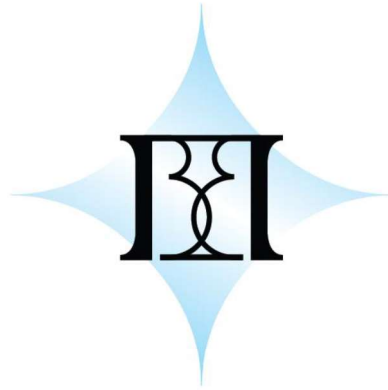


---

—BB Professional Services—



**Social Impacts Assessment**  
concerning  
**285 Pacific Highway Lake Munmorah**

prepared by  
**Dr Rigmor Berg**

**February 2019**

---



---

## Table of Contents


2.	Introduction .....	4
	Brief .....	4
	Tasks undertaken.....	5
	Capacity to undertake this work .....	5
3.	Conclusions .....	6
	Potential positive social impacts.....	6
	Potential negative social impacts.....	7
4.	The site .....	8
5.	The population of Lake Munmorah.....	11
	Age, gender and cultural background.....	11
	Socio-economic status .....	13
	Education, occupation, income.....	15
	Health .....	16
6.	Expected growth .....	17
	Population outlook.....	17
	Current and projected housing needs on the Central Coast .....	18
7.	Services in the area .....	24
	Schools .....	24
	Medical and allied health services .....	29
	Shopping.....	30
	Churches.....	34
	Recreational opportunities in the area .....	35
	Transport.....	37
	Emergency services .....	40
8.	Employment.....	41
9.	On-site facilities to be provided for residents .....	43
10.	Impacts on near neighbours .....	46
11.	References .....	49
12.	Dr Rigmor Berg .....	51
13.	Letters of support .....	59

---

## Figures

Figure 1: The site in the centre, zoned RU6 .....	8
Figure 2: The proposed 4 stage R2 low density residential development .....	8
Figure 3: The site at 285, 295 and 305 Pacific Highway .....	9
Figure 4: The population of Lake Munmorah .....	11
Figure 5: Ethnic origins of Lake Munmorah residents .....	12
Figure 6: Closest Aboriginal site marked by green pin .....	12
Figure 7: Index of Relative Socio-Economic Disadvantage .....	13
Figure 8: Index of Relative Socio-Economic Advantage and Disadvantage .....	14
Figure 9: Index of Education and Employment .....	14
Figure 10: Index of Economic Resources .....	14
Figure 11: Educational attainment .....	15
Figure 12: Occupation .....	15
Figure 13: Income .....	16
Figure 14: Overweight and obesity on the Central Coast .....	16
Figure 15: Expected population growth on Central Coast and Lake Munmorah .....	17
Figure 16: Development forecast .....	18
Figure 17: Households in Lake Munmorah .....	18
Figure 18: Housing in Lake Munmorah .....	19
Figure 19: Demand for lone person housing will increase .....	19
Figure 20: Land sub-division in Lake Munmorah .....	20
Figure 21: Residential park houses for sale or recently sold in Lake Munmorah .....	20
Figure 22: Houses for sale in Lake Munmorah October-November 2018 .....	21
Figure 23: Houses in nearby Kemira, Kookaburra and Wallaby streets .....	22
Figure 24: Families with and without children .....	24
Figure 25: In education .....	24
Figure 26: Lake Munmorah, showing nearby schools and pre-school .....	25
Figure 27: Pre-schools in Lake Munmorah .....	25
Figure 28: Primary schools in Lake Munmorah .....	26
Figure 29: High schools in Lake Munmorah .....	26
Figure 30: TAFE campuses .....	27
Figure 31: University of Newcastle .....	28
Figure 32: Medical and other health services in the adjacent shopping centre .....	29
Figure 33: Further health services .....	30
Figure 34: Supermarket and other shops .....	31
Figure 35: Banking, post box, DVD hire, recycling, petrol .....	32
Figure 36: Cafés and take away food outlets .....	33
Figure 37: Religious affiliation .....	34
Figure 38: Churches in or near Lake Munmorah .....	34
Figure 39: Recreational opportunities in the area .....	35
Figure 40: Regional recreational park at Lake Munmorah announced .....	36
Figure 41: Bus routes in the area .....	37
Figure 42: Bus route 95 .....	37
Figure 43: Bus routes 95X, 98 and 99 .....	38
Figure 44: School bus services .....	39

---



---

Figure 45: Emergency services .....	40
Figure 46: Employment and unemployment .....	41
Figure 47: Zoning of Wyong end of the Central Coast.....	42
Figure 48: Shelter for play groups and yoga.....	43
Figure 49: Exercise and play equipment .....	44
Figure 50: Proposed boardwalks and cycle paths .....	45
Figure 51: The site with surrounding streets.....	46

---

# 1. Introduction

## Brief

Social Impact Assessment was required for the rezoning and future sub-division of the land at 285, 295 and 305 Pacific Highway Lake Munmorah into approximately 300 lots, taking the impact of future housing.

The following components are required:

- Assess strategic need for the planning proposal; and
  - o Document availability of land appropriately zoned for development in Central Coast LGA; and
  - o Assess demand for land appropriately zoned for development through analysis of sales data and in the light of historic population growth and Department of Planning and Environment population projections; and
  - o Assess need for affordable housing options; and
  - o Assess affordability compared to affordability of alternatives; and
  
- Assess social and economic effects, including:
  - o An assessment of the likely number of dwellings;
  - o An assessment of the additional population likely as a result of the rezoning, including likely demography;
  - o Assess likely need for social infrastructure (such as green space, recreation areas, community centres, libraries and public transport) arising as a result of the planning proposal, based on population and appropriate normative standards including by reference to Council s94 plans;
  - o Identify ability of the locality to service additional population, and identify any gaps, including any need for open space;
  - o Identify additional need and existing supply for other services including health, education and emergency services;
  
- Undertake a door knock of residents in the adjacent streets of Kemira Road, Wallaby Road and Kookaburra Avenue to further understand potential social impacts in the locality, and proposed likely mitigations.
  
- Identify any potential adverse impacts and propose relevant mitigations.

---

## Tasks undertaken

- Consultation and liaison, in person, by phone or by e-mail, including as necessary:
  - Developers, designers, planners involved in the project;
  - Central Coast Council staff and Department of Planning and Environment staff;
  - Relevant service providers, government agencies, community organisations.
- Desk work, including:
  - Review of relevant policy documents, maps, plans and designs;
  - Demographic description of local population and projected future population using ABS Census data and DOPE projections;
  - Current housing availability, addressing affordability, using on-line sales reports and properties listed as for sale;
  - Services currently available, projected service needs and services planned for the area;
  - Availability and access to open space and recreational facilities;
  - Assessment of proposed housing in terms of affordability and housing for life.
- Field work, including:
  - Site inspection;
  - Inspection of local shopping centre, nearby services and facilities;
  - Door knocking interviews with residents of streets near the site, particularly Kemira Road, Wallaby Road and Kookaburra Avenue.
- Analysis and report preparation, addressing:
  - strategic need for the proposed rezoning, sub-division and development, as specified in the brief;
  - social and economic effects, as specified in the brief;
  - perceptions and concerns of the adjacent community
  - potential adverse impacts identified and appropriate mitigations.

## Capacity to undertake this work

Dr Rigmor Berg, Principal of BB Professional Services, will undertake all tasks personally. She has BSc(Hons) PhD qualifications, plus Associate Professional Certificate in Expert Evidence for the Land and Environment Court from the University of Sydney Planning Research Centre with the Australian Property Institute. She has more than 30 years' experience in social and strategic research and has provided social impacts expert evidence in the Land and Environment Court for government, community and private sector clients.

A list of past work is at the end of this report from page 50 and more information is available at <https://www.bbps.com.au/> .

---

## 2. Conclusions

The overall social impacts of the proposed development will be very positive for the community of Lake Munmorah.


### Potential positive social impacts

- There is clear need for more residential development in the suburb of Lake Munmorah. The population of the Central Coast is expected to grow substantially over the next 18 years. Much of this growth will be accommodated in the former Wyong Shire and the population of the Lake Munmorah-Chain Valley Bay area in particular is expected to grow by 77%. Some nearby residents expressed concern that already there are insufficient opportunities for the younger generation to find homes to buy or to rent so they can stay in the area.

The proposed development will add about 300 new homes to Lake Munmorah.

- The subject site is highly suitable for residential development in that:
  - a. It is large, flat and already largely cleared of trees;
  - b. It is close to essential services including:
    - i. shops, including supermarket, post office, bank, a range of specialty shops, petrol station and recycling facility;
    - ii. schools, including pre-school, primary school and high school;
    - iii. medical and other health services;
    - iv. recreational opportunities;
    - v. public transport;
    - vi. emergency services;
    - vii. churches.
- The proposed development will include valuable community facilities that will help to build a cohesive community, rich in social capital. These facilities will include:
  - a. a substantial green corridor along a natural watercourse;
  - b. picnic tables and barbeque facilities in open green space in the north-eastern corner, looking into the environmental area;
  - c. a dam in the north-eastern corner, with a solitude jetty;
  - d. a cycle path along the western side of the green corridor;
  - e. stroller/wheelchair-friendly footpaths;
  - f. picnic tables with bench seats and barbeque facilities;
  - g. children's play equipment and a shelter for mothers and infants play group at the south western corner adjacent to the shopping centre, which could also be used for children's birthday parties, yoga classes and similar shared activities;
  - h. exercise stations to promote better health and friendly interactions through a shared activity.
- The most common occupations in the population of Lake Munmorah include technician and trades workers and labouring. Lake Munmorah currently has higher unemployment than is average for the state.

The proposed development will provide new employment opportunities for a wide range of technicians, tradesmen and labourers throughout the four stages of site preparation and construction.

- 
- 
- The development will mean more customers for the shop-keepers in the Lake Munmorah shopping centre, which will help their businesses to thrive. It will also contribute to the feasibility of expanding the shopping centre to include a wider range of specialty shops, so residents will not need to travel to larger towns for shopping needs.

## Potential negative social impacts

- The main potential negative impact identified by close neighbours was increased traffic in the area, which already has congestion near the schools at drop-off and pick-up times and at the Tall Timbers traffic lights in peak hour periods. There is also concern about increased risk to children due to dead-end streets becoming thoroughfares.

Traffic management strategies are outside the writer's expertise, but the proposed Link Road will presumably be helpful in addressing these concerns and there are many strategies available for slowing traffic in residential streets. The local Progress Association takes a keen interest in traffic matters and should be consulted in identifying appropriate solutions.

- Another potential negative impact identified by close neighbours was that local services, particularly schools, might not have capacity to accommodate so many additional people.

Both public and Catholic primary schools and both public and Catholic high schools indicated that they have ample capacity to absorb the likely increase in students.

The two existing pre-schools are already full to capacity, so there will be need for either Council or the private sector to provide additional pre-school services.

The medical centre in the adjacent shopping centre indicated that they already have capacity to meet the needs of increased numbers and there is another nearby medical service on the opposite side of the Pacific Highway.

- Residents close to the north-eastern corner of the site reported experiencing drainage problems and suggested that drainage would be a central issue for the development. The Lake Munmorah Bowling Club also reported that they have experienced serious drainage problems since a dam nearby, which is downstream in the natural overland flow path that crosses the subject site, was filled in.

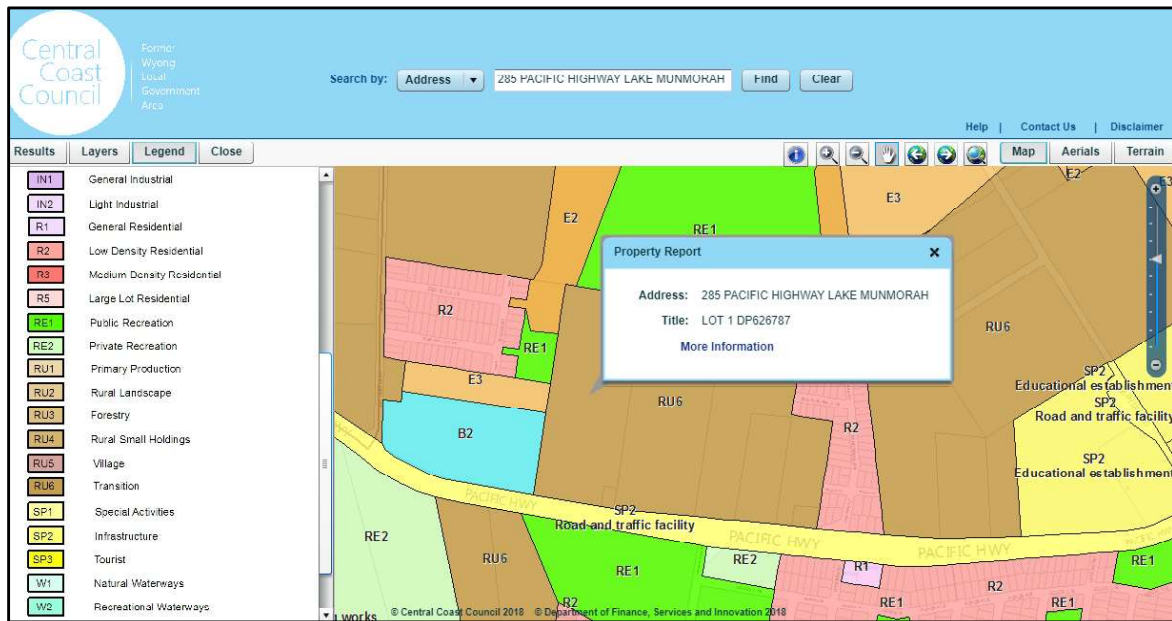
Drainage is also beyond the expertise of the writer, but presumably the construction of a dam in the north-east corner and retention of a green corridor along the natural overland flow path will address these problems, together with appropriate drainage measures within the residential streets of the site.



### 3. The site

The site is located at 285-305 Pacific Highway, Lake Munmorah. Currently zoned RU6 (Transition), the site is adjacent to the Lake Munmorah shopping centre and to residential streets zoned R2 (Low Density Residential), as well as land zoned RE1 (Public Recreation) to the north and west and land zoned E2 (Environmental Conservation) to the north west.

Figure 1: The site in the centre, zoned RU6



Source: Central Coast Council

Figure 2: The proposed 4 stage R2 low density residential development



Source: EDH Group Architects

---

The subject site is suitable for residential development in that it is quite flat and already largely cleared, due to previous uses.

Figure 3: The site at 285, 295 and 305 Pacific Highway





## 4. The population of Lake Munmorah

### Age, gender and cultural background

At the 2016 Census, Lake Munmorah suburb had a total population of 5,248 people, with a close to even gender balance (51.5% female : 48.5% male). If houses in the proposed development are occupied by the same average number of people per household on average as the existing suburb (2.4) then 300 new houses would mean a population increase of 720 people or almost 14 percent.

The population of Lake Munmorah, has an older median age (48 years) than NSW overall (38 years), in large part due to the many residential park retirement villages in the suburb, but houses in the streets closest to the subject site are predominantly occupied by working families with young children, but also some retirees and it is anticipated that potential residents of the proposed development will be similarly diverse. If the new residents closer to NSW averages, then the population increase may be closer to 900 or 17 percent.

The Lake Munmorah population is overwhelmingly Anglo-Celtic Australian, with very few people from culturally and linguistically diverse backgrounds. The large majority (82.3%) were born in Australia, compared with only two thirds (65.5%) for NSW overall. The non-Australian top response birth places were England, New Zealand and Scotland.

There is a small, but larger than average for NSW (4.2% vs 2.9%), Aboriginal population in Lake Munmorah

Figure 4: The population of Lake Munmorah

People	Lake Munmorah	%	New South Wales	%	Australia	%
<i>Persons count based on place of usual residence on Census night</i>						
Male	2,543	48.5	3,086,014	49.3	11,546,038	49.3
Female	2,699	51.5	3,794,217	50.7	11,855,248	50.7
Aboriginal and/or Torres Strait Islander people	218	4.2	216,176	2.9	649,171	2.8

In the 2016 Census, there were 5,248 people in Lake Munmorah (State Suburbs). Of these 48.5% were male and 51.5% were female. Aboriginal and/or Torres Strait Islander people made up 4.2% of the population.

[View the data quality statement for Place of Usual Residence \(PURP\)](#)

Age	Lake Munmorah	%	New South Wales	%	Australia	%
Median age	48	--	38	--	38	--
0-4 years	268	5.1	465,135	6.2	1,464,779	6.3
5-9 years	294	5.6	478,184	6.4	1,502,646	6.4
10-14 years	282	5.4	443,009	5.9	1,397,183	6.0
15-19 years	298	5.7	448,425	6.0	1,421,595	6.1
20-24 years	295	5.6	489,673	6.5	1,566,793	6.7
25-29 years	255	4.9	527,161	7.0	1,664,602	7.1
30-34 years	234	4.5	540,360	7.2	1,703,847	7.3
35-39 years	239	4.6	499,724	6.7	1,561,679	6.7
40-44 years	252	4.8	503,169	6.7	1,583,257	6.8
45-49 years	321	6.1	492,440	6.6	1,581,455	6.8
50-54 years	350	6.7	485,546	6.5	1,523,551	6.5
55-59 years	354	6.8	469,726	6.3	1,454,332	6.2
60-64 years	334	6.4	420,044	5.6	1,299,397	5.6
65-69 years	391	7.5	384,470	5.1	1,188,999	5.1
70-74 years	433	8.3	292,556	3.9	887,716	3.8
75-79 years	341	6.5	217,308	2.9	652,657	2.8
80-84 years	191	3.6	155,806	2.1	460,549	2.0
85 years and over	108	2.1	167,506	2.2	486,842	2.1

The median age of people in Lake Munmorah (State Suburbs) was 48 years. Children aged 0 - 14 years made up 16.1% of the population and people aged 65 years and over made up 27.9% of the population.

