
**Wayne Wallis**

**Chair**

**Port Stephens Local Emergency Management Committee**

Dated: 7/10/2016

ENDORSED

  
.....  
Chair J.A. Log APM

**Hunter Central Coast Regional Emergency Management Committee**

Dated: 14/11/16

## Contents

<b>Part 1 – Administration .....</b>	<b>2</b>
Authority.....	2
Contents.....	3
Purpose.....	4
Objectives .....	4
Scope .....	4
Principles .....	5
Test and Review Process .....	5
List of Abbreviations.....	6
 <b>Part 2 – Community Context.....</b>	 <b>8</b>
Annexure A – Community Profile .....	8
General.....	8
Landform and Topography .....	9
Land Use .....	10
Climate .....	11
Population and People .....	11
Transport Routes and Facilities .....	14
Economy and Industry .....	16
Annexure B – Hazards and Risks Summary .....	18
Annexure C – Local Sub Plans, Supporting Plans and Policies .....	22
 <b>Part 3 – Restricted Operational Information.....</b>	 <b>24</b>

## Purpose

Details arrangements for, prevention of, preparation for, response to and recovery from emergencies within the Local Government Area(s) covered by this plan.

It encompasses arrangements for:

- emergencies controlled by combat agencies;
- emergencies controlled by combat agencies and supported by the Local Emergency Operations Controller (LEOCON);
- emergency operations for which there is no combat agency; and
- circumstances where a combat agency has passed control to the LEOCON.

## Objectives

The objectives of this plan are to:

- define participating organisation and Functional Area roles and responsibilities in preparation for, response to and recovery from emergencies;
- set out the control, co-ordination and liaison arrangements at the Local level;
- detail activation and alerting arrangements for involved agencies; and
- detail arrangements for the acquisition and co-ordination of resources.

## Scope

The plan describes the arrangements at Local level to prevent, prepare for, respond to and recover from emergencies and also provides policy direction for the preparation of Sub Plans and Supporting Plans:

- Arrangements detailed in this plan are based on the assumption that the resources upon which the plan relies are available when required; and
- The effectiveness of arrangements detailed in this plan are dependent upon all involved agencies preparing, testing and maintaining appropriate internal instructions, and/or standing operating procedures.

## Principles

The following principles are applied in this plan:

- a) The Emergency Risk Management (ERM) process is to be used as the basis for emergency planning in New South Wales. This methodical approach to the planning process is to be applied by Emergency Management Committees at all levels.
- b) Responsibility for preparation, response and recovery rests initially at Local level. If Local agencies and available resources are not sufficient they are augmented by those at Regional level.
- c) Control of emergency response and recovery operations is conducted at the lowest effective level.
- d) Agencies may deploy their own resources from their own service from outside the affected Local area or Region if they are needed.
- e) The Local Emergency Operations Controller (LEOCON) is responsible, when requested by a combat agency, to co-ordinate the provision of resources support. The LEOCON would not normally assume control from a combat agency unless the situation can no longer be contained. Where necessary, this should only be done after consultation with the Regional Emergency Operations Controller (REOCON) and agreement of the combat agency and the appropriate level of control.
- f) Emergency preparation, response and recovery operations should be conducted with all agencies carrying out their normal functions wherever possible.
- g) Prevention measures remain the responsibility of authorities/agencies charged by statute with the responsibility.

## Test and Review Process

The Port Stephens Local Emergency Management Committee (LEMC) will review this Plan every three (3) years, or following any:

- activation of the Plan in response to an emergency;
- legislative changes affecting the Plan; and
- exercises conducted to test all or part of the Plan.

## List of Abbreviations

The following abbreviations have been used within this plan:

<b>ABS</b>	Australia Bureau of Statistics
<b>BOM</b>	Bureau of Meteorology
<b>CMG</b>	Consequence Management Guide
<b>DISPLAN</b>	Disaster Plan
<b>DPI</b>	Department of Primary Industries
<b>DSEP</b>	Dam Safety Emergency Plan
<b>EMPLAN</b>	Emergency Management Plan
<b>ECL</b>	East Coast Low
<b>EM</b>	Emergency Management
<b>EOC</b>	Emergency Operations Centre
<b>ERM</b>	Emergency Risk Management
<b>FRNSW</b>	Fire and Rescue New South Wales
<b>GRP</b>	Gross Regional Product
<b>HV</b>	High Voltage
<b>JATWC</b>	Joint Australian Tsunami Warning Centre
<b>LEMC</b>	Local Emergency Management Committee
<b>LEMO</b>	Local Emergency Management Officer
<b>LEOCON</b>	Local Emergency Operations Controller
<b>LEP</b>	Local Environmental Plan
<b>LGA</b>	Local Government Area
<b>LLS</b>	Local Land Services
<b>LV</b>	Low Voltage
<b>NBN</b>	National Broadband Network
<b>NSW SES</b>	New South Wales State Emergency Service