Source: ABS 2016 Census

**Figure 5: Ethnic origins of Lake Munmorah residents**

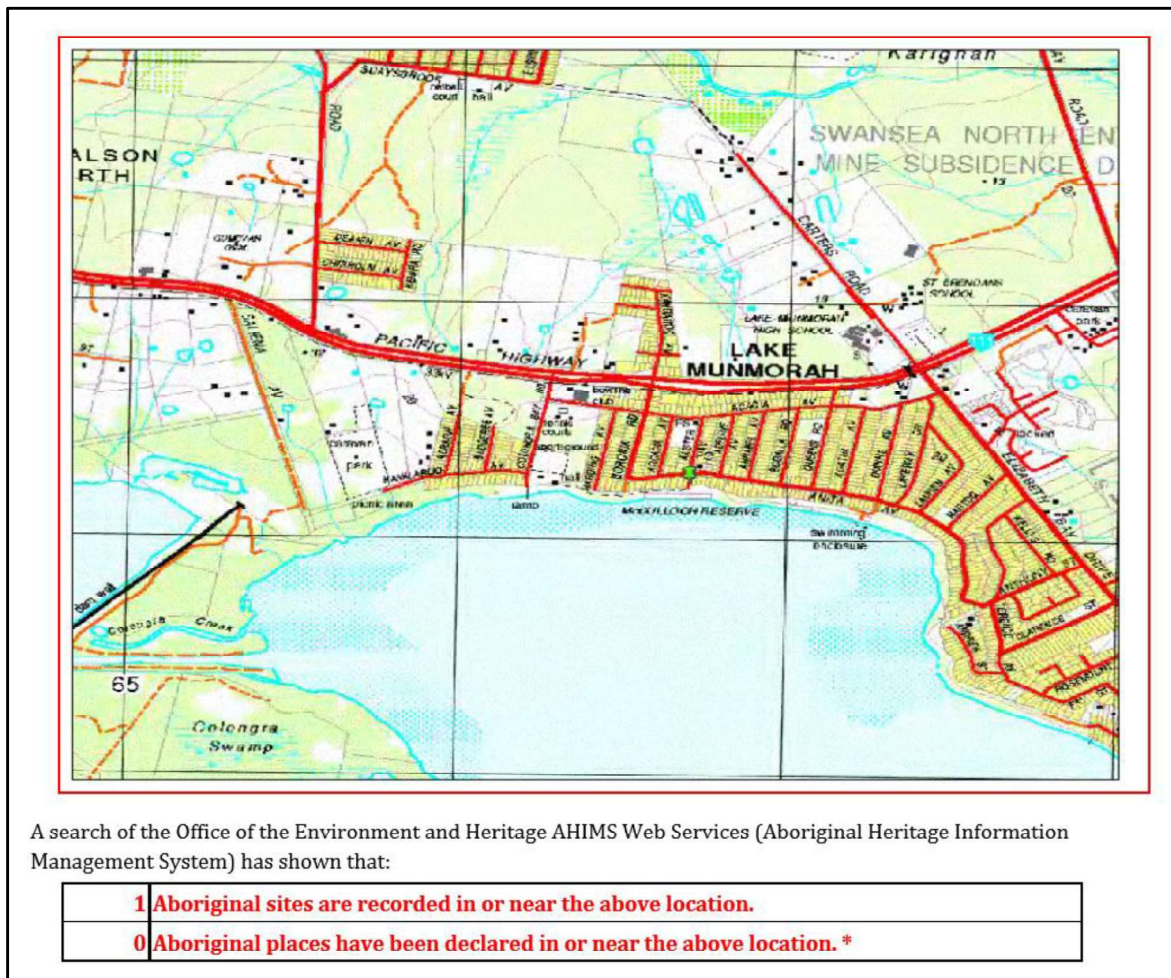
Country of birth	Lake Munmorah	%	New South Wales	%	Australia	%
Australia	4,309	82.3	4,899,090	65.5	15,614,835	66.7
<i>Other top responses</i>						
England	223	4.3	226,564	3.0	907,570	3.9
New Zealand	71	1.4	117,136	1.6	518,466	2.2
Scotland	34	0.6	28,579	0.4	119,417	0.5
Netherlands	26	0.5	16,900	0.2	70,172	0.3
Germany	23	0.4	29,541	0.4	102,595	0.4

In Lake Munmorah (State Suburbs), 82.3% of people were born in Australia. The most common countries of birth were England 4.3%, New Zealand 1.4%, Scotland 0.6%, Netherlands 0.5% and Germany 0.4%.

Source: ABS 2016 Census

A search on the Office of Environment and Heritage Aboriginal Heritage Information Management System website found that there is one site with Aboriginal heritage significance within the suburb of Lake Munmorah, located on the northern edge of the lake, adjacent to Anita Avenue. This is some distance from the subject site, with the Pacific Highway and substantial housing development in between. The site is marked with a small green pin near the centre of the map below.

**Figure 6: Closest Aboriginal site marked by green pin**



Source: OE&H AHIMS

---

## Socio-economic status

The population of Lake Munmorah can be characterised as low socio-economic status.

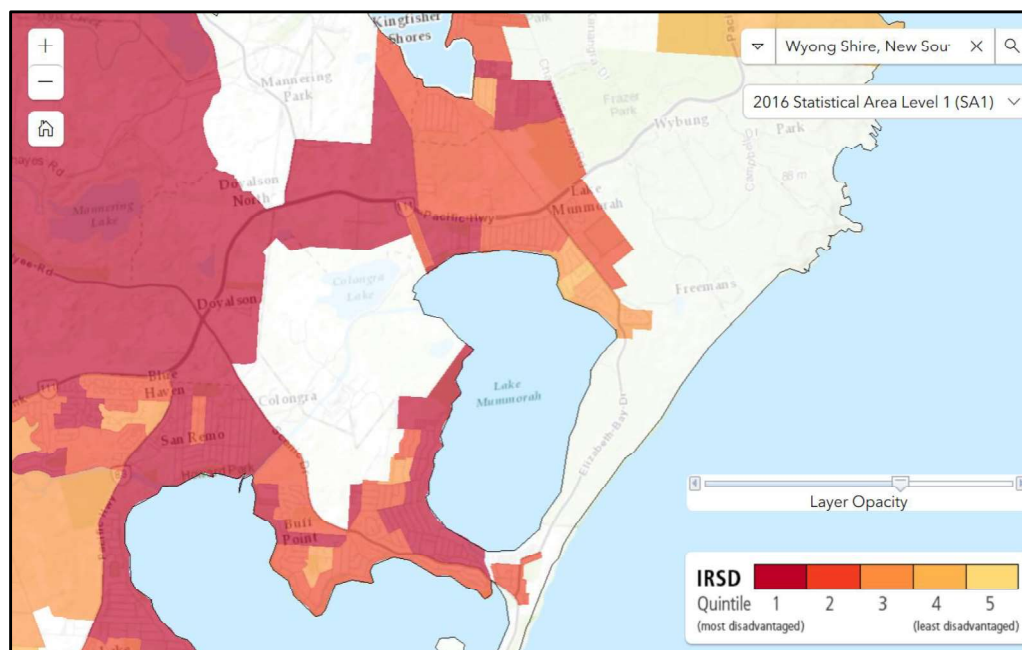
Socio-Economic Indexes for Areas (SEIFA) is an ABS product that ranks areas in Australia according to relative socio-economic advantage and disadvantage. These indexes are based on information from the five-yearly Census of Population and Housing. SEIFA 2016 was created from Census 2016 data and consists of four indices, each a summary of a different subset of Census variables, each focused on a different aspect of socio-economic advantage and disadvantage. These are:

- the Index of Relative Socio-economic Disadvantage (IRSD);
- the Index of Relative Socio-economic Advantage and Disadvantage (IRSAD);
- the Index of Education and Occupation (IEO); and
- the Index of Economic Resources (IER).

The suburb of Lake Munmorah is:

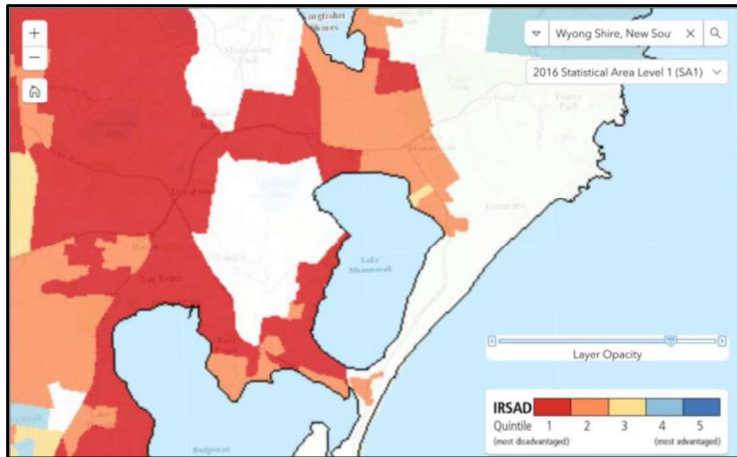
- in the first and second quintiles of the Index of Relative Socio-economic Disadvantage; that is the most and second most disadvantaged;
- in the first and second quintiles of the Relative Socio-economic Advantage and Disadvantage (IRSAD), that is the most and second most disadvantaged;
- mainly in the first quintile of the Index of Education and Occupation disadvantage; that is the most disadvantaged
- a mix of first, second and third quintiles on the Index of Economic Resources, the subject site being in the middle category (3) area, while residential park residents are more disadvantaged.

Figure 7: Index of Relative Socio-Economic Disadvantage



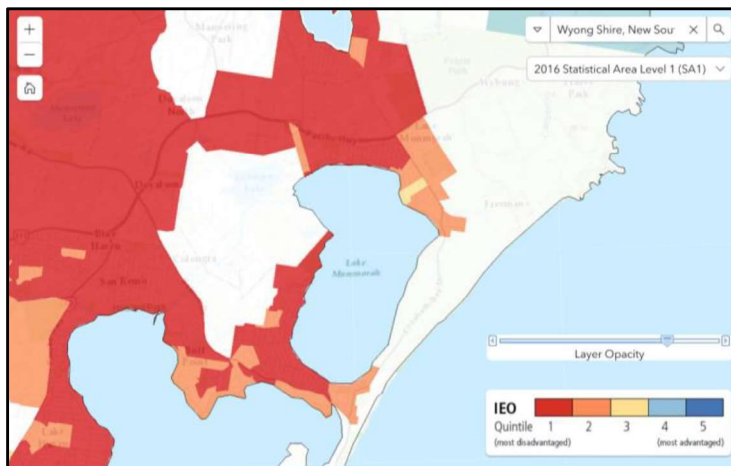
Source: ABS, based on 2016 Census

Figure 8: Index of Relative Socio-Economic Advantage and Disadvantage



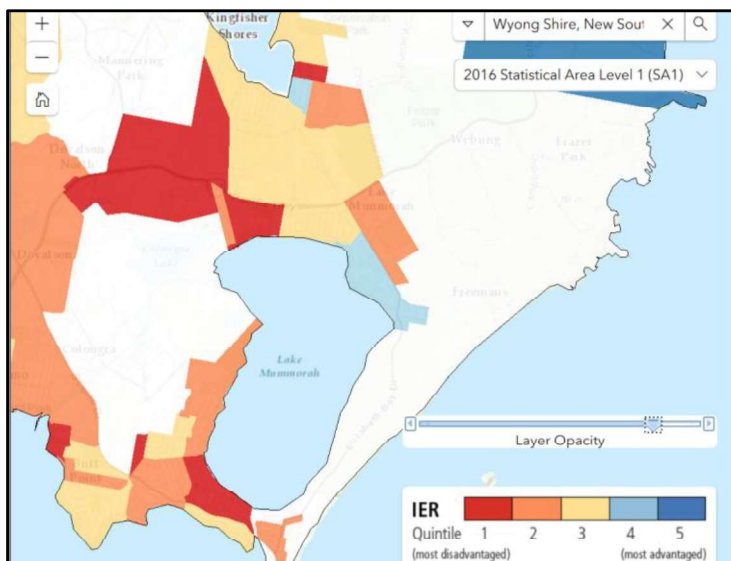
Source: ABS, based on 2016 Census

Figure 9: Index of Education and Employment



Source: ABS, based on 2016 Census

Figure 10: Index of Economic Resources



Source: ABS, based on 2016 Census

## Education, occupation, income

The population of Lake Munmorah is less well educated than average for NSW, with a much lower proportion having degrees (7.7% compared with 23.4% for NSW overall) and a higher proportion having a Certificate level III as their highest qualification (20.2% compared with 12% for NSW overall).

Lake Munmorah residents are more likely to be employed as technicians or trades workers (18.3% compared with 12.7% for NSW), community or personal services workers (14.6% compared with 10.4% for NSW), labourers (10.8% compared with 8.8% for NSW) or sales workers (10.6% compared with 9.2% for NSW). They are less likely to be professionals (13.5% compared with 23.6 for NSW) or managers (8.6% compared with 13.5% for NSW). The main industries of employment are aged care residential services, hospitals, supermarkets and grocery stores, takeaway food stores and primary education.

Figure 11: Educational attainment

Level of highest educational attainment <i>People aged 15 years and over</i>	Lake Munmorah	%	New South Wales	%	Australia	%
Bachelor Degree level and above	339	7.7	1,424,716	23.4	4,181,406	22.0
Advanced Diploma and Diploma level	344	7.9	543,142	8.9	1,687,893	8.9
Certificate level IV	149	3.4	167,947	2.8	551,767	2.9
Certificate level III	885	20.2	730,498	12.0	2,442,203	12.8
Year 12	497	11.3	930,654	15.3	2,994,097	15.7
Year 11	155	3.5	203,574	3.3	941,531	4.9
Year 10	826	18.9	702,178	11.5	2,054,331	10.8
Certificate level II	6	0.1	4,849	0.1	13,454	0.1
Certificate level I	0	0.0	625	0.0	2,176	0.0
Year 9 or below	539	12.3	513,209	8.4	1,529,897	8.0
No educational attainment	3	0.1	54,870	0.9	145,844	0.8
Not stated	505	11.5	627,465	10.3	1,974,794	10.4

Of people aged 15 and over in Lake Munmorah (State Suburbs), 11.3% reported having completed Year 12 as their highest level of educational attainment, 23.6% had completed a Certificate III or IV and 7.9% had completed an Advanced Diploma or Diploma.

Source: ABS 2016 Census

Figure 12: Occupation

Occupation <i>Employed people aged 15 years and over</i>	Lake Munmorah	%	New South Wales	%	Australia
Technicians and Trades Workers	365	18.3	429,239	12.7	1,447,414
Community and Personal Service Workers	292	14.6	350,261	10.4	1,157,003
Clerical and Administrative Workers	273	13.7	467,977	13.8	1,449,681
Professionals	269	13.5	798,126	23.6	2,370,966
Labourers	215	10.8	297,887	8.8	1,011,520
Sales Workers	212	10.6	311,414	9.2	1,000,955
Managers	171	8.6	456,084	13.5	1,390,047
Machinery Operators and Drivers	167	8.4	206,839	6.1	670,106

The most common occupations in Lake Munmorah (State Suburbs) included Technicians and Trades Workers 18.3%, Community and Personal Service Workers 14.6%, Clerical and Administrative Workers 13.7%, Professionals 13.5%, and Labourers 10.8%.  
[View the data quality statement for Occupation \(OCCP\)](#)

Industry of employment, top responses <i>Employed people aged 15 years and over</i>	Lake Munmorah	%	New South Wales	%	Australia
Aged Care Residential Services	81	4.3	67,209	2.0	211,621
Hospitals (except Psychiatric Hospitals)	67	3.6	119,350	3.5	411,808
Supermarket and Grocery Stores	64	3.4	74,487	2.2	254,275
Takeaway Food Services	43	2.3	56,957	1.7	189,447
Primary Education	42	2.2	65,204	1.9	231,198

Of the employed people in Lake Munmorah (State Suburbs), 4.3% worked in Aged Care Residential Services. Other major industries of employment included Hospitals (except Psychiatric Hospitals) 3.6%, Supermarket and Grocery Stores 3.4%, Takeaway Food Services 2.3% and Primary Education 2.2%.

Source: ABS 2016 Census



Lake Munmorah incomes were lower than average for NSW. Median household weekly income was \$1,004 compared with \$1,486 for NSW. A higher proportion of households (25.9%) had gross weekly income below \$650 per week than for NSW overall (19.7%) and a smaller proportion (7.4%) had gross weekly income above \$3,000 than for NSW overall (18.7%).

**Figure 13: Income**

Median weekly incomes <i>People aged 15 years and over</i>		Lake Munmorah	%	New South Wales	%	Australia	%
Personal		521	--	664	--	662	--
Family		1,339	--	1,780	--	1,734	--
Household		1,004	--	1,486	--	1,438	--

The median weekly personal income for people aged 15 years and over in Lake Munmorah (State Suburbs) was \$521.

Household income		Lake Munmorah	%	New South Wales	%	Australia	%
Less than \$650 gross weekly income		--	25.9	--	19.7	--	20.0
More than \$3000 gross weekly income		--	7.4	--	18.7	--	16.4

In Lake Munmorah (State Suburbs), 25.9% of households had a weekly household income of less than \$650 and 7.4% of households had a weekly income of more than \$3000.

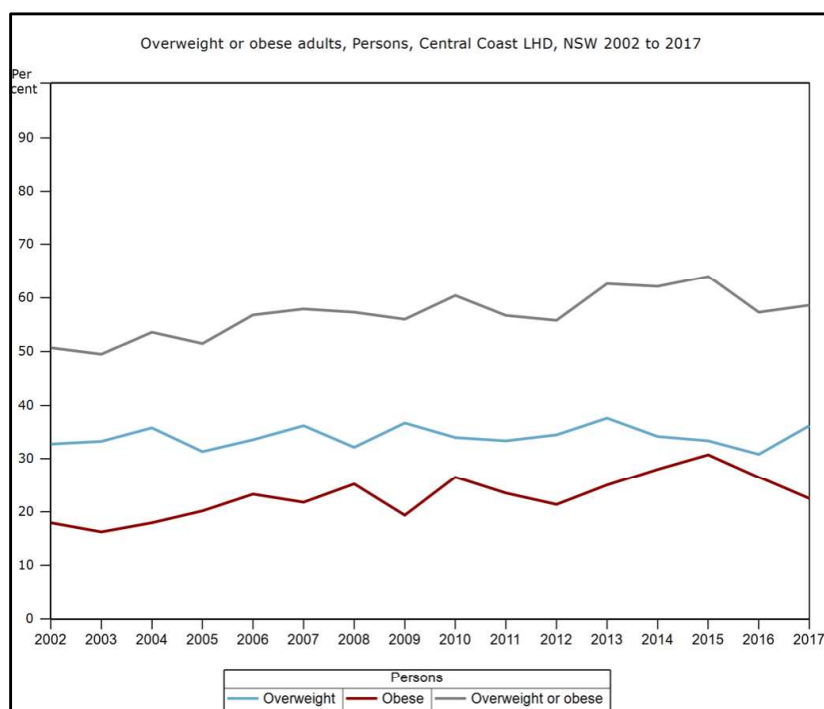
Source: ABS 2016 Census

## Health

The most obvious health issue on the Central Coast is people being overweight.

More than 50 percent of adults in the Central Coast Health District are overweight or obese, presumably in consequence of poor diet and inadequate exercise. Many further health issues can flow from being overweight.

**Figure 14: Overweight and obesity on the Central Coast**



Source: HealthStats NSW

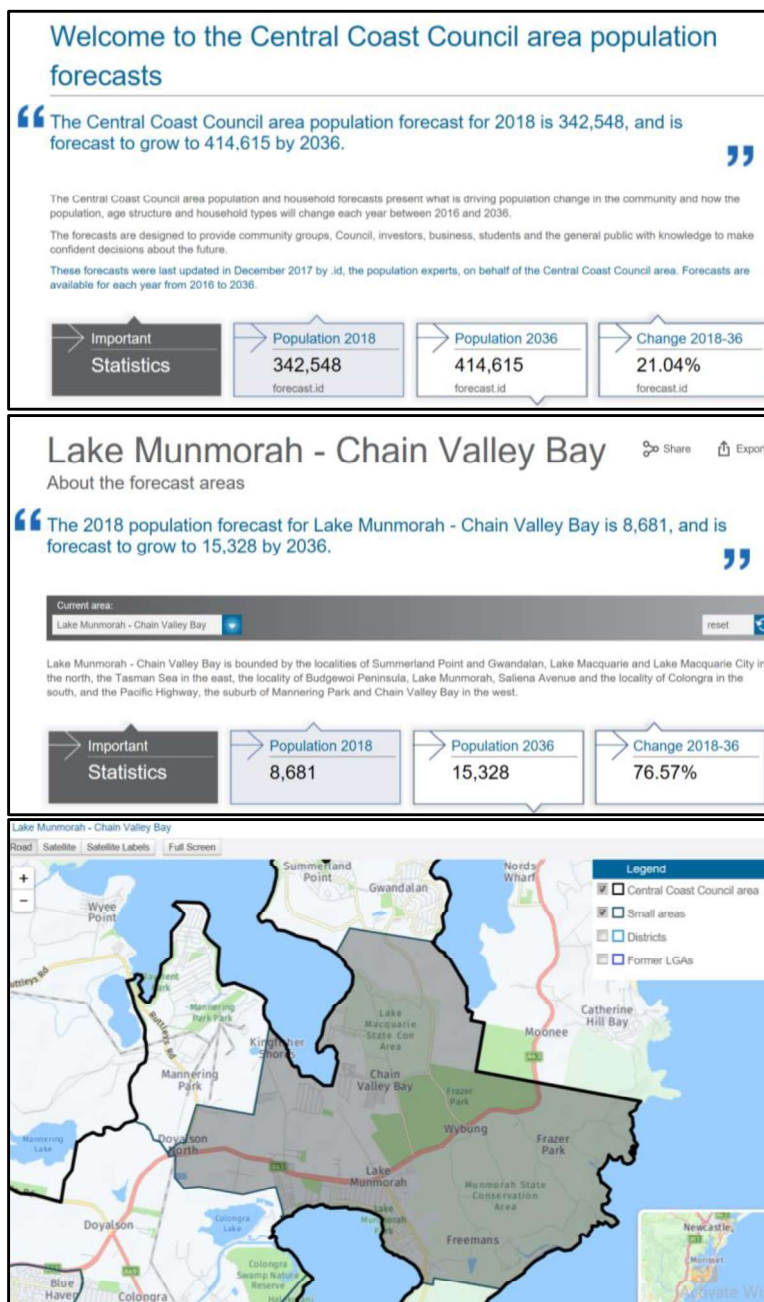
## 5. Expected growth

### Population outlook

The population of the Central Coast LGA is expected to increase from 342,548 in 2018 to 414,615 by 2036; that is by 21 percent.

However, the population of the Lake Munmorah – Chain Valley Bay area is expected to increase from 8,618 in 2018 to 15,328 by 2036; that is by 77 percent. The population density of Lake Munmorah – Chain Valley Bay is expected to increase in this period from 2.78 people per hectare to 5.02 people per hectare.

Figure 15: Expected population growth on Central Coast and Lake Munmorah



Source: Central Coast Council website

## Current and projected housing needs on the Central Coast

In keeping with the expected growth in population, the development forecast is that, between 2016 and 2036, the number of dwellings on the Central Coast overall will increase by 26.2 percent, but in the Lake Munmorah – Chain Valley Bay area, they will increase from 3,883 to 7,230, that is by 86.2 percent.

Figure 16: Development forecast

Forecast dwellings and development						
Central Coast Council area	2016		2036		Change between 2016 and 2036	
Area	Number	%	Number	%	Number	%
Central Coast Council area	145,958	100.0	184,129	100.0	+38,171	+26.2
Lake Munmorah - Chain Valley Bay	3,883	2.7	7,230	3.9	+3,347	+86.2

Source: Central Coast Council website

## Current and future households in Lake Munmorah

At the 2016 Census, while most homes in Lake Munmorah (69.3%) were family households, more than a quarter (28.3%) had a single occupant.

Figure 17: Households in Lake Munmorah

Household composition	Lake Munmorah	%	New South Wales	%	Australia	%
Family households	1,434	69.3	1,874,524	72.0	5,907,625	71.3
Single (or lone) person households	586	28.3	620,778	23.8	2,023,542	24.4
Group households	48	2.3	109,004	4.2	354,917	4.3

In Lake Munmorah (State Suburbs), of all households, 69.3% were family households, 28.3% were single person households and 2.3% were group households.

Source: ABS, 2016 Census

Homes in Lake Munmorah are virtually all (98.3%) separate houses, but they vary substantially in value. The most common number of bedrooms is three (40.5%) and more than a quarter (28.5%) have four bedrooms or more. Less than a quarter (22.6%) have only two bedrooms and very few (4.4%) have only one bedroom or are bed-sitters.

In 2016, almost half of Lake Munmorah residents (48%) owned their homes outright and a further third (31.6%) were paying them off. Median monthly mortgage repayments (\$1,600) were lower than that for NSW (\$1,968) and only a small minority were spending 30% or more of household income on mortgage repayments.

In 2016, only a small minority (16.7%) were renting. Median weekly rent (\$320) was lower than that for NSW (\$380) and few (7.4%) were paying 30% of household income or more on rent.

Figure 18: Housing in Lake Munmorah

Dwelling structure <i>Occupied private dwellings</i>	Lake Munmorah	%	New South Wales	%	Australia	%
Separate house	2,037	98.3	1,729,820	66.4	6,041,788	72.9
Semi-detached, row or terrace house, townhouse etc	8	0.4	317,453	12.2	1,055,016	12.7
Flat or apartment	24	1.2	519,390	19.9	1,087,434	13.1
Other dwelling	0	0.0	23,580	0.9	64,425	0.8

Of occupied private dwellings in Lake Munmorah (State Suburbs), 98.3% were separate houses, 0.4% were semi-detached, row or terrace houses, townhouses etc, 1.2% were flat or apartments and 0.0% were other dwellings.  
View the data quality statement for Dwelling structure (STRD)

Number of bedrooms <i>Occupied private dwellings</i>	Lake Munmorah	%	New South Wales	%	Australia	%
None (includes bedsitters)	11	0.5	17,157	0.7	39,769	0.5
1 bedroom	80	3.9	157,194	6.0	411,252	5.0
2 bedrooms	489	23.6	577,675	22.2	1,562,759	18.9
3 bedrooms	839	40.5	970,001	37.2	3,403,190	41.1
4 or more bedrooms	591	28.5	816,405	31.3	2,670,758	32.2
Number of bedrooms not stated	61	2.9	65,888	2.5	198,351	2.4
Average number of bedrooms per dwelling	3	--	3	--	3.1	--
Average number of people per household	2.4	--	2.6	--	2.6	--

In Lake Munmorah (State Suburbs), of occupied private dwellings 3.9% had 1 bedroom, 23.6% had 2 bedrooms and 40.5% had 3 bedrooms. The average number of bedrooms per occupied private dwelling was 3. The average household size was 2.4 people.  
View the data quality statements for: [Number of bedrooms in a private dwelling \(BEDD\)](#) [Number of persons usually resident in dwelling \(NPRD\)](#)

Tenure <i>Occupied private dwellings</i>	Lake Munmorah	%	New South Wales	%	Australia	%
Owned outright	1,000	48.0	839,665	32.2	2,565,695	31.0
Owned with a mortgage	658	31.6	840,004	32.3	2,855,222	34.5
Rented	347	16.7	826,922	31.8	2,561,302	30.9
Other tenure type	10	0.5	23,968	0.9	78,994	1.0
Tenure type not stated	67	3.2	73,763	2.8	224,869	2.7

Of occupied private dwellings in Lake Munmorah (State Suburbs), 48.0% were owned outright, 31.6% were owned with a mortgage and 16.7% were rented.

Rent weekly payments	Lake Munmorah	%	New South Wales	%	Australia	%
Median rent	320	--	380	--	335	--
Households where rent payments are less than 30% of household income	--	92.6	--	87.1	--	88.5
Households with rent payments greater than or equal to 30% of household income	--	7.4	--	12.9	--	11.5

Mortgage monthly repayments	Lake Munmorah	%	New South Wales	%	Australia	%
Median mortgage repayments	1,600	--	1,986	--	1,755	--
Households where mortgage repayments are less than 30% of household income	--	94.4	--	92.6	--	92.8
Households with mortgage repayments greater than or equal to 30% of household income	--	5.6	--	7.4	--	7.2

Source: ABS, 2016 Census

ABS projections suggest that, while family households will continue to be the dominant type, will be greater proportional increase in sole occupant households will be greater (61-65%). In effect, there will be greater demand for smaller houses.

Figure 19: Demand for lone person housing will increase

LONE PERSON HOUSEHOLDS
Although family households show the greatest numeric increase, lone person households are projected to show the greatest percentage increase over the 25-year projection period. The number of lone person households is projected to increase by between 61% and 65% (1.3 million households), from 2.1 million households in 2011 to between 3.3 million and 3.4 million households in 2036. This increase primarily reflects changes in the age structure of the population and the fact that older women in particular are more inclined to be living alone than other people.

Source: ABS Household and Family Projections, Australia, 2011 to 2036

There has already been substantial residential development in Lake Munmorah near the subject site.

Figure 20: Land sub-division in Lake Munmorah



Source: Central Coast Council website

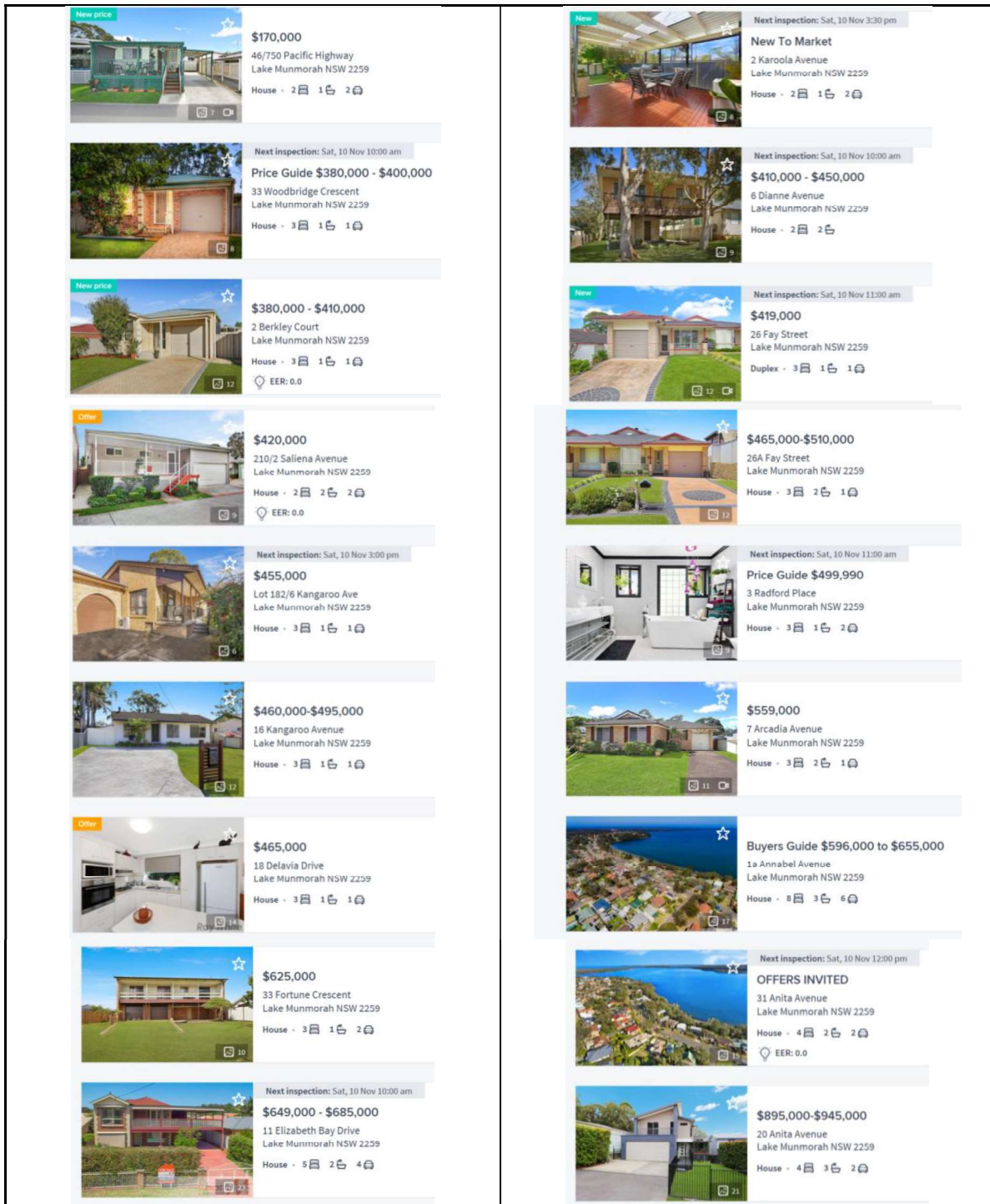
Homes in residential parks (that do not include the land they stand on) are generally priced in the \$150 - \$200,000 range.

Figure 21: Residential park houses for sale or recently sold in Lake Munmorah

Source: <https://www.allhomes.com.au/sale/lake-munmorah-nsw-2259/>

Homes with land for sale in Lake Munmorah range in price from just under \$400,000 to just under \$1,000,000.

Figure 22: Houses for sale in Lake Munmorah October-November 2018



Source: <https://www.allhomes.com.au/sale/lake-munmorah-nsw-2259/>

---

Houses in the streets closest to the subject site, in Kemira Avenue, Kookaburra Avenue and Wallaby Street are all separate family homes with land. There is a mix of single storey and two storey houses, ranging from older and more modest fibro-cement weatherboard homes to more modern and substantial brick homes. All are well maintained and appear occupied.

**Figure 23: Houses in nearby Kemira, Kookaburra and Wallaby streets**







## 6. Services in the area

### Schools

While at the 2016 Census the proportion of families in Lake Munmorah that included children was lower than average for NSW (35.4% compared with 45.7%) and the proportion of families without children was higher (47.8% compared with 36.6%), this is due to the large number of retirement villages in the suburb. It is likely that residents of the proposed development will more closely resemble those in nearby streets and NSW overall, in having more families with children.

**Figure 24: Families with and without children**

Family composition	Lake Munmorah	%	New South Wales	%	Australia	%
Couple family without children	704	47.8	709,524	36.6	2,291,987	37.8
Couple family with children	521	35.4	887,358	45.7	2,716,224	44.7
One parent family	231	15.7	310,906	16.0	959,543	15.8
Other family	17	1.2	32,438	1.7	102,559	1.7

Of the families in Lake Munmorah (State Suburbs), 35.4% were couple families with children, 47.8% were couple families without children and 15.7% were one parent families.  
View the data quality statement for Family composition (FMCF)

Single (or lone) parents <i>Proportion of the total single (or lone) parent population</i>	Lake Munmorah	%	New South Wales	%	Australia	%
Male	--	19.1	--	17.8	--	18.2
Female	--	80.9	--	82.2	--	81.8

In Lake Munmorah (State Suburbs), 19.1% of single parents were male and 80.9% were female.

Source: ABS 2016 Census

At 2016 Census, just over one quarter (26.6%) of Lake Munmorah residents were attending an educational institution. Of these, 6.7% were in pre-school, 28.2% were in primary school, 22.2% were in secondary school and 15.6% were in tertiary or technical education. If the residents of the proposed development are consistent with 2016 demographics, places will be needed for about 200 students: roughly 14 pre-schoolers, 55 public primary school students, 26 Catholic primary school students, 46 public high school students, 14 Catholic high school students and 47 TAFE or university students. The actual number attending an educational institution may be a bit higher because the Lake Munmorah figures are affected by the large number of retirement village residential parks in the area.

**Figure 25: In education**

Education	Lake Munmorah	%	New South Wales	%	Australia	%
Preschool	93	6.7	132,047	5.7	347,621	4.8
Primary - Government	253	18.3	417,465	18.0	1,314,787	18.2
Primary - Catholic	119	8.6	122,099	5.3	380,604	5.3
Primary - other non Government	15	1.1	67,611	2.9	231,490	3.2
Secondary - Government	213	15.4	269,249	11.6	827,505	11.5
Secondary - Catholic	65	4.7	117,689	5.1	338,384	4.7
Secondary - other non Government	23	1.7	79,915	3.4	280,618	3.9
Technical or further education institution	94	6.8	144,103	6.2	424,869	5.9
University or tertiary institution	122	8.8	376,133	16.2	1,160,626	16.1
Other	27	1.9	63,673	2.7	198,383	2.8
Not stated	362	26.1	535,266	23.0	1,707,023	23.7

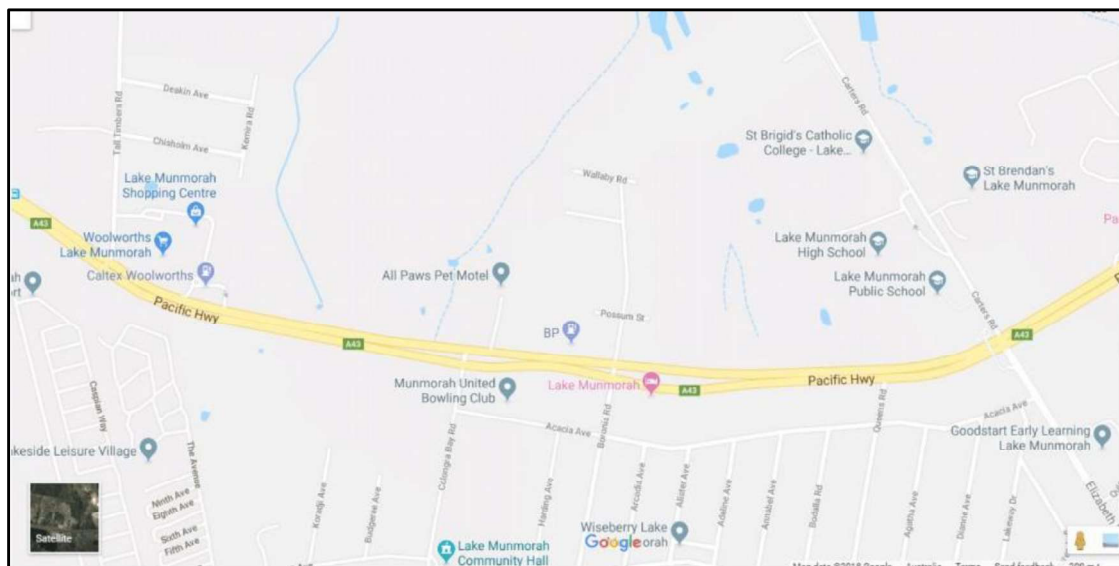
In Lake Munmorah (State Suburbs), 26.6% of people were attending an educational institution. Of these, 28.2% were in primary school, 22.2% in secondary school and 15.6% in a tertiary or technical institution.

Source: ABS, based on 2016 Census

As well as pre-schools, there are four schools in Lake Munmorah, all close to the site:

- Lake Munmorah Public School
- Lake Munmorah High School
- St Brendan's Catholic Primary School
- St Brigid's Catholic College.

Figure 26: Lake Munmorah, showing nearby schools and pre-school



## Pre-schools

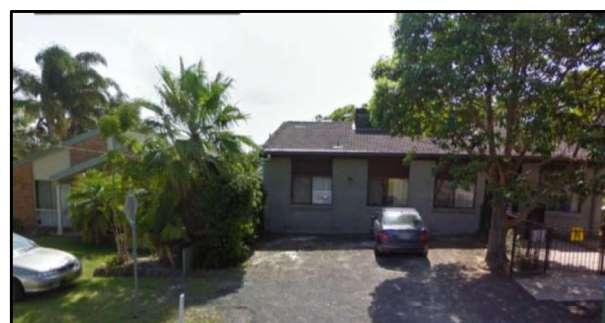
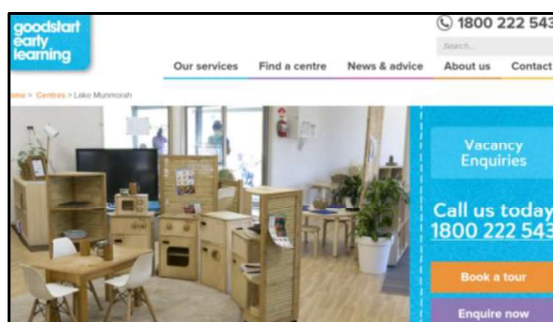
Lake Munmorah Pre-school provides pre-school education and care to children from two years to school age. They currently have 30 children enrolled and a short waiting list.

Good Start Early Learning Centre provides pre-school and care for children up to school age, including babies. Currently they have 70 enrolments, which is close to capacity.

St Brendan's Early Learning Centre has capacity to take 60 children aged 3 to 6 years and is currently full. They give priority to the children of Catholic parents.

Lake Munmorah Public School provides some pre-school classes for children with special needs. Currently 15 children are enrolled in these classes.