<b>NSW RFS</b>	New South Wales Rural Fire Service
<b>RAAF</b>	Royal Australian Air Force
<b>REOCON</b>	Regional Emergency Operations Controller
<b>RFC</b>	Region Forecast Centre
<b>SEOCON</b>	State Emergency Operations Controller
<b>SERCON</b>	State Emergency Recovery Controller
<b>SERM Act</b>	State Emergency and Rescue Management Act 1989
<b>USAR</b>	Urban Search and Rescue

## Part 2 – Community Context

### Annexure A – Community Profile

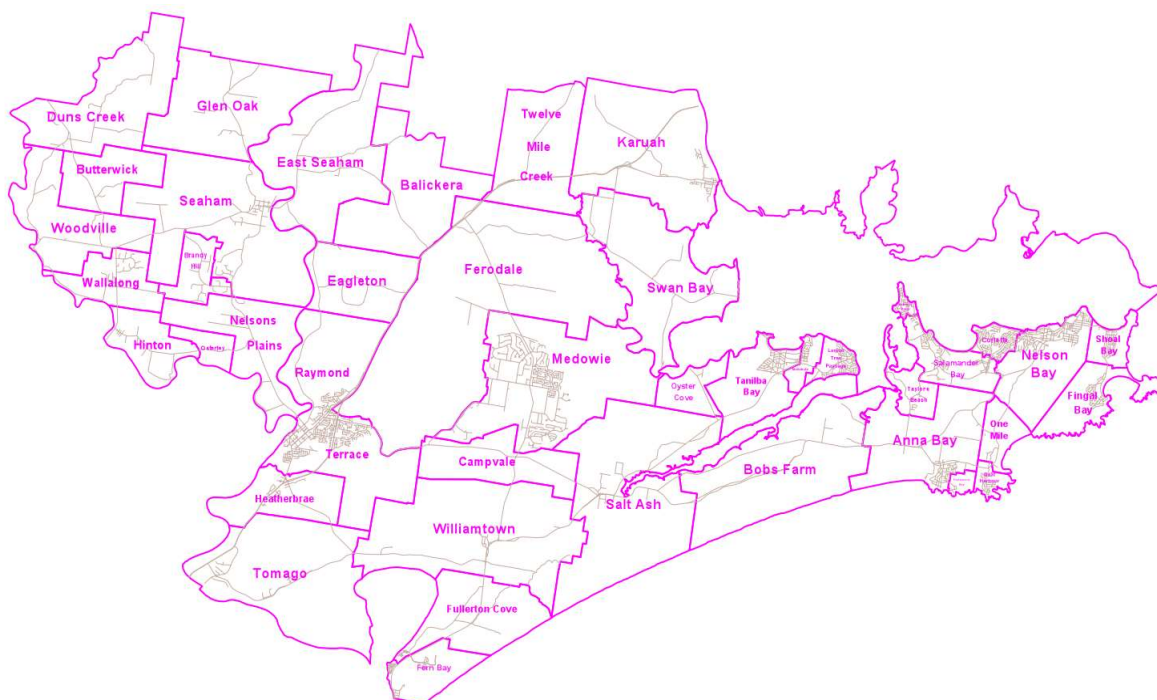
#### General

The Port Stephens Local Government Area (LGA) is located in the Hunter Region of New South Wales, about 200 kilometres north of Sydney.

The LGA is approximately 55 kilometres from east to west and 30 kilometres from north to south. It extends north to Karuah, west to Duns Creek, east to Shoal Bay, south to Tomago and southeast to Fern Bay. The land area of the LGA is 850 km<sup>2</sup> and includes disparate population densities, ranging from 16 people per km<sup>2</sup> in the Karuah/Swan Bay Planning Districts and 218 per km<sup>2</sup> in the Tomaree Planning District.

The Port Stephens LGA is bounded by Dungog Shire and the MidCoast Council area in the north, the Pacific Ocean in the east, the City of Newcastle across the Hunter River in the south and Maitland City in the west.

The LGA contains major service centres at Raymond Terrace (regional centre), and Nelson Bay/Salamander Bay. A major industrial area is located at Tomago which is adjacent to the Port of Newcastle, and the regional civilian airport is located at Williamtown. A large defence facility, RAAF Base Williamtown, is located adjacent to the airport.



**Map 1 – Port Stephens LGA**



## Landform and Topography

The Port Stephens LGA enjoys substantial biodiversity due to the variety of ecosystems it contains. These include open forest, rainforest, riparian forest, coastal swamp forests, woodland, heath and sedge land.