Figure 27: Pre-schools in Lake Munmorah

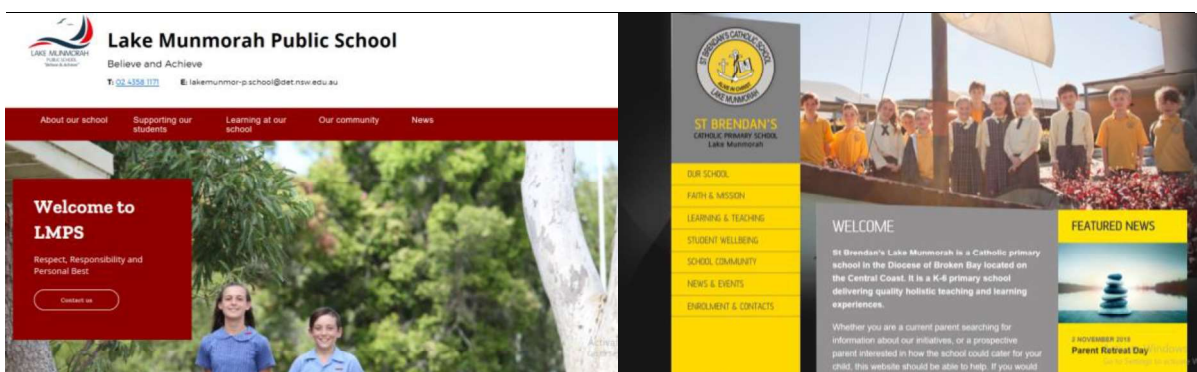


## Primary schools

Lake Munmorah Primary School currently has about 450 students enrolled and one vacant classroom. In the past 600 students have been enrolled, so increased enrolment is possible, using demountable classrooms if necessary. Forty six additional students would not present a problem. Lake Munmorah Primary School also provides three classes for children with special needs.

St Brendan's Catholic Primary School currently has 495 students and has some capacity to expand. There is more room for additional students in some classes than in others. Catholic children are given priority in enrolments.

Figure 28: Primary schools in Lake Munmorah

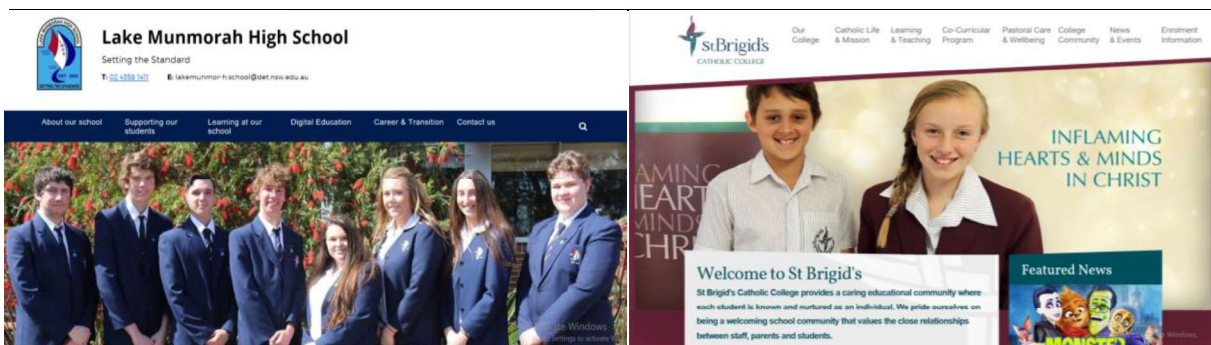


## High schools

Lake Munmorah High School currently has almost 742 students enrolled for 2019. In 2007, prior to the opening of St Brigid's Catholic High School next door, the enrolment was 957, so there is definitely capacity to absorb another 45-50 students.

St Brigid's Catholic College has more than 300 students currently enrolled and is a growing school that can accommodate up to 800 students.

Figure 29: High schools in Lake Munmorah



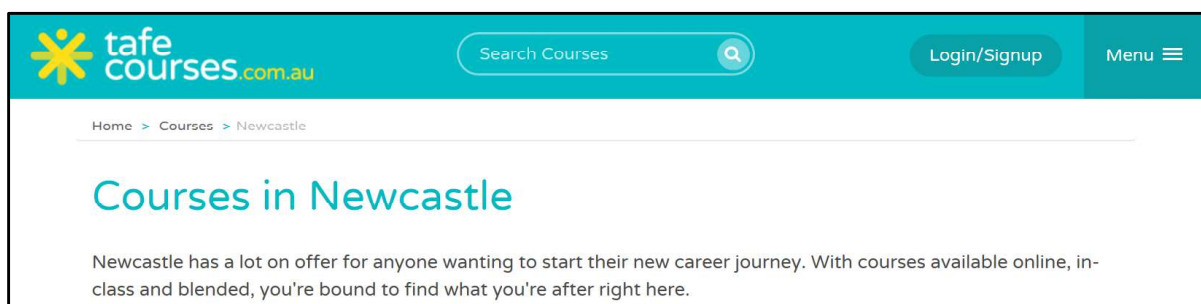
---

## Technical and tertiary education

TAFE has campuses in Newcastle and Ourimbah, offering a wide range of as well as on-line courses.

- Hairdressing and beauty training academy, open to the public
- Massage training clinic, open to the public
- Design Centre Hunter, featuring:
  - Purpose designed gallery
  - Collaborative design workspaces
  - Industrial design workshop
- Hunter Maritime College, featuring:
  - State-of-the-art simulated engine room
  - Ship bridge simulator
  - Replicated engine control room
  - Heat engine lab
  - Fully operational auxiliary boiler system
- Newcastle Knights study hub, featuring:
  - Foundation media skills
  - Governance in sport
  - Skills exchange
  - Staff development skills
  - Work placements
  - Access to TAFE facilities for National Youth Cup players
- Regional Music Institute, featuring:
  - 2 state-of-the-art recording studios with:
    - SSL Duality analogue/digital desk
    - AVID S6 post production desk, capable of producing 360 degree sound
      - 2 Mac computer labs with 35 computers, Pro Tools Version 12 HD, Mini keyboards
  - Large performance space with Vertec QL PA system
  - Portable foley sound pit
  - Regional Institute of Performing Arts, featuring:
    - Drama/dance studio with Dance floor, Dance barres, Full-length mirrors, AV system
  - Writers room
  - 4 flexible rehearsal rooms for music, dramatic performances and screen work
  - Costume and props room

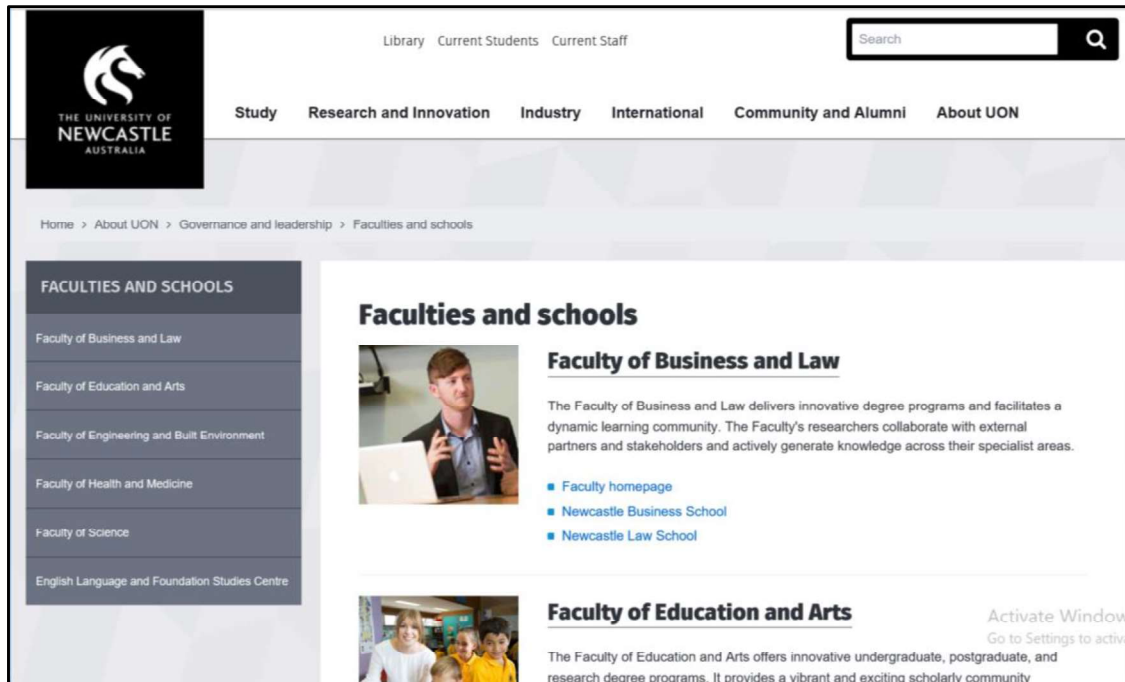
Figure 30: TAFE campuses



The University of Newcastle, with a Wyong campus, as well as Newcastle, includes:

- Faculty of Business and Law;
- Faculty of Education and Arts;
- Faculty of Engineering and Built Environment;
- Faculty of Health and Medicine;
- Faculty of Science;
- English Language and Foundation Studies Centre.

Figure 31: University of Newcastle



---

## Medical and allied health services

Coastal Lakes Medical Practice is located in the adjacent shopping centre and provides a bulk-billing service. Currently there are four doctors and another will soon join the team. There is space for seven, so more doctors can be added to meet increased demand.

Laverty Pathology Services are adjacent and there is also a Pharmacy, an Optometrist and an Accupuncture and Massage practice in the same shopping centre.

Lake Munmorah Doctors' Surgery and Medical Practice has 10 doctors and is also nearby, on the other side of the Pacific Highway at the intersection with Queen Street.

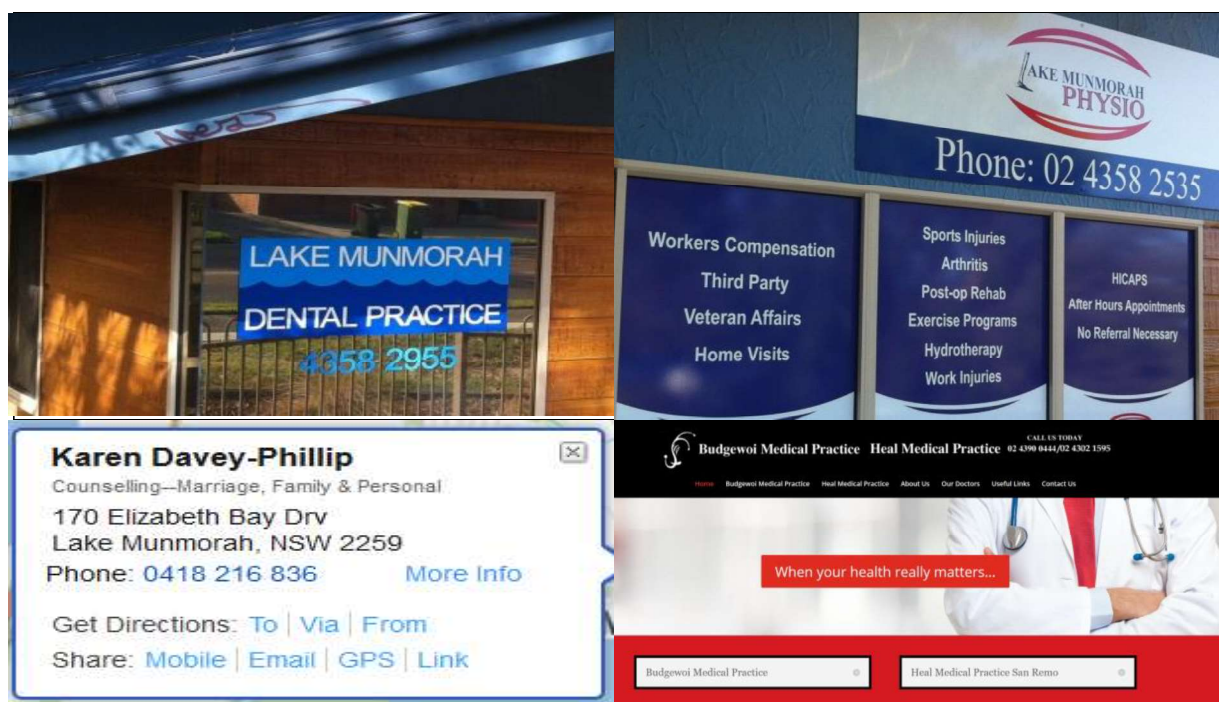
Figure 32: Medical and other health services in the adjacent shopping centre



In Elizabeth Bay Drive, there is a dental practice, a physiotherapist and a counselling service. There is another pharmacy and another pathology collection centre in Anita Avenue, on the bus route; a natural medicine practice in Fay Street and a physiotherapy clinic in Gardenia Close. The Budgewoi Medical Practice is 5 minutes away by car.

Wyong Hospital is 15 minutes away by car. Gosford Hospital and North Gosford Private Hospital are 30 minutes away.

Figure 33: Further health services



## Shopping

The adjacent shopping centre currently offers shops to meet regular household needs:

- A Woolworths supermarket, with adjacent BWS bottle shop;
- Newcastle Permanent branch and ATMs for Commonwealth and ANZ banks;
- Newsagent with Australia Post agency;
- Super Dollar household items store;
- Tobacconist;
- Hair salon;
- Bakery;
- A range of affordable café dining and take-away food options:
  - an Indian and kebab restaurant
  - a pan-Asian restaurant
  - A sit down coffee shop
  - takeaway coffee, sushi, sandwiches and other snack stands;
- adjacent petrol station;
- recyclables return station and DVD rental.

Figure 34: Supermarket and other shops





Figure 35: Banking, post box, DVD hire, recycling, petrol



Figure 36: Cafés and take away food outlets



## Churches

At the 2016 Census, more than half of the population of Lake Munmorah was Christian (57.5%), mainly Anglican (28.5%) or Catholic (25.7%), with a few Uniting Church (3.3%). Almost a third said “No religion” (24.1%) or gave no answer (7.7%).

Figure 37: Religious affiliation

Religious affiliation, top responses	Lake Munmorah	%	New South Wales	%	Australia	%
Anglican	1,495	28.5	1,161,810	15.5	3,101,185	13.3
Catholic	1,347	25.7	1,846,443	24.7	5,291,834	22.6
No Religion, so described	1,263	24.1	1,879,562	25.1	6,933,708	29.6
Not stated	406	7.7	684,969	9.2	2,238,735	9.6
Uniting Church	172	3.3	217,258	2.9	870,183	3.7

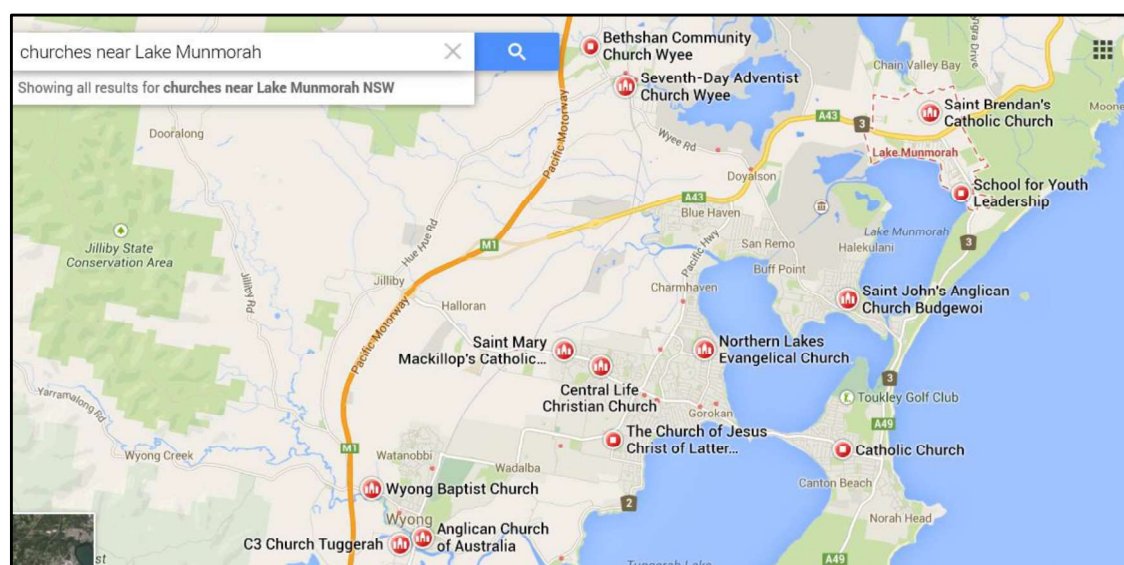
The most common responses for religion in Lake Munmorah (State Suburbs) were Anglican 28.5%, Catholic 25.7%, No Religion, so described 24.1%, Not stated 7.7% and Uniting Church 3.3%. In Lake Munmorah (State Suburbs), Christianity was the largest religious group reported overall (72.2%) (this figure excludes not stated responses).

Source: ABS 2016 Census

There are churches serving various Christian denominations in or near Lake Munmorah. They include:

- St Brendan’s Catholic Church, St Mary Mackillop’s at Warnervale
- St John’s Anglican at Budgewoi and Anglican Church of Australia in Wyong
- Seventh Day Adventist Church at Wyee
- Bethshan Community Church at Wyee
- Wyong Baptist Church and another at Doyalson
- Church of Jesus Christ of the Latter Day Saints at Kanwal
- Northern Lakes Evangelical Church at Tumbi Umbi
- C3 Church at Tuggerah
- Central Life Christian Church at Woongarah
- Salvation Army School for Youth Leadership in Lake Munmorah
- New Hope Community Church at Caves Beach
- Gateway Church at Pelican.

Figure 38: Churches in or near Lake Munmorah



Source: Google maps

---

## Recreational opportunities in the area

It has recently been announced that a regional recreation facility, including a skate park, a play space, passive recreation and environment protection areas will be built on Tall Timbers Road in Lake Munmorah, opposite the shopping centre and very close to the subject site.

Munmorah United Bowling Club is 2 minutes away in Acacia Avenue. Halekulani Bowling Club is 5 minutes away in Budgewoi, Toukley RSL Bowling Club is 10 minutes away and there is another bowling club at Gwandalyn. There are tennis courts in Colongara Road, behind the Munmorah Bowling Club. Doyalson-Wyee RSL Club is 3 minutes away. Toukley Golf Course is 10 minutes away and Wyong Golf Course is 17 minutes away.

The site is close to the Munmorah State Conservation Area and three beautiful lakes that provide bush walking, boating, fishing and picnicking opportunities. Lake Munmorah is 2 minutes away, Lake Macquarie is 5 minutes away and Budgewoi Lake is 6 minutes away. The site is also close to many beautiful beaches, including Budgewoi Beach, Birdie Beach, Frazer Beach, Lakes Beach and Soldiers Beach at Norah Head is 14 minutes away.

There are heated pools at Toukley 10 minutes away and in Wyong 20 minutes away and the Mingara Club Complex, 25 minutes away, includes extensive aquatic, gym and bowling facilities as well as dining and entertainment areas.

There is an Athletic Track at Warnervale, 12 minutes away. There is a Senior Citizens Centre in Acacia St and a Community Hall in Colongara Road.

Figure 39: Recreational opportunities in the area



Source: relevant websites

Figure 40: Regional recreational park at Lake Munmorah announced

# Lake Munmorah to have a regional skate park



*A concept image of what the Lake Munmorah skate park could look like.*

The pre design phase of the project closes on Monday, February 11, and the Council will then present the concept back to the community for further consultation. The concept has been developed by some people living in Lake Munmorah," Drury said.

The community is invited to attend a pre design/creative workshop and feedback will play an important part in the next step of developing a concept design for the new recreation area. There were two workshops held on February 6.

"This would still be used by some people living in Lake Munmorah," Drury said.

The community is invited to attend a pre design/creative workshop and feedback will play an important part in the next step of developing a concept design for the new recreation area. There were two workshops held on February 6.



*Plans for Lake Munmorah park*

**A** regional recreation facility will be built at Lake Munmorah.

The recreation area will be on Tall Timbers Rd, opposite the shopping centre, and between the football field, Gumbayah Oval.

There will be an access road off Tall Timbers Rd to both the oval and a car parking area at

accessible venue for community activities and attract regional and significant skate events.

Lake Munmorah Progress Association Secretary, Stuart Drury, said that "all things considered, I think this site is acceptable to the wider community."

"It will be a lot of money and will be a good boost for the area."

"It will be a regional

skate park, so it will suit people at Chain Valley Bay too, and it's next to the football oval.

"We have asked Council that the existing skateboard ramp in Acacia Ave, Lake Munmorah, be retained.

"It is a modest ramp adjacent to the netball courts and we've asked that it not be demolished, but have some sort of maintenance.

**A**ccessible venue for community activities and attract regional and significant skate events.

Lake Munmorah Progress Association Secretary, Stuart Drury, said that "all things considered, I think this site is acceptable to the wider community."

"It will be a lot of money and will be a good boost for the area."

"It will be a regional

The recreation area will be on Tall Timbers Rd, opposite the shopping centre, and between the football field, Gumbayah Oval.

There will be an access road off Tall Timbers Rd to both the oval and a car parking area at

## Transport

Most residents of Lake Munmorah drive cars. According to ABS figures, only 5% of Lake Munmorah households have no car; 45% have one car, 31.5% have two cars and 15% have three cars or more. However, schools, shops, a medical practice and some other services are within walking distance and several bus routes pass the site:

- 95: Lake Haven - Gwandalan – Lake Munmorah - Morisset
- 95X: Lake Haven – Gwandalan - Lake Munmorah - Wyee
- 98: Lake Haven – Blue Haven – Chain Valley Bay
- 99: Lake Haven – Blue Haven – Gwandalan – Swansea - Charlestown

Figure 41: Bus routes in the area



Figure 42: Bus route 95

ROUTE 95: LAKE HAVEN - GWANDALAN - MUNMORAH - MORISSET		ROUTE FREQUENCY	
<p><b>CURRENT TIMETABLE</b></p> <p>Current timetable effective from Sunday 30th September 2018</p> <p><a href="#">VIEW TIMETABLE &gt;</a></p> <p>(Adobe Acrobat Reader required to view PDF)</p>	<p><a href="#">VIEW ROUTE MAP</a></p> <p><a href="#">STAY UPDATED</a></p> <p><a href="#">ORDER BY POST</a></p>	<p><b>Weekdays</b></p> <p><b>First Bus</b> Lake Haven Shops 07:00</p> <p><b>Last Bus</b> Lake Haven Shops 16:17</p> <p><b>Frequency</b> am peak 2 trips pm peak 1 trip</p> <p> - Busways reserves the right to substitute a non-accessible bus on trips marked accessible if operational circumstances dictate.</p>	
<p><b>ROUTE DESCRIPTION</b></p> <p><b>From Lake Haven to Morisset</b></p> <p>From Lake Haven Shops (R) Goobarabah Ave (R) Lake Haven Dr (R) Pacific Hwy (L) Kanangra Dr (L) Summerland Rd (L) Yeramba Rd (R) Cams Bvd (L) Ginganup Rd (R) Government Rd (R) Summerland Rd (L) Kanangra Dr (R) Orana Rd (R) Winbin Cct (L) Gamban Rd (R) Parraweena Rd (L) Kanangra Dr (R) Pacific Hwy (R) Chain Valley Bay Rd (L) Houston Ave (R) Findlay Ave (R) Karoola Ave (L) Houston Ave (R) Chain Valley Bay Rd (R) MULLOWAY RD (L) TREVALLY AVE (R) TERAGALIN DR (R) MULLOWAY RD (R) Chain Valley Bay Rd (R) Pacific Hwy (L) Elizabeth Bay Dr (R) Rosemount Ave (R) Terence Ave (L) Anita Ave (R) Boronia Rd (L) Pacific Hwy (R) Tall Timbers Rd (R) Lakeshore Ave (R) Karoola Ave (L) Tall Timbers Rd (L) Scaysbrook Dr (L) Ivy Ave (R) Lloyd Ave (R) Elabana Ave (R) Scaysbrook Dr (L) Tall Timbers Rd (R) Pacific Hwy (R) Rutleys Rd (R) Vales Rd (L) Greenway Ave (R) Macquarie Ave (R) Waverly Rd (R) Vales Rd (L) Spencer Rd (R) Griffith St (R) Catherine St (L) Vales Rd (L) Rutleys Rd (L) Pacific Hwy (L) Tall Timbers Rd (R) Lakeshore Ave (R) Karoola Ave (L) Tall Timbers Rd (L) Pacific Hwy (R) Boronia Rd (L) Anita Ave (R) Terence Ave (L) Rosemount Ave (L) Elizabeth Bay Rd (R) Pacific Hwy (L) Chain Valley Bay Rd (L) Houston Ave (R) Findlay Ave (R) Karoola Ave (L) Houston Ave (R) Chain Valley Bay Rd (R) MULLOWAY RD (L) TREVALLY AVE (R) TERAGALIN DR (R) MULLOWAY RD (R) Chain Valley Bay Rd (L) Pacific Hwy (L) Kanangra Dr (L) Summerland Rd (L) Yeramba Rd (R) Cams Bvd (L) Ginganup Rd (R) Government Rd (R) Summerland Rd (L) Kanangra Dr (R) Orana Rd (R) Winbin Cct (L) Gamban Rd (R) Parraweena Rd (L) Kanangra Dr (R) Pacific Hwy (L) Lake Haven Dr (L) Goobarabah Ave (L) To Lake Haven Shops.</p> <p><b>From Morisset to Lake Haven</b></p> <p>From Morisset Station, Dora St (L) Wyee Rd (L) Rutleys Rd (L) Government Rd (L) High St (R) Bath St (R) Bay St (R) Government Rd (L) Rutleys Rd (L) Vales Rd (L) Greenway Ave (R) Macquarie Ave (R) Waverly Rd (R) Vales Rd (L) Spencer Rd (R) Griffith St (R) Catherine St (L) Vales Rd (L) Rutleys Rd (L) Pacific Hwy (L) Tall Timbers Rd (R) Lakeshore Ave (R) Karoola Ave (L) Tall Timbers Rd (L) Pacific Hwy (R) Boronia Rd (L) Anita Ave (R) Terence Ave (L) Rosemount Ave (L) Elizabeth Bay Rd (R) Pacific Hwy (L) Chain Valley Bay Rd (L) Houston Ave (R) Findlay Ave (R) Karoola Ave (L) Houston Ave (R) Chain Valley Bay Rd (R) MULLOWAY RD (L) TREVALLY AVE (R) TERAGALIN DR (R) MULLOWAY RD (R) Chain Valley Bay Rd (L) Pacific Hwy (L) Kanangra Dr (L) Summerland Rd (L) Yeramba Rd (R) Cams Bvd (L) Ginganup Rd (R) Government Rd (R) Summerland Rd (L) Kanangra Dr (R) Orana Rd (R) Winbin Cct (L) Gamban Rd (R) Parraweena Rd (L) Kanangra Dr (R) Pacific Hwy (L) Lake Haven Dr (L) Goobarabah Ave (L) To Lake Haven Shops.</p>		<p><b>Weekdays</b></p> <p><b>First Bus</b> Morisset Station 09:00</p> <p><b>Last Bus</b> Morisset Station 18:18</p> <p><b>Frequency</b> am peak 1 trip pm peak 2 trips</p> <p> - Busways reserves the right to substitute a non-accessible bus on trips marked accessible if operational circumstances dictate.</p>	

For those travelling to Sydney or Newcastle, there are railway stations at Wyee and Morisset, accessible by bus, and at Wyong, accessible by car.

Figure 43: Bus routes 95X, 98 and 99

<p><b>ROUTE 95X: LAKE HAVEN - GWANDALAN - LAKE MUNMORAH - WYEE</b></p> <p><b>CURRENT TIMETABLE</b> Current timetable effective from Sunday 30th September 2018 <a href="#">VIEW TIMETABLE &gt;</a> (Adobe Acrobat Reader required to view PDF)</p> <p><a href="#">VIEW ROUTE MAP</a></p> <p><a href="#">STAY UPDATED</a></p> <p><a href="#">ORDER BY POST</a></p> <p><b>ROUTE DESCRIPTION</b></p> <p><b>From Lake Haven to Wyee</b> From Lake Haven Shops (R) Goobarabah Ave (R) Lake Haven Drive (R) Pacific Hwy (L) Kanangra Dr (L) Summerland Rd (L) Yeramba Rd (R) Cams Bvd (L) Gingham Rd (R) Government Rd (R) Summerland Rd (L) Kanangra Dr (R) Orana Rd (R) Winbin Cct (L) Gamban Rd (R) Farraweena Rd (L) Kanangra Dr (R) Pacific Hwy (L) Elizabeth Bay Dr (R) Rosemount Ave (R) Terrence Ave (L) Anita Ave (R) Boronia Rd (L) Pacific Hwy (R) Wyee Rd to Wyee Station.</p> <p><b>From Wyee to Lake Haven</b> From Wyee Station, Wyee Rd (L) Rutleys Rd (L) Pacific Hwy (R) Boronia Rd (L) Anita Ave, Terrence Ave (L) Rosemount Ave (L) Elizabeth Bay Rd (L) Kanangra Dr (L) Summerland Rd (L) Yeramba Rd (R) Cams Bvd (L) Gingham Rd (R) Government Rd (R) Summerland Rd (L) Kanangra Dr (R) Orana Rd (R) Winbin Cct (L) Gamban Rd (L) Farraweena Rd (L) Kanangra Dr (R) Pacific Hwy (L) Lake Haven Dr (L) Goobarabah Ave (L) To Lake Haven Shops.</p> <p>(L) means bus turns left, (R) means bus turns right.</p>	<p><b>ROUTE FREQUENCY</b></p> <table border="1"> <thead> <tr> <th></th> <th>Weekdays</th> </tr> </thead> <tbody> <tr> <td><b>First Bus</b> Lake Haven Shops</td> <td>05:10</td> </tr> <tr> <td><b>Last Bus</b> Lake Haven Shops</td> <td>05:10</td> </tr> <tr> <td><b>Frequency</b></td> <td></td> </tr> <tr> <td>am peak</td> <td>1 trip</td> </tr> <tr> <td>pm peak</td> <td>-</td> </tr> </tbody> </table> <p><b>3</b> - Busways reserves the right to substitute a non-accessible bus on trips marked accessible if operational circumstances dictate.</p> <p><b>ROUTE FREQUENCY - OPPOSITE</b></p> <table border="1"> <thead> <tr> <th></th> <th>Weekdays</th> </tr> </thead> <tbody> <tr> <td><b>First Bus</b> Wyee Station</td> <td>19:35</td> </tr> <tr> <td><b>Last Bus</b> Wyee Station</td> <td>19:35</td> </tr> <tr> <td><b>Frequency</b></td> <td></td> </tr> <tr> <td>am peak</td> <td>-</td> </tr> <tr> <td>pm peak</td> <td>1 trip</td> </tr> </tbody> </table>		Weekdays	<b>First Bus</b> Lake Haven Shops	05:10	<b>Last Bus</b> Lake Haven Shops	05:10	<b>Frequency</b>		am peak	1 trip	pm peak	-		Weekdays	<b>First Bus</b> Wyee Station	19:35	<b>Last Bus</b> Wyee Station	19:35	<b>Frequency</b>		am peak	-	pm peak	1 trip																								
	Weekdays																																																
<b>First Bus</b> Lake Haven Shops	05:10																																																
<b>Last Bus</b> Lake Haven Shops	05:10																																																
<b>Frequency</b>																																																	
am peak	1 trip																																																
pm peak	-																																																
	Weekdays																																																
<b>First Bus</b> Wyee Station	19:35																																																
<b>Last Bus</b> Wyee Station	19:35																																																
<b>Frequency</b>																																																	
am peak	-																																																
pm peak	1 trip																																																
<p><b>ROUTE 98: LAKE HAVEN - BLUE HAVEN - CHAIN VALLEY BAY</b></p> <p><b>CURRENT TIMETABLE</b> Current timetable effective from Sunday 30th September 2018 <a href="#">VIEW TIMETABLE &gt;</a> (Adobe Acrobat Reader required to view PDF)</p> <p><a href="#">VIEW ROUTE MAP</a></p> <p><a href="#">STAY UPDATED</a></p> <p><a href="#">ORDER BY POST</a></p> <p><b>ROUTE DESCRIPTION</b></p> <p><b>From Lake Haven to Chain Valley Bay</b> Outwards from Lake Haven (R) Goobarabah Ave (R) Lake Haven Dr (R) Pacific Hwy (L) Bokhara Ave (L) Colorado Dr (L) Lady Laurel Dr (L) Kawana Ave (R) Turner Cl (R) McKellar Bvd (R) Roper Rd (L) Pacific Hwy (R) Lights onto Pacific Hwy (L) Tall Timbers Rd (R) Scaysbrook Ave (L) Ivy Ave (R) Lloyd Ave (R) Elabana Ave (R) Scaysbrook Ave (R) Tall Timbers Rd (R) Lakeshore Ave (L) Karoola Ave (L) Tall Timbers Rd (L) Pacific Hwy (R) Boronia Rd (L) Anita Ave (R) Terrence Ave (L) Rosemount Ave (L) Elizabeth Bay Dr (R) Pacific Hwy (L) Chain Valley Bay Rd (L) Mullyoway Rd (L) Trevally Ave (R) Teragalin Dr (R) Mullyoway Rd (L) Chain Valley Bay Rd (L) Houston Ave (R) Findlay Ave (R) Karoola St (L) Houston Ave to Findlay Ave.</p> <p><b>From Chain Valley Bay to Lake Haven</b> From Houston Ave (R) Findlay Ave (R) Karoola St (L) Houston Ave (R) Chain Valley Bay Rd (R) Mullyoway Rd (L) Trevally Ave (R) Teragalin Dr (R) Mullyoway Rd (R) Chain Valley Bay Rd (R) Pacific Hwy (L) Elizabeth Bay Dr (R) Rousemount Ave (R) Terrence Ave (L) Anita Ave (R) Boronia Rd (L) Pacific Hwy (R) Tall Timbers Rd (R) Lakeshore Ave (L) Karoola Ave (L) Tall Timbers Rd (L) Scaysbrook Ave (L) Ivy Ave (R) Lloyd Ave (R) Elabana Ave (R) Scaysbrook Ave (L) Tall Timbers Rd (R) Pacific Hwy (L) Lights after the Doyalson Lights (R) Roper Rd (L) McKellar Bvd (L) Turner Cl (L) Kawana Ave (R) Lady Laurel Dr (R) Colorado Dr (R) Bokhara Ave (R) Pacific Hwy (L) Lake Haven Dr (L) Goobarabah Ave (L) into Lake Haven.</p> <p>(L) means bus turns left, (R) means bus turns right.</p>	<p><b>ROUTE FREQUENCY</b></p> <table border="1"> <thead> <tr> <th></th> <th>Weekdays</th> <th>Saturday</th> </tr> </thead> <tbody> <tr> <td><b>First Bus</b> Lake Munmorah (Elizabeth Bay Dr &amp; Acacia Ave)</td> <td>04:56</td> <td>07:54</td> </tr> <tr> <td><b>Last Bus</b> Lake Munmorah (Elizabeth Bay Dr &amp; Acacia Ave)</td> <td>L16:53</td> <td>07:54</td> </tr> <tr> <td><b>Frequency</b></td> <td></td> <td></td> </tr> <tr> <td>am peak</td> <td>30-60 mins</td> <td>1 trip</td> </tr> <tr> <td>pm peak</td> <td>30-60 mins</td> <td>-</td> </tr> </tbody> </table> <p>L - Omits Lake Munmorah loop. Catch bus on Pacific Hwy. <b>3</b> - Busways reserves the right to substitute a non-accessible bus on trips marked accessible if operational circumstances dictate.</p> <p><b>ROUTE FREQUENCY - OPPOSITE</b></p> <table border="1"> <thead> <tr> <th></th> <th>Weekdays</th> <th>Saturday</th> <th>Sunday &amp; Public Holidays</th> </tr> </thead> <tbody> <tr> <td><b>First Bus</b> Lake Haven Shops</td> <td>04:41</td> <td>07:39</td> <td>08:25</td> </tr> <tr> <td><b>Last Bus</b> Lake Haven Shops</td> <td>Y20:40</td> <td>Y18:56</td> <td>Y18:35</td> </tr> <tr> <td><b>Frequency</b></td> <td></td> <td></td> <td></td> </tr> <tr> <td>am peak</td> <td>30-60 mins</td> <td>5 trips</td> <td>3 trips</td> </tr> <tr> <td>pm peak</td> <td>30-60 mins</td> <td>60 mins</td> <td>4 trips</td> </tr> </tbody> </table> <p>Y - Bus operates via San Remo to Wills Rd &amp; Barker Av, then to Blue Haven via Central Coast Hwy. Pacific Hwy. Roper Rd then via normal route.</p>		Weekdays	Saturday	<b>First Bus</b> Lake Munmorah (Elizabeth Bay Dr & Acacia Ave)	04:56	07:54	<b>Last Bus</b> Lake Munmorah (Elizabeth Bay Dr & Acacia Ave)	L16:53	07:54	<b>Frequency</b>			am peak	30-60 mins	1 trip	pm peak	30-60 mins	-		Weekdays	Saturday	Sunday & Public Holidays	<b>First Bus</b> Lake Haven Shops	04:41	07:39	08:25	<b>Last Bus</b> Lake Haven Shops	Y20:40	Y18:56	Y18:35	<b>Frequency</b>				am peak	30-60 mins	5 trips	3 trips	pm peak	30-60 mins	60 mins	4 trips						
	Weekdays	Saturday																																															
<b>First Bus</b> Lake Munmorah (Elizabeth Bay Dr & Acacia Ave)	04:56	07:54																																															
<b>Last Bus</b> Lake Munmorah (Elizabeth Bay Dr & Acacia Ave)	L16:53	07:54																																															
<b>Frequency</b>																																																	
am peak	30-60 mins	1 trip																																															
pm peak	30-60 mins	-																																															
	Weekdays	Saturday	Sunday & Public Holidays																																														
<b>First Bus</b> Lake Haven Shops	04:41	07:39	08:25																																														
<b>Last Bus</b> Lake Haven Shops	Y20:40	Y18:56	Y18:35																																														
<b>Frequency</b>																																																	
am peak	30-60 mins	5 trips	3 trips																																														
pm peak	30-60 mins	60 mins	4 trips																																														
<p><b>ROUTE 99: LAKE HAVEN - BLUE HAVEN - GWANDALAN - SWANSEA - CHARLESTOWN</b></p> <p><b>CURRENT TIMETABLE</b> Current timetable effective from Sunday 30th September 2018 <a href="#">VIEW TIMETABLE &gt;</a> (Adobe Acrobat Reader required to view PDF)</p> <p><a href="#">VIEW ROUTE MAP</a></p> <p><a href="#">STAY UPDATED</a></p> <p><a href="#">ORDER BY POST</a></p> <p><b>ROUTE DESCRIPTION</b></p> <p><b>From Lake Haven to Charlestown</b> From Lake Haven Shops (R) Goobarabah Ave (R) Lake Haven Dr (R) Pacific Hwy (L) Bokhara Rd (L) Colorado Dr (L) Lady Laurel Dr (L) Kawana Ave (R) McKellar Bvd (R) Roper Rd (L) Pacific Hwy (R) lights onto Pacific Hwy (R) Boronia Ave (L) Anita Ave (R) Terrence Ave (L) Rosemount Ave (L) Elizabeth Bay Dr (R) Pacific Hwy (L) Kanangra Dr (L) Summerland Rd (L) Yeramba Rd (R) Cams Bvd (L) Gingham Rd (R) Government Rd (R) Summerland Rd (L) Kanangra Dr (R) Orana Rd (R) Winbin Cres (L) Gamban Cres (L) Farraweena Rd (L) Kanangra Dr (L) Pacific Hwy (R) Montifore St (L) Clarke St (R) Lindsley St (L) Flowers St (L) Pacific Hwy (R) Awabakal Dr (R) Government Rd (L) Phillip St (R) Marine Pde, Nords Wharf Rd (L) Crangan Bay Rd (R) Cams Wharf Rd (L) Pacific Hwy then to Swansea Belmont and Charlestown. At Charlestown: (L) Lincoln St (R) Ferris St (R) Frederick St (L) Pearson Bus Stop. Then Via: Pearson St (L) Ridley Lay over rank Ridley + turn (R) Pearson St.</p> <p><b>From Charlestown to Lake Haven</b> From Charlestown Square Bus Stop, Pearson St, Ferris St (L) Lincoln St (R) Pacific Hwy Then to Belmont &amp; Swansea, after Swansea to Cams Wharf, Pacific Hwy (R) Cams Wharf Rd (L) Crangan Bay Rd (R) Nords Wharf Rd, Marine Pde (L) Phillip Rd (R) Government Rd (L) Awabakal Dr (L) Pacific Hwy (R) Flowers Dr (R) Lindsley St (L) Clarke St (R) Montifore St (L) Pacific Hwy (R) Kanangra Dr (R) Orana Rd (R) Winbin Cres (L) Gamban Rd (R) Farraweena Rd (L) Kanangra Dr (R) Summerland Rd (L) Yeramba Rd (R) Cams Bvd (L) Gingham Rd (R) Government Rd (R) Summerland Rd (R) Kanangra Dr (R) Pacific Hwy (L) Elizabeth Bay Dr (R) Rousemount Ave (R) Terrence Ave (L) Anita Ave (R) Boronia Ave (L) Pacific Hwy (L) Lights after the Doyalson Lights (R) Roper Rd (L) McKellar Bvs (L) Turner Cl (L) Kawana Ave (R) Lady Laurel Dr (R) Colorado Dr (R) Bokhara Rd (R) Pacific Hwy (L) Lake Haven Dr (L) Goobarabah Ave (L) into Lake Haven.</p> <p>(L) means bus turns left, (R) means bus turns right.</p>	<p><b>ROUTE FREQUENCY</b></p> <table border="1"> <thead> <tr> <th></th> <th>Weekdays</th> <th>Saturday</th> <th>Sunday &amp; Public Holidays</th> </tr> </thead> <tbody> <tr> <td><b>First Bus</b> Gwandalan (Kanangra Dr at Tunkuvallin Oval)</td> <td>\$07:02</td> <td>08:21</td> <td>08:50</td> </tr> <tr> <td><b>Last Bus</b> Gwandalan (Kanangra Dr at Tunkuvallin Oval)</td> <td>16:41</td> <td>18:30</td> <td>17:21</td> </tr> <tr> <td><b>Frequency</b></td> <td></td> <td></td> <td></td> </tr> <tr> <td>am peak</td> <td>5 trips</td> <td>2 trips</td> <td>1 trip</td> </tr> <tr> <td>pm peak</td> <td>4 trips</td> <td>3 trips</td> <td>1 trip</td> </tr> </tbody> </table> <p>S - Bus operates public school days only. <b>3</b> - Busways reserves the right to substitute a non-accessible bus on trips marked accessible if operational circumstances dictate.</p> <p><b>ROUTE FREQUENCY - OPPOSITE</b></p> <table border="1"> <thead> <tr> <th></th> <th>Weekdays</th> <th>Saturday</th> <th>Sunday &amp; Public Holidays</th> </tr> </thead> <tbody> <tr> <td><b>First Bus</b> Lake Haven Shops</td> <td>\$06:26</td> <td>07:48</td> <td>08:15</td> </tr> <tr> <td><b>Last Bus</b> Lake Haven Shops</td> <td>R18:12</td> <td>17:44</td> <td>16:28</td> </tr> <tr> <td><b>Frequency</b></td> <td></td> <td></td> <td></td> </tr> <tr> <td>am peak</td> <td>6 trips</td> <td>2 trips</td> <td>1 trip</td> </tr> <tr> <td>pm peak</td> <td>6 trips</td> <td>3 trips</td> <td>1 trip</td> </tr> </tbody> </table>		Weekdays	Saturday	Sunday & Public Holidays	<b>First Bus</b> Gwandalan (Kanangra Dr at Tunkuvallin Oval)	\$07:02	08:21	08:50	<b>Last Bus</b> Gwandalan (Kanangra Dr at Tunkuvallin Oval)	16:41	18:30	17:21	<b>Frequency</b>				am peak	5 trips	2 trips	1 trip	pm peak	4 trips	3 trips	1 trip		Weekdays	Saturday	Sunday & Public Holidays	<b>First Bus</b> Lake Haven Shops	\$06:26	07:48	08:15	<b>Last Bus</b> Lake Haven Shops	R18:12	17:44	16:28	<b>Frequency</b>				am peak	6 trips	2 trips	1 trip	pm peak	6 trips	3 trips	1 trip
	Weekdays	Saturday	Sunday & Public Holidays																																														
<b>First Bus</b> Gwandalan (Kanangra Dr at Tunkuvallin Oval)	\$07:02	08:21	08:50																																														
<b>Last Bus</b> Gwandalan (Kanangra Dr at Tunkuvallin Oval)	16:41	18:30	17:21																																														
<b>Frequency</b>																																																	
am peak	5 trips	2 trips	1 trip																																														
pm peak	4 trips	3 trips	1 trip																																														
	Weekdays	Saturday	Sunday & Public Holidays																																														
<b>First Bus</b> Lake Haven Shops	\$06:26	07:48	08:15																																														
<b>Last Bus</b> Lake Haven Shops	R18:12	17:44	16:28																																														
<b>Frequency</b>																																																	
am peak	6 trips	2 trips	1 trip																																														
pm peak	6 trips	3 trips	1 trip																																														