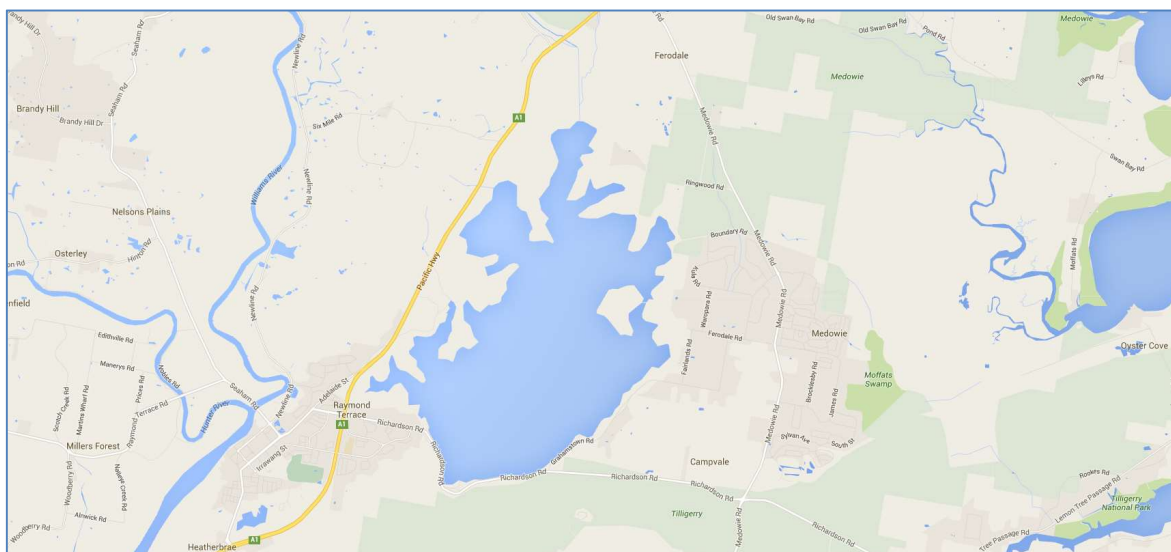
A number of vegetation communities in Port Stephens are classified as nationally, state or regionally significant with around 32,156 hectares of protected land in the LGA that support biodiversity conservation.

### Grahamstown Dam

Grahamstown Dam was constructed between 1955 and 1965 as the Hunter regions third water supply source and is the Hunter's largest drinking water supply dam.

The primary function of the dam is to provide a sufficient volume buffer to maintain water supply in a severe drought. The dam provides about 40% of the drinking water requirements on an ongoing basis, but would supply a much higher percentage in a drought. The dam and its delivery and treatment systems are also critical components for meeting peak day demands, and can meet up to 75% of supply requirements on a peak day.

Grahamstown Dam is an off-river storage that is primarily used to store water extracted from the Williams River. As well as rain, the dam also receives inflows from its own catchment.



**Map 2 – Grahamstown Dam**

## Land Use

The Port Stephens Local Environmental Plan 2013 provides a range of land use zones. These include:

Land Use Zone / Type / Classification	Area (ha)	% of LGA
RU1 – Primary Production	11537.20	11.92
RU2 – Rural Landscape	21603.70	22.33
RU3 – Forestry	3501.76	3.62
RU5 - Village	78.47	0.08
R1 – General Residential	411.76	0.43
R2 – Low Density residential	2430.26	2.51
R3 – Medium Density Residential	2430.26	2.51
R5 – Large Lot Residential	1946.61	2.01
B1 – Neighbourhood Centre	9.82	0.01
B2 – Local Centre	45.62	0.05
B3 – Commercial Use	47.47	0.05
B4 – Mixed Use	41.62	0.04
B5 – Business Development	76.07	0.08
B7 – Business Park	89.29	0.09
IN1 – General Industrial	925.35	0.96
IN2 – Light Industrial	33.84	0.03
IN4 – Working Waterfront	30.38	0.03
SP1 – Special Activities	7170.64	7.41
SP2 – Infrastructure	5016.30	5.18
RE1 – Public Recreation	910.07	0.94
RE2 – Private Recreation	389.77	0.40
E1 – National Parks and Nature Reserves	18951.58	19.59
E2 – Environmental Conservation	3701.01	3.82
E3 – Environmental Management	4309.28	4.45
E4 – Environmental Living	114.90	0.12
W1 – Natural Waterways	506.98	0.52
W2 – Recreational Waterways	12718.89	13.14

**Table 1 – Land Use<sup>1</sup> – Port Stephens LGA**

## Climate

Port Stephens enjoys a temperate year round climate without the high humidity and seasonal temperature extremes.

The Port Stephens area has moderate summer temperatures. The summer high temperature for Port Stephens Area is approximately 26 °C. The summer low temperature is approximately 17 °C.

The Port Stephens area has mild winter temperatures. The winter high temperature for Port Stephens area is approximately 18 °C. The winter low temperature is approximately 8 °C.

Rainfall is relatively evenly distributed throughout the year with around 11 days per month of rain falls with an annual average of 1,347mm of rain.