It seems likely that many children will walk to school or ride pushbikes, since they are very close, but there are also school specific buses bringing children from other suburbs to the four schools in Carters Road and many of them pass the subject site on the way (2196, 2197, 2198, 2199, 2200 in the morning 2795, 2796, 2798, 2799 in the afternoon).

Figure 44: School bus services

St Brigid's Catholic College				
Timetable effective from Monday 15 October 2018				
Amended 12/09/2018 <span style="float: right;">(R) Bus Turns Right - (L) Bus Turns Left</span>				
MORNING				
Bus Number	Route Number	Time	Locations Serviced	Route Description
2197	-	7:23 AM	Wyeec Wyeec Point Manning Park	Departs Wyeec Station via Wyeec Rd (R)Ruttleys Rd (L)Government Rd (L)High St (R)Bath St (R)Bay St (R)Government Rd (L)Ruttleys Rd (L)Vales Rd (L)Greenway Av (R)Macquarie Rd (R)Waverley Rd (R)Vales Rd (L)Spencer Rd (R)Griffith St (R)Catherine St (L)Vales Rd (L)Ruttleys Rd (L)Pacific Hwy (L)Carters Rd to St Brigid's Catholic College (8:01am) then to School.
2199	-	7:24 AM	Buff Point San Remo	Departs Elouera Av & Narambi Rd via Narambi Rd (R)Buff Point Av (R)Girraween St (L)Central Coast Hwy (L)Wills Rd (7:32am) (L)Richardson Rd (R)Goorama Av (7:38am) (R)Pacific Hwy (R)Pacific Hwy (7:43am) (R)Wentworth Av (R)Denham St (R)Barton Rd (L)Wentworth Av (R)Pacific Hwy (L)Carters Rd to Lake Munmorah High School (7:50am) then to School.
2200	-	7:29 AM	Halekulani Budgewoi	Departs Central Coast Hwy & Woolana Av via Woolana Av (R)Lilo Av (R)Sunrise Av (L)Natuna Av (7:37am) (R)Noela Pl (L)Central Coast Hwy (L)Durringo St (7:43am), Mimosa Rd, Elizabeth Bay Dr (7:48am) (L)Rosemount Av (R)Terence Av (L)Anita Av (R)Boronia Rd (R)Pacific Hwy (L)Carters Rd to Lake Munmorah High School (7:55am) then to School.
2194	-	7:30 AM	Gwandalan	Departs Kanangra Fire Station via Kanangra Dr (R)Orana Rd (R)Winbin Cr (L)Gamban Rd (R)Parraweena Rd (7:37am) (L)Kanangra Dr (R)Pacific Hwy (R)Carters Rd to School.
2134	-	7:31 AM	*Budgewoi *Halekulani *Buff Point *San Remo Doyalson	* STUDENTS BOARD CENTRAL COAST HWY ONLY Departs Central Coast Hwy & Main Rd via Central Coast Hwy (R)Pacific Hwy to Ruttleys Rd (7:48am) continues Pacific Hwy to Carters Rd (7:54am). <b>SETS STUDENTS DOWN AT PACIFIC HWY &amp; CARTERS RD</b>
2188	-	7:37 AM	Chain Valley Bay North	Departs Houston Av & Kariola St via Houston Av (R)Findlay Av (R)Kariola St (L)Houston Av (R)Chain Valley Bay Rd (R)Mulloy Rd (7:43am) (L)Trevally Av (R)Teragalin Dr (R)Mulloy Rd (R)Chain Valley Bay Rd (R)Pacific Hwy (R)Carters Rd to Lake Munmorah High School (7:50am) then to school.
2196	-	7:37 AM	Chain Valley Bay South	Departs Tall Timbers Rd & Lakeshore Av via Tall Timbers Rd (R)Lakeshore Av (R)Karoola Av (L)Tall Timbers Rd (L)Scaysbrook Av (7:43am) (L)Jivy Av (R)Lloyd Av (R)Elabana Av (R)Scaysbrook Av (L)Tall Timbers Rd (L)Pacific Hwy (L)Carters Rd to School.
2195	-	7:42 AM	Summerland Point	Departs Yeramba Rd & Summerland Rd via Yeramba Rd (R)Jillawong Rd (L)Warrina Av (L)Muraban Rd (R)Indra Av (R)Kullaroo Rd (L)Cams Bvd (7:49am) (L)Ginganup Rd (R)Government Rd, Summerland Rd (R)Kanangra Dr (R)Pacific Hwy (R)Carters Rd to School.
2198	-	7:49 AM	Blue Haven	Departs Bokhara Av & Pacific Hwy via Bokhara Av (L)Colorado Dr (L)Lady Laurel Dr (7:53am) (L)Kawana Av (R)McKellar Bvd (R)Roper Rd (L)Pacific Hwy (R)Pacific Hwy (L)Carters Rd to School.

AFTERNOON

Bus Number	Route Number	Time	Locations Serviced	Route Description
2799	-	2:35 PM	Lake Munmorah Budgewoi Halekulani	Departs School via (R)Carter Rd to St Brendan's Primary School (2:38pm) (L)Carters Rd (R)Pacific Hwy (L)Boronia Rd (L)Anita Av (R)Terence Av (L)Rosemount Av (2:49pm) (R)Elizabeth Bay Dr, Mimosa Rd (2:56pm), Durringo St (R)Central Coast Hwy (R)Noela Pl (L)Natuna Av (R)Sunrise Av (L)Lilo Av (L)Woolana Av to Central Coast Hwy (3:11pm).
-	98	2:35 PM	Chain Valley Bay South Kingfisher Shores	Departs School via (R)Carters Rd to St Brendan's Primary School (2:37pm) (L)Carters Rd (R)Pacific Hwy (R)Tall Timbers Rd (R)Scaysbrook Av (L)Jivy Av (2:46pm) (R)Lloyd Av (R)Elabana Av (R)Scaysbrook Av (R)Tall Timbers Rd (R)Lakeshore Av (R)Karoola Av to Tall Timbers Rd (2:53pm).
-	99	2:35 PM	Summerland Point	Departs School via (R)Carters Rd to St Brendan's Primary School (2:37pm) (L)Carters Rd (L)Pacific Hwy (L)Kanangra Dr (L)Summerland Rd (L)Yeramba Rd (2:52pm) (R)Jillawong Rd (L)Warrina Av (L)Muraban Rd (R)Indra Av (R)Kullaroo Rd (L)Cams Bvd (L)Ginganup Rd (R)Government Rd, Summerland Rd to Kanangra Dr (3:06pm).
2797	-	2:36 PM	Blue Haven	<b>FIRST SET DOWN ROPER RD</b> Departs School via (R)Carters Rd to St Brendan's Primary School (2:40pm), then to Roper Rd (L)McKellar Bvd (2:47pm) (L)Kawana Av (R)Lady Laurel Dr (R)Colorado Dr (R)Bokhara Av to Pacific Hwy (2:57pm).
2798	-	2:37 PM	San Remo Buff Point	Departs School via (R)Carters Rd to St Brendan's Primary School (2:40pm) (L)Carters Rd (R)Pacific Hwy (L)Wentworth Av (R)Denham St (2:55pm) (R)Barton Rd (L)Wentworth Av (L)Pacific Hwy (L)Pacific Hwy (2:59pm) (L)Goorama Av (L)Richardson Rd (3:04pm) (R)Wills Rd (R)Central Coast Hwy (R)Girraween St (L)Buff Point Av (L)Narambi Rd to Nacooma Rd (3:12pm).
2800	-	2:39 PM	Chain Valley Bay North	Departs School via (R)Carters Rd to St Brendan's Primary School (2:43pm) (L)Carters Rd (L)Pacific Hwy (L)Chain Valley Bay Rd (L)Mulloy Rd (L)Trevally Av (2:52pm) (R)Teragalin Dr (R)Mulloy Rd (L)Chain Valley Bay Rd (L)Houston Av (R)Findlay Av (R)Kariola St to Houston Av (2:59pm).
2796	-	2:43 PM	Manning Park Wyeec Point Wyeec	Departs School via (R)Carters Rd to St Brendan's Primary School (2:47pm)(L)Carters Rd (R)Pacific Hwy (2:54pm) (R)Ruttleys Rd (R)Vales Rd (R)Catherine St (L)Griffith St (L)Spencer Rd (R)Vales Rd (L)Greenway Av (R)Macquarie Rd (R)Waverley Rd (R)Vales Rd (R)Ruttleys Rd (R)Government Rd (L)High St (R)Bath St (3:18pm) (R)Bay St (R)Government Rd (R)Ruttleys Rd (L)Wyeec Rd to Wyeec Station (3:28pm).
2795	-	2:43 PM	Gwandalan	Departs School via (R)Carters Rd to St Brendan's Primary School (2:46pm) (L)Carters Rd (L)Pacific Hwy (L)Kanangra Dr (R)Orana Rd (R)Winbin Cr (L)Gamban Rd (R)Parraweena Rd (R)Kanangra Dr to Gwandalan Public School (3:06pm).



## Emergency services

Lake Munmorah is within the Tuggerah Lakes Police District. Head office is in Hely St, Wyong. There are also Police Stations in Main Road, Toukley and Denning St, The Entrance.

There are ambulance stations in Wyong and in Toukley and funding to upgrade these facilities with a second ambulance station in Wyong and a replacement station in Toukley was announced in 2017.

The site is within a bush fire prone area and there is a Lake Munmorah Rural Fire Brigade, located in Acacia Avenue.

Figure 45: Emergency services

The image shows a screenshot of the NSW Police website. At the top, there are logos for NSW Government and NSW Police Force, along with a search bar. Navigation links include NEWS, ONLINE SERVICES, CRIME, SAFETY & PREVENTION, CAN YOU HELP US?, ABOUT US, and RECRUITMENT. Below this, emergency contact numbers are listed: ALL EMERGENCIES Triple Zero (000), NON-EMERGENCY 131 444, and CRIME STOPPERS 1800 333 000. The main banner features a photo of mounted police officers on horses, with the text 'Tuggerah Lakes Police District' overlaid. Below the banner, there are two news snippets. The first is titled 'New Wyong and Toukley ambulance stations announced' and includes a photo of two men talking. The second is a Facebook post from 'Lake Munmorah Rural Fire' featuring the brigade's logo and the text 'Lake Munmorah Rural Fire Brigade @LakeMunmorahRFS'.

Source: NSW Police, NSW Health Infrastructure, Facebook

## 7. Employment

Currently shortage of employment opportunities is a concern for the community of Lake Munmorah.

At the 2016 Census, the proportion of those in the workforce who were full time employed (54.8%) was lower than for NSW overall (59.2%) and the proportion unemployed (7.5%) was higher than for NSW (6.3%).

The proportion of families with both parents working full time was lower than average for NSW (14.2% compared with 22.6% for NSW) and the proportion with both parents not working was higher (36.5% compared with 21.0% for NSW).

Figure 46: Employment and unemployment

Employment	Lake Munmorah	%	New South Wales	%	Australia	%
<i>People who reported being in the labour force, aged 15 years and over</i>						
Worked full-time	1,184	54.8	2,134,521	59.2	6,623,065	57.7
Worked part-time	728	33.7	1,071,151	29.7	3,491,503	30.4
Away from work	87	4.0	174,654	4.8	569,276	5.0
Unemployed	162	7.5	225,546	6.3	787,452	6.9
There were 2,161 people who reported being in the labour force in the week before Census night in Lake Munmorah (State Suburbs). Of these 54.8% were employed full time, 33.7% were employed part-time and 7.5% were unemployed.						
Employment - hours worked	Lake Munmorah	%	New South Wales	%	Australia	%
<i>Employed people aged 15 years and over</i>						
1-15 hours per week	240	12.0	364,637	10.8	1,218,823	11.4
16-24 hours per week	228	11.4	352,817	10.4	1,079,236	10.1
25-34 hours per week	254	12.7	353,702	10.5	1,193,445	11.2
35-39 hours per week	422	21.1	645,428	19.1	2,031,263	19.0
40 hours or more per week	763	38.2	1,489,099	44.1	4,591,801	43.0
Of employed people in Lake Munmorah (State Suburbs), 12.0% worked 1 to 15 hours, 11.4% worked 16 to 24 hours and 38.2% worked 40 hours or more.						
Employment status of parents in couple families	Lake Munmorah	%	New South Wales	%	Australia	%
<i>Labour force, parents or partners aged 15 years and over</i>						
Both employed, worked full-time	173	14.2	360,916	22.6	1,084,006	21.6
Both employed, worked part-time	38	3.1	63,106	4.0	203,596	4.1
One employed full-time, one part-time	243	19.9	329,567	20.6	1,086,460	21.7
One employed full-time, other not working	143	11.7	240,084	15.0	749,886	15.0
One employed part-time, other not working	68	5.6	96,933	6.1	302,037	6.0
Both not working	445	36.5	334,742	21.0	1,006,697	20.1
Other (includes away from work)	45	3.7	80,905	5.1	264,145	5.3
Labour force status not stated (by one or both parents in a couple family)	65	5.3	90,630	5.7	311,381	6.2
In Lake Munmorah (State Suburbs), of couple families with children, 14.2% had both partners employed full-time, 3.1% had both employed part-time and 19.9% had one employed full-time and the other part-time.						

Source: ABS 2016 Census

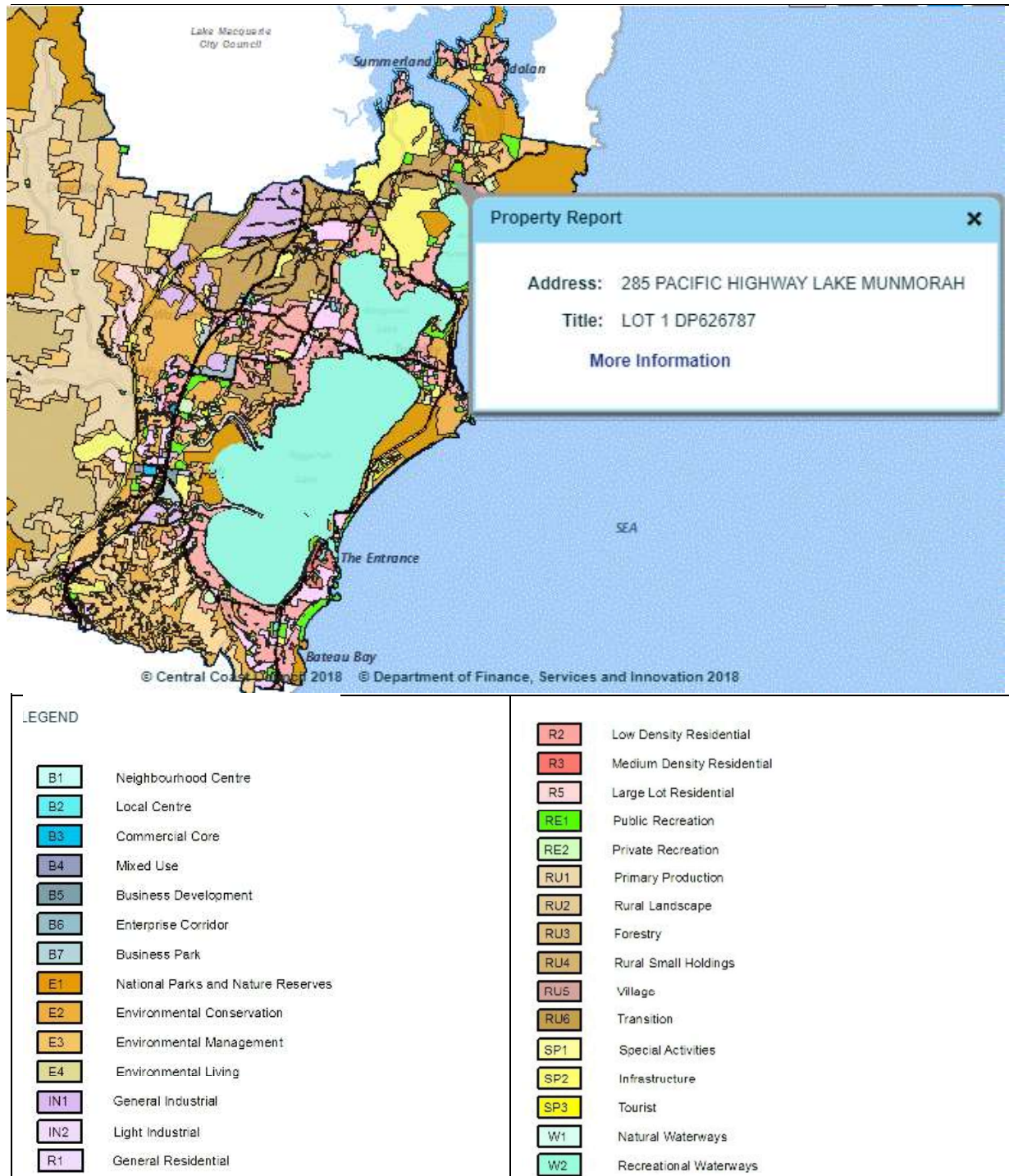
Currently Council's main strategy for encouraging employment in the area is to permit home-based businesses under State Environmental Planning Policy exempting these from compliant development codes.

Over the four proposed stages of development, this project will bring to the area substantial employment opportunities for a wide range of tradesmen and labourers working in:

- site preparation including, earth-moving, drainage and dam construction
- road building, installation of power lines and internet
- housing construction and landscaping, including walkways and recreational areas.

Future employment will presumably arise in the areas zoned B1, B2, B3, B4, B5, B6, B7 (commercial areas) and IN1, IN2 (industrial areas) and SP1, SP2, SP3 (Infrastructure and tourism).

Figure 47: Zoning of Wyong end of the Central Coast



Source: Central Coast Council website

---

## 8. On-site facilities to be provided for residents

Over the past 20 years, an extensive body of research and meta-analysis has emerged, concluding that social cohesion, measured by the levels of trust, reciprocity and formation of strong social bonds within communities, is an important factor in determining health, well-being and safety and there has been increasing interest in aspects of the built environment that may facilitate the development of social connectedness or “social capital”, through pleasant every day encounters and shared activities (Coleman, 1988; Putnam, 2000; Lin, 2001; Lin, Cook and Burt, 2001; Halpern, 2005; Glover, Shinew and Perry, 2005; Wood, Giles-Corti and Bulsara, 2012; Eriksson and Emmelin, 2013; Cooper, Fone and Chiaradia, 2014; Strange, Bremner, Fisher, Howat and Wood, 2017).

The proposed development will include on-site community facilities that will help to build a strong and cohesive community, rich in social capital.

These facilities will include:

- a substantial green corridor along the natural overland flow path;
- a dam in the north-eastern corner, with a contemplation jetty;
- picnic tables and barbeque facilities in open green space in the north-eastern corner, looking into the environmental area;
- a cycle path along the western side of the green corridor;
- stroller/wheelchair-friendly walkways;
- children’s play equipment and a shelter suitable for a mothers and infants play group at the south western corner, adjacent to the shopping centre, which could also serve for children’s birthday parties, a yoga class and other shared activities
- exercise stations to promote better health and friendly interactions through a shared activity.

Figure 48: Shelter for play groups and yoga

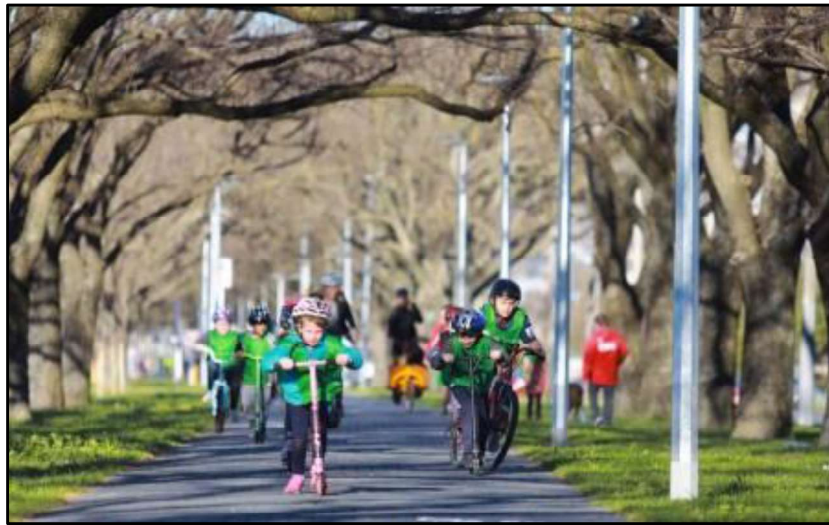


Figure 49: Exercise and play equipment



---

Figure 50: Proposed boardwalks and cycle paths

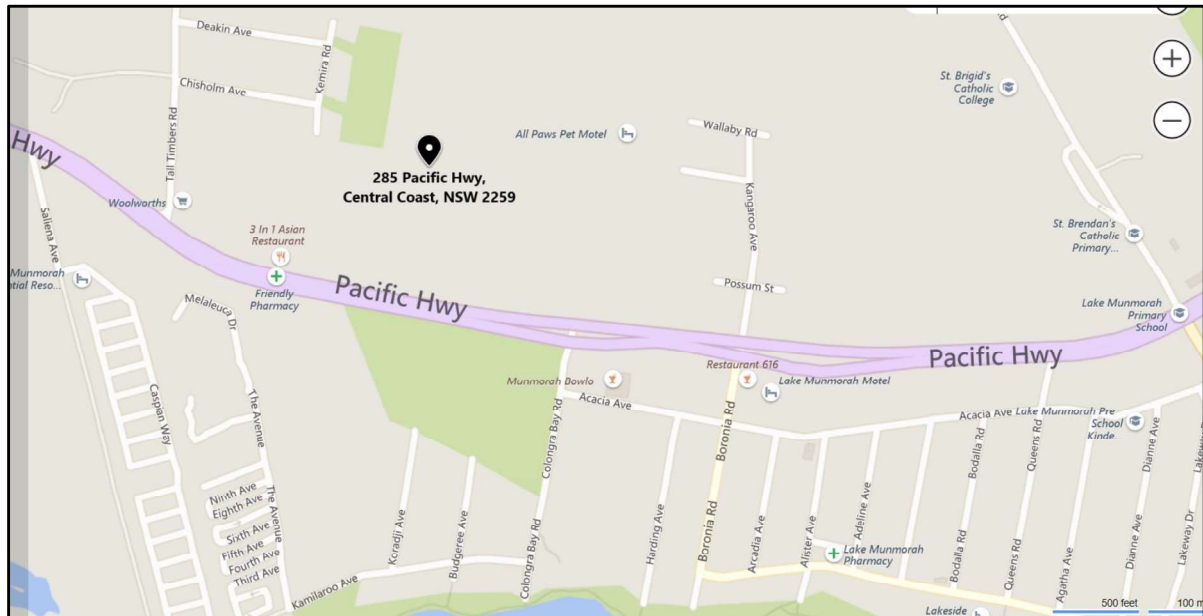


---

## 9. Impacts on near neighbours

Residents of houses in the closest streets (Kemira, Kookaburra, Wallaby and Possum and to a limited extent Kangaroo) were invited to comment on the prospect of having a large, new residential development close to their homes.

Figure 51: The site with surrounding streets



Some said the development would have no significant impact on them.

*"It's going to happen. I don't know that it will affect me."*

*"It won't affect me at all. No problem."*

*"I don't think it's much to do with me at all."*

*"I've got nothing against it. You can't stop progress. It doesn't worry me in the slightest."*

*"Some will be happy about it; some not, but it's inevitable with so much land."*

*"Doesn't bother me as long as they get the infrastructure right, which they never do. I don't mind it being built up as long as the roads are not afterthoughts."*

Some thought that increased population might bring positive changes including more Council and State Government expenditure in the area, an expanded shopping centre and more housing available for the next generation to buy or rent.

*"It's not a bad thing. Lake Munmorah has grown. It could only benefit us. More would be provided up this end of the Central Coast. We're the forgotten part."*

---

*“There are eight residential parks within two kilometres of here, so some housing that is not for retirees would be good. It’s impossible to get a rental around here. I think it would be a good support for Woolworths. We’d be keen to see that (shopping centre) expand. ...It’s suitable. It’s close to the ocean. Warnervale’s too hot.”*

*“Sounds good to me. More shops. More growth. That’s good for us.”*

*“It’s good. I’d like my son to be able to buy a home here so he can stay in the area.”*

*“Not a bad thing. It’d be busier at Woolies, but more shops would be a benefit. If it brings more facilities... There’s been talk of a skateboard park. If it brings Council plans forward...”*

*“There’s always impacts. Footpaths would be good. This is a good family environment. If it brings tennis courts or a park for family parties...”*

*“Maybe better infrastructure: gas, internet better. There’s nothing here for kids. The skate park hasn’t happened. It’s positive. Things will get better.”*

*“Property values will go up. We’ll get kerbing and guttering, more reliable power.”*

*“If it brings infrastructure forward, that would be something.”*

*“If there’s more people, they might fill in the gutters so I can get my caravan off my front garden. I’ve asked them to fill it in. My caravan will be on the road and registered if they fill in the gutters.”*

*“Maybe some things will get done. They’ll need to fix the power supply then. We have blackouts as it is. There’s no playgrounds or park for older kids. There’s been talk of a skate park. There’s no public transport. It’s the forgotten area.”*

Traffic flow was the main concern raised. Many said there were already traffic problems due to children being dropped off and picked up at roughly the same time from the four schools in Carters Road and that there was also congestion at the traffic lights at the Tall Timbers intersection with the Pacific Highway at peak times.

*“Traffic at the Tall Timbers lights is already backed up after school.”*

*“There’s a traffic issue in the school area.”*

*“My grandchildren go to school here, so the Link Road would be great for me.”*

*“The down side is increased traffic.”*

*“Will that make it impossible to park? I don’t know.”*

*“There’d be a lot more traffic to the area and traffic means pollution.”*

*“All the traffic. There’ll be no more kookaburras. We need a green area for the kids growing up in the area. Otherwise they’ll run amok. A skateboard ramp near the shops would be good.”*



---

*“Fixing up these feeder roads, not everyone going into it as it is. You need to bring people in and out from the back. Link Road. Every school kid’s parents will want to come in that way.”*

*“I always assumed Kemira Road would join the Link Road.”*

*“In and out from the Pacific Highway would be safest.”*

*“I hope it’s not through to Kemira. I’d prefer they went out to the Link Road. I don’t want a busy street. Yuck! We’re so happy here. No-one behind us. Just the bush.”*

*“There’s no buses here and no jobs. The only thing it will do is add to the traffic. The bridges all lead to one lane. It’s insane. There’s no infrastructure in place for any of it. People don’t know how to use buses. No education.”*

*“I’d prefer they used the Link Road. Who wants a bus coming past? Too noisy. I’m a shift worker and I need my sleep.”*

There was some resistance to growth, particularly the idea of their own streets becoming thoroughfares to provide access to and from the new residential development.

*“I don’t want this road to be busy. I prefer to see it green.”*

*“Kids. The children play a lot together. They cross the roads to visit each other and ride their bikes. There’s freedom and security here. It would increase the dangers and reduce the freedom.”*

*“I’d like to keep it as it is: a small community, a cul-de-sac. Quiet, private and safe.”*

*“I’d like to keep our streets dead end. We like our kids to ride their bikes there where there’s few cars and we can keep an eye out for them.”*

*“They’ll need slow down zones, chicanes, 50 kilometres.”*

*“There’ll be more traffic. The view is awesome now. Quiet. Too many houses.”*

*“I’m not for development. I like it here small and quiet and sectioned off. I don’t like too much growth. There’s more potential risk.”*

A few suggested adequate attention to drainage would be important.

*“Drainage is the first thing that has to happen.”*

*“There’s plenty of water. Drainage is very important. They’ll need bloody good drainage.”*

Some were concerned that the local schools might not have the capacity to accept more students. .

*“Aren’t the schools full now?”*

---

*“The schools can’t handle what’s there at the moment.”*

*“The primary school is at capacity now and there’s no land to build on.”*

Stuart Durie, Secretary of the Lake Munmorah Progress Association advised that the development proposal had been discussed at a meeting. Most of the discussion concerned traffic solutions and the proposal received no adverse comments.

*“The planning Proposal for the Pacific Highway was tabled at last Tuesday’s meeting of the Lake Munmorah Progress Association. There was some discussion around traffic solutions and it was generally well received with no adverse comments.”*

The Lake Munmorah Bowling Club currently has about 6,000 members and would particularly welcome younger new members.

*“We would support it, definitely. Great for us. Obviously very beneficial. We have about 6,000 members and it’s growing all the time, but the average age is about 67, so it would be good to have younger members joining to keep it alive for the future. We hope to get a set of lights so people can turn in here safely from the Pacific Highway and turn right safely when leaving. It would make sense to have an entry-exit point for the development at the same spot.*

There was general enthusiasm for the development amongst business owners in the Lake Munmorah shopping centre.

*“It’ll be good for our business. I wonder if the car park’s big enough.”*

*“Businesswise, it would be good.”*

*“From a business point of view, it would be good.”*

*“We’d get busier. It’s great! An increase in population would be good.”*

*“I think it’s good.” “I think it will be beneficial.”*

*“Potentially we’ll have more patients.”*

*“It will be positive, you’d think.”*

*“It might be good for us. More [people coming into the shop].”*

*“Maybe better for shops.”*

*“For me, happy. Shopping centre get bigger. More customers. No need to go to Swansea or Lake Haven or Tuggerah.”*

Please see page 59 for letters of support.

---

## 10. References

- Coleman, James S. Social Capital in the Creation of Human Capital. *American Journal of Sociology* 94/Supplement (1988): S95-S120.
- Putnam, Robert B *Bowling Alone: The Collapse and Revival of American Community*, NY: Simon & Shuster, 2000.
- Lin, Nan. *Social Capital: A Theory of Social Structure and Action*. Cambridge: Cambridge University, 2001.
- Lin, N, Cook, K and Burt, RS (Eds), *Social capital: Theory and research* New York: Aldine de Gruyter, 2001.
- Halpern, David. *Social Capital*. London: Polity, 2005.
- Glover, TD, Shiness, KJ and Perry, D: Association, sociability, and civic culture: The democratic effect of community gardening *Leisure Sciences*, 2005, V27 (1): 75–92.
- Wood, Lisa; Giles-Corti, Billie; Bulsara, Max Streets Apart: Does Social Capital Vary with Neighbourhood Design? *Urban Studies Research*; New York 2012.
- Eriksson, Malin and Emmelin, Maria: What constitutes a health-enabling neighborhood? A grounded theory situational analysis addressing the significance of social capital and gender. *Social Science & Medicine*, Oxford, Nov 2013, Vol. 97, p 112.
- Cooper, Crispin HV, Fone, David L and Chiaradia, Alain JF: Measuring the impact of spatial network layout on community social cohesion: a cross-sectional study *International Journal of Health Geographics*, London; 2014, V13, p 11.
- Strange, Cecily; Bremner, Alexander; Fisher, Colleen; Howat, Peter; Wood, Lisa: Local community playgroup participation and associations with social capital *Health Promotion Journal of Australia*; Milton Vol. 28, Iss 2, Aug 2017, pp 110-117.

---

## 11. Dr Rigmor Berg

Dr Rigmor Berg, Principal of BB Professional Services, aims to provide research that is enlightening, constructive and strategically useful, with clear conclusions and actionable recommendations, well supported by evidence. Her qualifications include BSc(Hons) PhD in Research Psychology, as well as Associate Professional Certificate in Expert Evidence. She has provided social impacts expert evidence in the Land and Environment Court for government, community and private sector clients. She is experienced in pure social research, integrative and evaluative research, using both qualitative and quantitative methods, often in combination.

Rigmor was Senior Researcher at the Independent Commission Against Corruption (ICAC) for three years and has taught Psychology and Women's Studies at Melbourne University, Bio-ethics at University of NSW and Marketing Research at the University of Technology Sydney, each over several years. She has mainly worked as an independent research consultant to all levels of government, community-based organisations, international organisations and the private sector and has held period contracts with the Australian Federation of AIDS Organisations, the National Relay Service and Centrelink Social Marketing Research Panel.

Australian Federal Government clients have included Australia Council, Centrelink, the Department of Health & Family/Human Services/Aged Care, Department of Immigration & Indigenous Affairs, Department of Social Security, Health Insurance Commission, National Centre in HIV Epidemiology and Clinical Research, Department of Family and Community Services and the Department of Education, Employment, Training and Youth Affairs.

State Government clients have included the NSW Departments of Health, Corrective Services, Community Services, Juvenile Justice, Education and Training and Attorney General; North Sydney and Central Coast, South Eastern Sydney and Illawarra, Western Sydney and Central Sydney Area Health Services and Communicable Diseases Branch of Queensland Health. Local government clients have included Gosford City and Hornsby Shire Councils. Other clients include World Health Organisation and Wellcome Australia.

Non-government organisation clients have included Seniors Rights Service, NSW Tenants Union, Maternity Action UK, Cancer Council of NSW, Diabetes Australia, Family Planning Association, the Australian Federation of AIDS Organisations, ACON, Queensland AIDS Council, Queensland Association for Healthy Communities, NSW Users and AIDS Association, NSW Association for Mental Health, Australian Arabic Welfare Council, the Gender Centre and the Inspire Foundation.

She has worked with a range of populations with special needs including people with HIV, people from culturally and linguistically diverse backgrounds, First Nations people, lesbians, gay men and transgender people, people in custodial settings, people who use drugs, sex workers, people with disabilities, seniors, vulnerable youth, people experiencing homelessness, people experiencing unemployment and tenants.

While most of her work has been undertaken as the sole or principal consultant, she has also collaborated with or been sub-contracted by other social research, social marketing or strategic planning organisations, including T Issues, Quay Connection, Urbis Keys Young, University of New England, Australian Centre for Health Promotion at Sydney University, C,W,F,S, Cultural Partners Australia and WestWood Spice.