## Population and People

The total population of the Port Stephens LGA on census night 2011 was 64,807, which comprises of Males 31,907 and Females 32,900. In 2014 the ABS adjusted resident population was 69,728.

The Port Stephens population includes 2,328 Aboriginal and Torres Strait Islander people, who make up 3.6% of our population.

It is important to note, the Port Stephens LGA is made up of varying community demographics with a dispersed and fragmented settlement pattern. The predominant resident populations are on the eastern coastal fringe, within the Tomaree planning district and inland at Raymond Terrace, within the Raymond Terrace planning district and Medowie in the Medowie planning district. The Tilligerry planning district, while on the coastal fringe adjacent to the more densely populated coast areas of the Tomaree planning district, is geographically separated by Tilligerry Creek and therefore closer to Medowie.

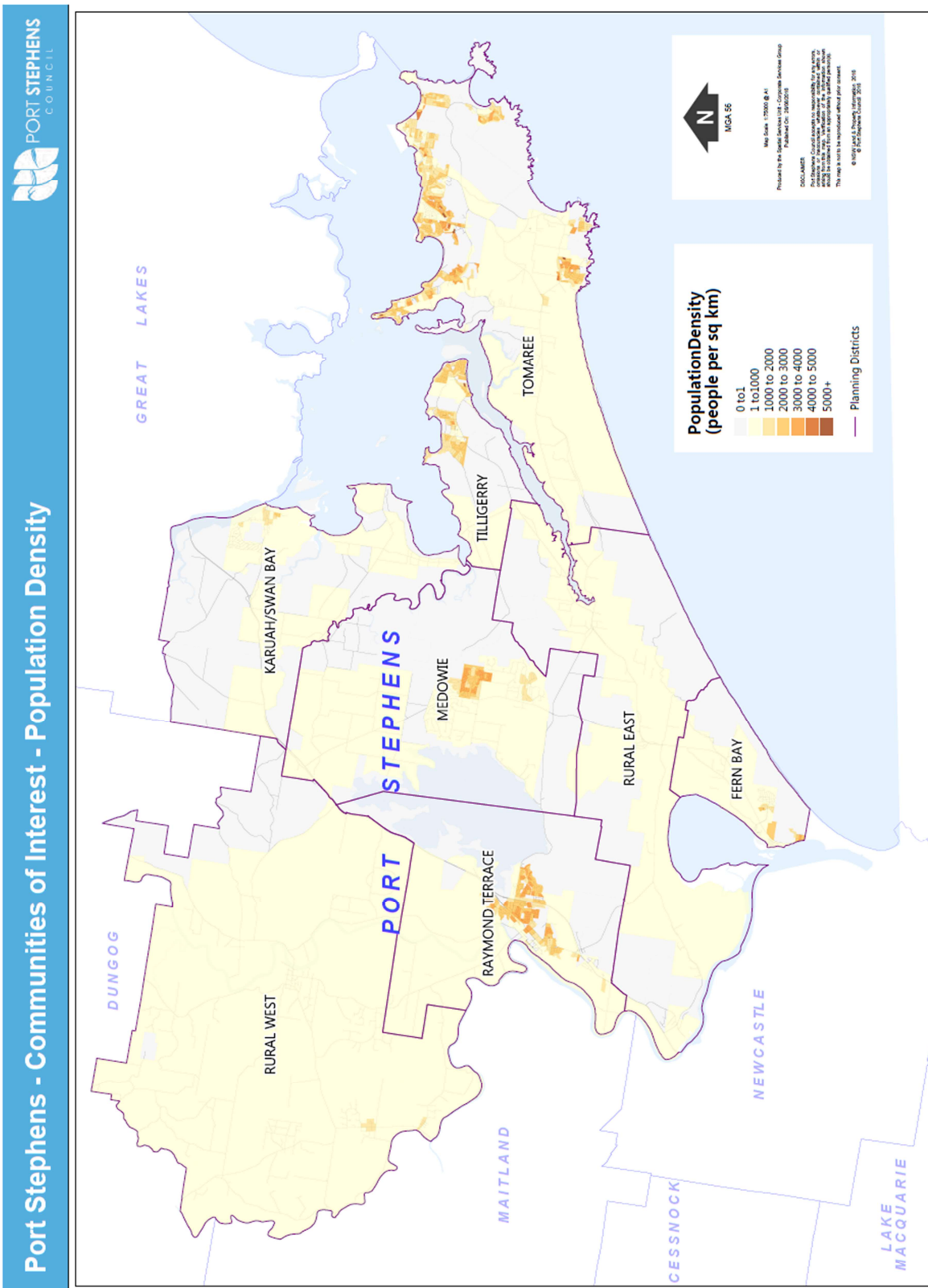
There are a number of smaller rural communities such as Karuah, Seaham and Wallalong dispersed throughout other less populated planning districts to the north and west of Raymond Terrace and Medowie.

In Port Stephens, 83.1% of people were born in Australia where English is spoken in 92.2% of households.

An average number of motor vehicles per dwelling is 1.8.

The dominant dwelling type in the Port Stephens LGA are separate dwellings at 82.4%, followed by semi-detached, row terrace or townhouse at 10.8%, flat unit and apartment at 4.6%. Other dwelling types make up 2.2%. The average number of people per household is 2.5 people.

## Planning District Population Density



## Planning District Catchment Population Data

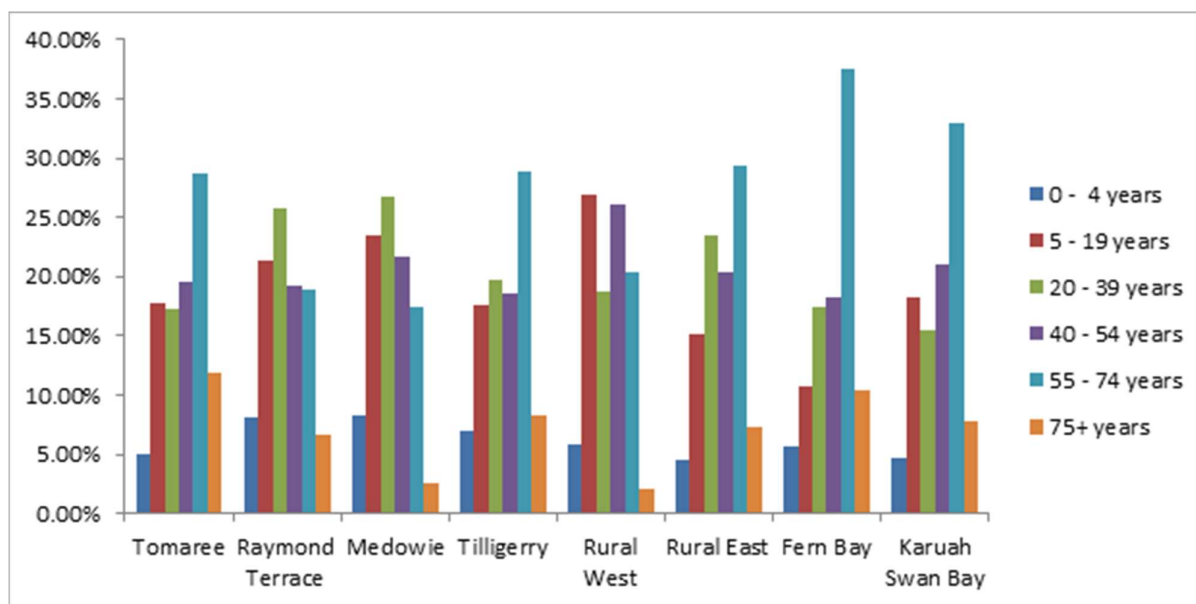


Chart 1 – Planning Catchment by District<sup>1</sup> – Port Stephens LGA

Planning District Catchment	0 – 4 years	5 – 19 years	20 – 39 years	40 – 54 years	55 – 74 years	75+ years
<b>Tomaree</b>	1,258	4,459	4,312	4,889	7,166	2,955
<b>Raymond Terrace</b>	1,093	2,895	3,498	2,607	2,573	903
<b>Medowie</b>	742	2,100	2,393	1,941	1,556	236
<b>Tilligerry</b>	44	1,123	1,264	1,191	1,843	530
<b>Rural West</b>	252	1,172	820	1,140	892	88
<b>Rural East</b>	99	333	518	449	650	162
<b>Fern Bay</b>	109	207	334	352	721	201
<b>Karuah Swan Bay</b>	70	271	230	313	490	115

Table 2 – Actual population data by planning catchment<sup>1</sup> – Port Stephens LGA

## Housing tenure

Tenure	Number	Percentage
Occupied private dwellings		
Owned outright	9,020	37.6%
Owned with a mortgage	7,493	31.3%
Rented	6,620	27.6%
Other tenure type	244	1.0%
Tenure type not stated	599	2.5%

**Table 3 – Breakdown of housing tenure<sup>1</sup> – Port Stephens LGA**

## Industry of employment

Industry of employment	Numbers	Percentage
Defence	1,581	5.9%
Cafes, Restaurants and Takeaway Food Services	1,313	4.9%
School Education	1,044	3.9%
Supermarket and Grocery Stores	817	3.1%
Residential Care Services	777	2.9%

**Table 4 – Breakdown of top responses, industry of employment<sup>1</sup> – Port Stephens LGA**

## Travel to work

Travel to work	Numbers	Percentage
Car, as driver	18,281	68.7%
Car, as passenger	1,442	5.4%
Walked only	770	2.9%
Truck	358	1.3%
Bus	219	0.8%
People who travelled to work by public transport	417	1.6%
People who travelled to work by car as driver or passenger	19,817	74.5%

**Table 5 – Port Stephens residents – Travel to work<sup>1</sup> – Port Stephens LGA**

<sup>1</sup> - Information obtained from 2011 Census data

## Transport Routes and Facilities

Port Stephens Council is located on the NSW lower North coast. The LGA is bisected and serviced by the Pacific Highway, the major interstate highway linking Sydney and Brisbane.