Please see website for more information: <https://www.bbps.com.au/>

---

Dr Rigmor Berg was the sole or principal consultant for all projects listed in the following pages, except those marked by \*, for which she was a sub-contracted consultant.

### **Social impact research and expert evidence**

- Gosford City Council/PJ Donnellan & Co:
  - Social Impact Assessment re redevelopment of Tingari Residential Park for Land & Environment Court (LEC GCC vs Baker)
  - Social Impact Assessment re Erina Gardens and Karalta Court Residential Parks
  - Social impact opinion regarding proposed redevelopment of land at Mt White
- Longhill Planning/ Cameron & Myers: Social impact survey and expert evidence for Land and Environment Court case 975/2004 - Tommy Doran's Irish Pub, Wallarah Rd, Kanwal
- Longhill Planning/Hawkins Consortium: Social impacts assessment of a proposed vertical village and seniors living complex at Umina Beach
- Longhill Planning/QCare Australia P/L: Social impacts assessment of a proposed integrated seniors housing and aged care facility at Empire Bay
- Cameron & Myers/Gwynne Thompson: Review of literature addressing potential social impacts of proposed Killarney Vale bottle shop on the Central Coast of NSW
- Cameron & Myers: Social Impact Assessment of Proposed *Corea Bay Village* Residential Park at South Woy Woy
- Gwynne Thompson: Community Impacts Assessment concerning proposed IGA bottle shop in Marulan
- Nexus Environmental Planning Pty Ltd / PRJM Pty Ltd: Social Impacts Assessment concerning proposed residential park development in Glossodia
- The Cellar Group/Gwynne Thompson: Community Impacts of proposed Dan Murphy's bottle shop in Byron Bay
- NSW Tenants Union: Social impacts evidence concerning eviction of elderly long-term tenants in relation to the proposed Badgerys creek airport
- Hornsby Council/Storey & Gough: Social impact expert evidence for Land and Environment Court Proceeding No 10030 of 2006 (proposed childcare centre)
- Phillip Brand/ Cameron & Myers: Social Impact study and expert evidence for Liquor Administration Board related to Union Hotel Gosford
- De Cue Pty Ltd /Comino Prassas: Social impact expert evidence for Land and Environment Court class 4 proceedings No 40301 of 2006
- The Stevens Group: Social Impact Statement concerning the redevelopment of Melaleuca Caravan park at Port Macquarie
- Entasil: Social Impacts Statement concerning proposed bottle shop in Rozelle
- SJH Planning/Glynatsis: Social impacts assessment re Bella Café and Small Bar in Terrigal (Central Coast Council DA: 52739/2017)
- Poonsup/Storey & Gough: Social impacts of a proposed brothel in Gordon

### **Needs assessment and strategic review of services and programs**

- Sydney University College of Health Sciences: Strategic Review of All International Health Activities of Faculties and Institutes within the College
- NSW Health/Department of Health, Housing and Community Services: Evaluation of Innovative Health Services for Homeless Youth Program in NSW (10 youth services)

- 
- NSW Drug and Alcohol Directorate: Strategic Assessment of all Alcohol and Other Drug Services for Young People throughout NSW
  - WestWood Spice/National Relay Service Outreach:
    - National User Survey 2008, 2009, 2010, 2011, 2012, 2013
    - qualitative research concerning Indigenous Australians with hearing impairment
    - Needs assessment for promotion of the NRS to older men with hearing impairment
    - Needs Assessment for Indigenous Users
    - Research concerning awareness of NRS amongst professional intermediaries
    - Needs assessment for and testing of responsive website design for mobile devices
    - User Experience Consultation concerning NRS App
    - TTY Users Project, including survey of Speak & Read users and focus groups with Type & Read users
  - UnitingChurch Burnside/Division of General Practice/NSW Department of Community Services (with T Issues Consultancy): Evaluation strategy for RAPT AOD Project (Reconnecting Adolescents and Parents Team) AOD Project; Year 1 Review of RAPT AOD Project; Final Evaluation of RAPT AOD Project
  - Australian Federation of AIDS Organisations: Evaluation of Education Program 2012-2014, including intellectual leadership and capacity development components, plus
    - *Ending HIV* national campaign
    - *The Drama Downunder* national campaign
    - *Time to Test* national campaign
    - *Your Body Blueprint* website
    - *Condoman* website
    - *Our Team* booklet
    - *Taking a Look* booklet
    - *Us Mob and HIV* booklet
    - *Our Destiny Haz Arrived* print resources.
  - AIDS Council of NSW / ACON:
    - Evaluation of Trashy Queens Tribes Project;
    - Evaluation of NSW Deaf Communities HIV Project;
    - Fun and Esteem Gay Youth HIV Project Evaluation data analysis;
    - HIV Education Needs Assessment data analysis;
    - Evaluation of The Luncheon Club (health promotion for HIV+ people)
  - Department of Community Services/urbis keys young\* Family Access to Prisoners
  - Australian Federation of AIDS Organisations: Process and Outcome Evaluation of Gay Education Strategies Program, including:
    - *Withdrawal* campaign,
    - *Relationships* campaign,
    - *Oral Sex* campaign,
    - *Negotiated Safety* campaign,
    - *One Community* campaign,
    - *Getting in Focus* campaign,
    - *Living in the Epidemic* campaign,
    - *Asian Gay Proud* campaign,
    - *Gay Youth* campaign,
    - *NTAC Mensline*,
    - AACACT referral cards,
    - *TasCARD Bass Strait is Not a Barrier* campaign,
    - conferences, workshops, manuals and other resources
  - Australian Federation of AIDS Organisations:
    - Assessment of Information Needs of People with HIV from Culturally and Linguistically Diverse Backgrounds;

- 
- Evaluation of Reflexive Practice Workshop;
  - Evaluation of Gay Educators' Conference;
  - Review of AFAO/NAPWA Education Steering and Education Strategies Groups
  - PLWHIV community consultation concerning health promotion needs in relation to a proposed website addressing preventable illness
  - The Aged-care Rights Service (TARS):
    - Review of Client Intake, Flow and Support Processes
    - Quality Assurance Study for Retirement Villages Legal Service
    - Rebranding consultations with staff and potential clients
  - NSW Users and AIDS Association:
    - Review of User's News (with Julie Bates)
    - Evaluation of Goulburn Koories Tribes Project
  - Queensland Health Communicable Diseases Branch HIV/AIDS, Hepatitis C and Sexual Health Program: Sex Workers Assessment of Needs 2008 (with Julie Bates), followed by establishment support for a community-based organisation to deliver a health promotion program for sex workers, including community workshops, development of policies and procedures, strategic, operational and implementation plans and evaluation strategy using a Hierarchy of Outcomes framework
  - NSW Department of Corrective Services Prison AIDS Project/Commonwealth Department of Health, Housing and Community Services: Evaluation of National AIDS in Prisons Information Clearing House (NAIPIC)
  - Queensland Association for Healthy Communities:
    - Evaluation of HIV, HCV and STIs Program for Gay and other Men who have Sex with Men (including Two Spirits Indigenous Program), including development of conceptual diagram, stakeholder consultations, community focus groups and audit against national benchmarks
    - Review of Best Practice in Group Work with Gay Men
  - HIV and Related Programs (HARP) Unit of South Eastern Sydney and Illawarra Health Region: Gap Analysis of Services for Sex Workers At Risk (with Julie Bates and Christine Harcourt)
  - AIDS and Infectious Diseases Branch, NSW Dept Health:
    - Impact evaluation of CEIDA HIV/AIDS Training Program for drug treatment and needle exchange workers;
    - Evaluation of Needle and Syringe Vending Machine Strategy;
    - Evaluation of HIV/AIDS Education Arabic Speaking Community Project
  - Health Insurance Commission/ Keys Young\*: Strategies for Improved Aboriginal Access to Medicare and Pharmaceutical Benefits telephone survey of Aboriginal Health Services
  - Office of Aboriginal and Torres Strait Islander Health Services/ Keys Young\*: Mid-term Review of National Indigenous Australians Sexual Health Strategy
  - Department of Health and Family Services/Keys Young\*: Evaluation Strategy for Aboriginal and Torres Strait Islander Mental Health Action Plan
  - ATSIC/Keys Young\*: Evaluation of ATSIC Service Charter and Complaints Management
  - ACON Sex Workers Outreach Project (SWOP): Review of All Information Resources (with Julie Bates)
  - Family Planning Association/Juvenile Justice Department: Evaluation instruments for *Thinking Through Adolescent Sexuality* workshop

- 
- Inspire Foundation/Mental Health Branch, Department of Human Services and Health: Evaluation of *Reach Out!* national youth suicide prevention project
  - Western Sydney Area Health Service: Assessment of HIV/STD education needs of young people in Western Sydney
  - Qld EPA /\*T Issues: evaluation tool design and data analysis for Waste Education Strategic Review
  - Department of Community Services: Review of Services for Vulnerable Youth throughout NSW in relation to Youth Services Database Pilot Project
  - Commonwealth Department of Health, Housing and Human Services/ Sydney Sexual Health Centre: Process and Impact Evaluation of National HIV Contact Tracing Seminar
  - Gender Centre/NSW Health: Evaluation of Health Service Providers Training
  - NSW Department of Health/Cultural Partners: Evaluation of Play Now Act Now Youth Alcohol Film Project
  - Department of Education, Employment, Training and Youth Affairs/ Keys Young\*: Strategies for Disadvantaged Job Seekers telephone survey of key informants
  - Department of Education, Employment, Training and Youth Affairs/ Centrelink/Keys Young\*: Post Implementation Review of Jobs Network Access
  - Australia Council/Quay Connection\*: Community Cultural Development Fund National Models Project Evaluation

### Concept testing and evaluation of campaigns and information resources

- Cellblock Youth Health Centre/NSW Department of Health: Concept testing and evaluation of *Health Information Project for Homeless Youth (HIP comics)*; Concept testing and evaluation of *Youth Alcohol Project (YAP comics)*
- Drug and Alcohol Directorate/Centre for Education and Information on Drugs and Alcohol:
  - Concept testing, evaluation of Amphetamines Campaign (*Speed Wise Speed Safe*)
  - Concept testing of minor tranquillisers information brochure for women
  - Drink Drunk Campaign: Concept testing of alcohol and violence comic
- Social Change Media/Mental Health Branch, Department of Human Services and Health: concept testing and evaluation of *Parenting* booklets and materials for radio
- National Relay Service Outreach/ WestWood Spice:
  - Concept testing of information resources and advertisements targeting older men and their families
  - concept testing of general promotional brochure
  - testing of new website design
  - testing of viral promotional video
  - testing of responsive version of website for small screen mobile devices.
- NSW Association for Mental Health: Evaluation of the Mental Health Information for Regional and Remote Australia (MHIRRA) service
- MedAct /Maternity Action (UK):
  - Concept testing of *Reaching Out Project: Maternity Access and Advocacy Pack*
  - Evaluation strategy and instruments for *Maternity Rights at Work* Project
  - Evaluation strategy for *Maternity Rights* website for service providers.
- Centrelink/FaCS:
  - Customer consultation concerning sole parent review process;



- 
- Evaluation of new format *Age Pension News*;
  - Focus testing of *You and Your Family* December, 1997 and March, 1998;
  - Market testing of SA316 (residential aged care fee subsidy form and booklet)
  - Focus testing of Commonwealth Seniors Health card claim form and brochure
  - Department of Social Security (with Juliet London):
    - Concept testing of *TeleService* promotional materials
    - Concept testing of information resources concerning changes to Age Pension eligibility age
    - Concept testing of change of Age Pension eligibility (extended deeming) information resources
    - Concept testing of Age Pension *All you need to know* booklet
    - Concept testing of Age Pension *Investing money: Your choices* booklet
    - Concept testing of *Moving House: Your choices* booklet
  - AIDS Council of NSW: Evaluation of Social Marketing Program 2001-2002, including
    - *Safe Summer campaigns*;
    - *Consider This*;
    - *When You're Hot, You're Hot* (SOPV booklets);
    - *On Any Street* (Anti-Violence Project),
    - *Relationships* magazine;
    - *15%* campaign
  - Australian Federation of AIDS Organisations/National Association of People With HIV/AIDS: Concept testing / impact evaluation of:
    - *Indigenous Sistergirl* posters
    - Indigenous gay men and sistergirl life stories project for radio
    - *Everyday Pleasures* campaign
    - *Parties* campaign
    - *Overseas Travel* campaign
    - *Regional Travel* campaign
    - *Young Gay Men* campaign
    - *Standards of Care* booklet for people with HIV
    - *HIV+ Gay Sex* booklet
    - *Unprotected Anal Intercourse/ Clinical Markers* campaign
    - *HIV Survival Guide; HIV Treatments Breaks* Campaign
    - *Sexually Transmissible Infections* poster
    - *Sex In Queer Places* interactive website
    - booklet for people newly diagnosed with HIV
    - *Having a Life* resource for HIV positive people
    - *Side Effects* resource for positive people
  - AIDS Council of NSW: Concept testing of
    - *Summer 2002* materials
    - *Relationships* magazine
    - *Post-Exposure Prophylaxis* posters
  - Central Sydney Area Health Service: STIGMA HIV/STI testing interactive website and campaign print materials
  - Wellcome Australia/C,W,F,S: HIV Early Treatments Information Campaign: concept testing and benchmark research


---

## Other research services

- World Health Organisation Global Program on AIDS: Multi-centred Sex Industry Research Project research guidelines and Australian component of field work (with Julie Bates)
- National Centre in HIV Epidemiology and Clinical Research: HIV Related Malignancy Study questionnaire design
- UTS School of Marketing\*/ Goodman Fielder: Attitudes to Gelatine in the Asia Pacific
- Department of Ageing, Disability and Home Care/Sydney University: Facilitation of action research to define best practice in systemic conferencing with clinicians
- Queensland Health/University of Queensland: Data collection from Torres Strait Islander gay men/sistergirls to inform health promotion programs
- World Health Organisation/\*Australian Centre for Health Promotion: Tobacco Control Workshop for the Asia Pacific Region Needs Assessment (consultation Senior Health Executives in China, India, Indonesia, Korea, Japan, Malaysia, Papua New Guinea, Tuvalu, Solomon Islands, Tonga, Samoa, Thailand, Vietnam, Micronesia, Taiwan, Fiji, Vanuatu)
- Health Insurance Commission/Cultural Partners: project management, questionnaire design and data analysis for Overseas Drug Diversion Program Second Evaluation
- Diabetes Australia/Quay Connection\*: Facilitated round table discussions to identify priorities for a Diabetes Public Awareness Strategy
- Cancer Council NSW: Preparation of scientific paper for submission to Standards Australia, *Measurement and Reporting of Broad Spectrum Capability in Sunscreens*
- School of Public Health, Sydney University: Preparation of research brief for independent marketing research tender
- Matthew Myers:
  - research towards paper addressing ways to improve access to Family Dispute Resolution Services for Aboriginal people
  - preparation of paper addressing the evidence of children and of expert witnesses in cases before the Family and Federal Magistrates Courts involving allegations of child sexual abuse.

## Training/Manuals/Workshops

- NSW Department of Corrective Services: Drug and Alcohol Harm Reduction Education Manual (and later adaptation for Indigenous Inmates)
- NSW Department of Corrective Services/ University of New England, Northern Rivers\*: Prison Officer HIV Training Program design
- Central Coast Area Health Service: Consultant trainer in HIV prevention, HIV support, HIV legal and ethical issues over three years for diverse human services professionals
- ASP Plastics *Fitpack Disposa-Safe*: Consumer Stakeholders facilitated workshop addressing safe disposal of injecting equipment
- NSW Association for Adolescent Health: Best Practice in Youth Health Services (facilitated two day workshop, followed by production of best practice manual)
- NSW Attorney General's Department: Manual of Policies and Procedures for Youth Drug Court Pilot Program
- NACAIDS: HIV Counselling Manual for Telephone Counsellors; HIV Counselling Manual for Campus Counsellors

- 
- 
- Network of Alcohol and Drug Agencies: HIV Education, Counselling and Support Manual
  - 5th National AIDS Conference: HIV training of venue staff and community liaison
  - University of Technology Sydney: Lecturer in Marketing Research, School of Marketing for 3 years
  - University of NSW: Lecturer in Bioethics, School of Medical Education; Lecturer in Medical Ethics and Health Law, School of Community Medicine for 4 years.

### **Strategic Planning**

- Seniors' Rights Service: development of 2015-2020 Strategic Plan
- ANET (Australian Federation of AIDS Organisations – National Association of People with AIDS Education Team): Membership consultation and development of 2011-2015 Five Year Strategic Plan (with Ross Duffin)
- Communicable Diseases Branch, Queensland Health / Respect Inc: Mentoring assistance with development of first 3 year strategic plan, operational plan and agency implementation plans for Year 1; Design of program logic conceptual diagram, evaluation strategies and tools
- NTARF (Northern Territory Aboriginal Health Forum): facilitation of strategic planning day
- Araluen Cultural Precinct, Alice Springs: Facilitation of strategic planning day.

## 12. Letters of support



Acacia Ave Lake Munmorah NSW 2259  
ABN 24 000 639 314  
Phone. (02) 4358 8519  
Email. info@munmorahbowling.com.au

15 January 2019

To Whom It May Concern

Re: Lake Munmorah Rezoning Precinct Plan

I am the Chief Executive Officer of the Munmorah United Bowling Club Limited. The Club is in close proximity of the proposed development of the Lake Munmorah planning proposal for 285, 295 and 305 the Pacific Highway Lake Munmorah.

The Munmorah United Bowling Club is a not-for-profit entity with over 6,000 members. The Club is regarded by many as a meeting place for the Lake Munmorah community. The Club is a major sponsor of numerous sporting associations and provides financial support to the local schools by way of bursaries and scholarships. In 2018 the Club donated over \$74,000 to the local community.

On behalf of the Board of Directors, the Club fully supports the proposed development of the Concept Precinct Layout of lots 285, 295 & 305 on the Pacific Highway Lake Munmorah. The Board and management of the Club are fully aware of the proposed 300 new home sites and feel that the development will be a genuine boost to local business, sporting teams and the education precinct. The development will inject much needed funds into the local community that will create employment in all facets of business and allow the township of Lake Munmorah to prosper.

The Club sincerely encourage the approval of the development.

Your faithfully

A handwritten signature in blue ink, appearing to be "Alex Moore", written over a light blue circular stamp.

Alex Moore  
Chief Executive Officer  
For and on behalf of the Board of Directors



[www.munmorahbowling.com.au](http://www.munmorahbowling.com.au)

---

**LAKE MUNMORAH PROGRESS ASSOCIATION**

Dr Rigmor Berg  
Principal  
BB Professional Services  
928 Bourke St  
ZETLAND NSW 2017

Dear Dr Berg

**RE: Planning Proposal 285, 295 + 305 Pacific Highway Lake Munmorah**

Thank you for providing the concept precinct layout of the above mentioned planning proposal. The layout and supporting plans were tabled at a meeting of the Association on 11<sup>th</sup> December 2018 and the latest version was tabled on 12<sup>th</sup> February 2019. The plan was well received and there have been no adverse comments.

In support of the proposal, it was noted that the planned subdivision will be in close proximity to the proposed Regional Skate Park and Recreation facility to be constructed by Central Coast Council on the corner of Tall Timbers Road and the Pacific Highway.

The community is generally supportive of the expansion of the nearby Woolworths Shopping Complex and it is hoped that proposals of this nature will help sustain the second Stage.

Yours sincerely



Stuart Durie JP  
Secretary & Publicity Officer  
Lake Munmorah Progress Association  
PO Box 6009  
Lake Munmorah 2259  
02-43581052 - 0411257721

20<sup>th</sup> February 2019