Nelson Bay Road connects the Tomaree Peninsula with Newcastle.

The main arterial roads in the area carry significant volumes of heavy vehicles carrying freight and servicing the local heavy industrial operations and extractive industries.

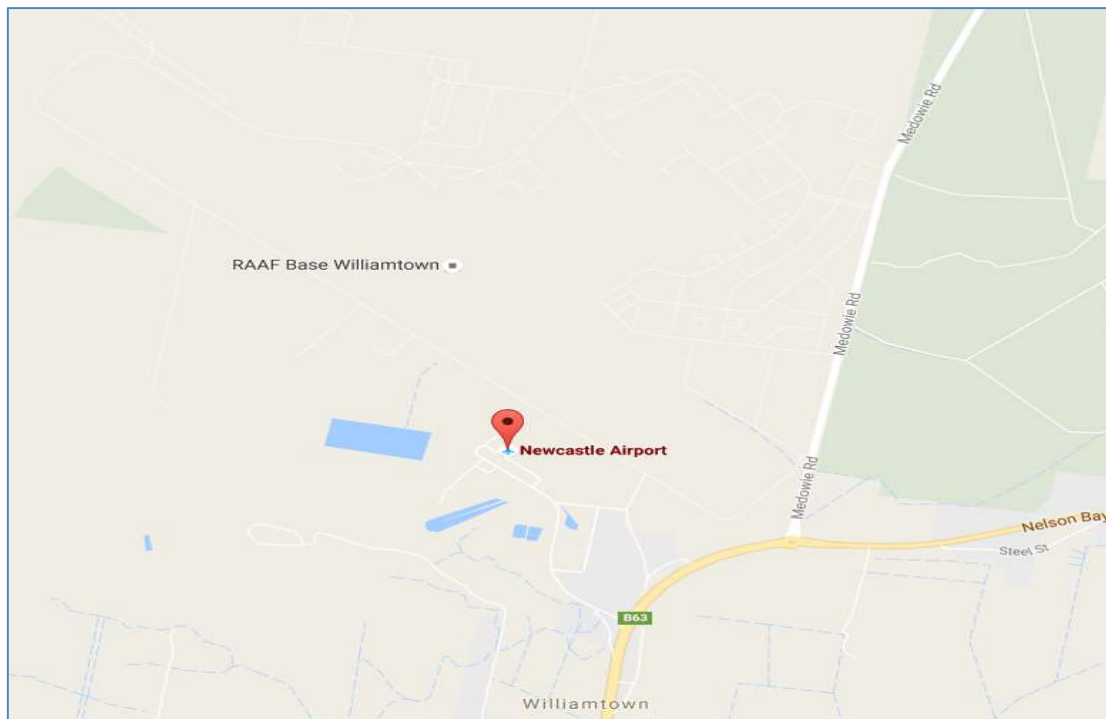
Public transport is provided by Port Stephens Coaches and Hunter Valley Buses who operate bus services in the main centres and across the LGA.

There are no rail services within the Local Government Area.

### Newcastle Airport

Newcastle Airport, located in Williamtown is the regional airport for the Hunter Valley and Newcastle regions and is the gateway to the region for many tourist and business visitors. The airport is owned by Port Stephens Council and Newcastle City Council.

The airport is located on 28 hectares of land and shares a runway with RAAF base Williamtown, located opposite the terminal building. Approximately 185 domestic flights depart from Newcastle Airport on a weekly basis. It is estimated that the Airport generates \$633.5 million to the local economy annually.



**Map 4 – Newcastle Airport – Williamtown Drive, Williamtown NSW 2318**

## **Economy and Industry**

It is estimated that 22,689 people work in Port Stephens. Port Stephens represents 9.45 % of the people working in Hunter Region. Port Stephens' Gross Regional Product (GRP) is estimated at \$3.826 billion. Port Stephens represents 9.21 % of Hunter Region's GRP.

In the Port Stephens LGA there are four main economies;

### **Defence and Aviation Economy**

There is a large cluster of high skill and well-paid jobs in the RAAF, defence support and in aviation services. Defence is being driven by government policy, defence spending and the aviation sector by the expansion of the airport due to business and passenger growth. There is a long term commitment to the role of the Williamstown Base, which is also a centre for aircraft development, maintenance and support.

### **Global Manufacturing and Logistics Economy**

This is driven by global market growth and regional supply chains that are supporting mining and heavy engineering activities. Tomago is a strategic location for these activities.

A significant organisation in global manufacturing is Tomago Aluminium. Tomago Aluminium is Australasia's largest aluminium smelter. It has been operating 24 hours a day since 1983. The company contributes \$1.5 billion annually to the Australian economy, of which \$800 million is spent locally. The smelter produces 585,000 tonnes of aluminium every year, which is 25% of Australia's primary aluminium. 90% of the product is exported to the Asia-Pacific region.

### **Services Economy**

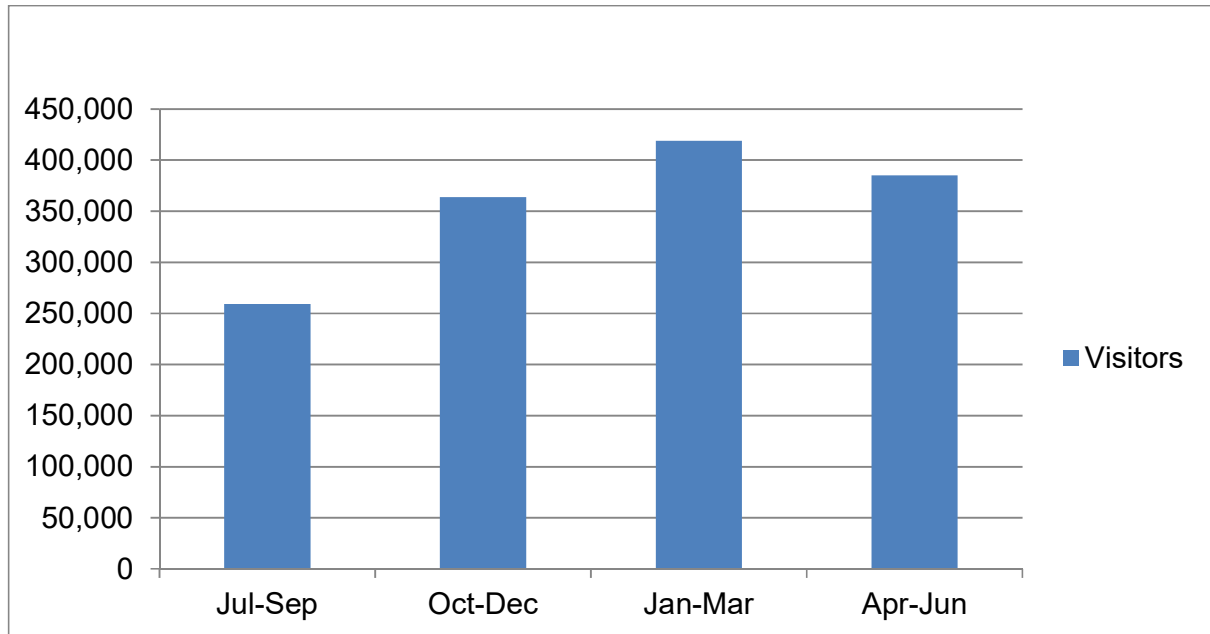
The local services economy (retail and services) are largely based at Raymond Terrace, which is the service and administrative centre for the LGA.

### **Services and Tourism Economy**

The services and tourism economy is based around Nelson Bay and Salamander Bay. It is servicing both the local resident population and the strategically important tourism industry, which sees close to 1.5 million people visit the LGA annually.



### Visitors to the Port Stephens LGA for the 2014 – 15 Financial Year



**Chart 2 – Recorded visitors to the Port Stephens LGA – 2014/15**

## Annexure B – Hazards and Risks Summary

A Local Emergency Risk Management (ERM) Study has been undertaken by the Port Stephens Local Emergency Management Committee identifying the following hazards as having risk of causing loss of life, property, utilities, services and/or the community's ability to function within its normal capacity. These hazards have been identified as having the potential to create an emergency. The Lower Hunter Emergency Risk Management Report should be referenced to identify the complete list of consequences and risk descriptions.

Hazard	Risk Description	Likelihood Rating	Consequence Rating	Risk Priority	Combat / Responsible Agency
Agricultural Disease (Animal/Animal)	An agriculture/horticulture incident that results, or has potential to result, in the spread of a communicable disease or infestation.	Likely	Major	Extreme	Department of Primary Industries
Bridge Collapse	Failure of a major bridge structure with or without warning owing to structural failure or as a result of external/ internal events or other hazards/ incidents.	Rare	Moderate	Medium	FRNSW (USAR) LEOCON
Building Collapse	Collapse of building owing to structural failure or impact from external/internal event of other hazards /incidents.	Rare	Moderate	Medium	FRNSW (USAR) LEOCON
Communicable Disease (Human/Animal)	Pandemic illness that affects, or has potential to affect, large portions of the human or animal population	Unlikely	Moderate	Medium	Department of Health

Hazard	Risk Description	Likelihood Rating	Consequence Rating	Risk Priority	Combat / Responsible Agency
Dam Failure	A dam is compromised that results in localised or widespread flooding.	Rare	Major	High	Dam Owners NSW SES
Earthquake	Earthquake of significant strength that results in localised or widespread damage.	Rare	Catastrophic	High	LEOCON
Explosion	Explosion caused as a result of an incident or accident.	Possible	Major	High	LEOCON
Fire (Bush or Grass)	Major fires in areas of bush or grasslands.	Almost Certain	Major	Extreme	NSW RFS FRNSW
Fire (Industrial)	Serious industrial fire in office complexes and/or warehouses within industrial estates.	Possible	Moderate	High	FRNSW NSW RFS
Fire (Commercial)	Serious commercial fires in shopping centres, aged persons units, nursing homes and hospitals.	Possible	Major	Extreme	FRNSW NSW RFS
Fire (Residential)	Serious residential fire in medium/high rise apartments.	Possible	Minor	Medium	FRNSW NSW RFS

Hazard	Risk Description	Likelihood Rating	Consequence Rating	Risk Priority	Combat / Responsible Agency
Flood (Flash)	Heavy rainfall causes excessive localised flooding with minimal warning time.	Almost Certain	Major	Extreme	NSW SES
Flood (Riverine)	River flows exceed the capacity of normal river systems resulting in flood waters escaping and inundating river plains.	Almost Certain	Major	Extreme	NSW SES
Hazardous Release	Hazardous material released as a result of an incident.	Almost Certain	Moderate	Extreme	FRNSW
Heatwave	A sequence of abnormally hot conditions having the potential to affect a community adversely.	Almost Certain	Major	Extreme	SEOCON
Landslip / Subsidence / Rock fall	Landslip/landslide resulting in localised or widespread damage.	Possible	Minor	Medium	LEOCON
Storm	Severe storm with accompanying lightning, hail, wind, and/or rain that causes severe damage and/or localised flooding.(includes tornado)	Almost Certain	Major	Extreme	NSW SES
Transport Emergency (Air)	Aircraft crashes in LGA resulting in large number of fatalities, injuries and/or damage to property.	Rare	Catastrophic	Extreme	LEOCON

Hazard	Risk Description	Likelihood Rating	Consequence Rating	Risk Priority	Combat / Responsible Agency
Transport Emergency (Road)	A major vehicle accident that disrupts one or more major transport routes that can result in risk to people trapped in traffic jams, restrict supply routes and/or protracted loss of access to or from the area.	Almost Certain	Minor	High	LEOCON
Transport Emergency (Sea)	A major accident that results in environmental damage and major recovery operation	Rare	Major	High	Relevant Port / Maritime
Tsunami	A tsunami wave of magnitude that presents a risk to land and marine elements.	Rare	Catastrophic	High	NSW SES
Utilities Failure	Major failure of essential utility for unreasonable periods of time as a result of a natural or man-made occurrence.	Possible	Major	Extreme	LEOCON

## Annexure C – Local Sub Plans, Supporting Plans and Policies

Responsibility for the preparation and maintenance of appropriate sub and supporting plans rest with the relevant Combat Agency Controller or the relevant Functional Area Coordinator.

The sub/supporting plans are developed in consultation with the Port Stephens LEMC and the community.

The plans listed below are supplementary to this EMPLAN. The sub/supporting plans are determined as complimentary to the arrangements listed in this EMPLAN.

These plans are retained by the LEMO on behalf of the LEMC.

Plan/Policy	Purpose	Combat / Responsible Agency
<b>Bush Fire Risk Management Plan</b>	A strategic document which identifies assets at risk and sets out a program of coordinated, multi-agency treatments to reduce the risk of bushfire to key assets.	NSW Rural Fire Service
<b>Dam Safety Emergency Plan</b>	A Dam Safety Emergency Plan outlines roles and responsibilities for monitoring and responding to incidents relating to the Bagnall Beach Road Detention Basin.	Port Stephens Council
<b>Newcastle Airport Aerodrome Emergency Plan</b>	The Aerodrome Emergency Plan covers the roles and responsibilities for a number of possible scenarios at the airport.	Newcastle Airport

Plan/Policy	Purpose	Combat / Responsible Agency
<b>Port Stephens Flood Emergency Sub Plan</b>	This plan covers preparedness measures, the conduct of response operations and the coordination of immediate recovery measures from flooding within the Port Stephens Council area. It covers operations for all levels of flooding within the LGA.	NSW State Emergency Service
<b>Port Stephens Tsunami Plan</b>	The Port Stephens Tsunami Plan identifies emergency management arrangements for the management of a tsunami in the LGA.	NSW State Emergency Service
<b>RAAF Williamtown Airfield Emergency Plan</b>	The RAAF Williamtown Airfield Emergency Plan covers the roles and responsibilities of a number of Military and Civilian aircraft incident scenarios for RAAF Williamtown Airfield and areas of operation.	Royal Australian Air Force

## Part 3 – Restricted Operational Information

**Not for public distribution**

RESTRICTED OPERATIONAL INFORMATION