Moruya and Narooma Parking Study

FOR

**EUROBODALLA SHIRE COUNCIL** 



Gold Coast Suite 26, 58 Riverwalk Avenue Robina OLD 4226 P: (07) 5562 5377 W: www.bitziosconsulting.com.au Brisbane Level 2, 428 Upper Edward Street Spring Hill QLD 4000 P: (07) 3831 4442 E: admin@bitziosconsulting.com.au

Sydney Studio 203, 3 Gladstone Street Newtown NSW 2042 P: (02) 9557 6202

Project No: P0635

Version No: 001

Issue date: 16 February 2011



### **DOCUMENT CONTROL SHEET**

#### **Issue History**

Report File Name	Prepared by	Reviewed by	Issued by	Date	Issued to
P0635.001R Moruya and Narooma Parking Study	A. Finlay	D. Bitzios	A. Finlay	17/02/11	Geoff Armstrong
					Eurobodalla Shire Council



Copyright in the information and data in this document is the property of Bitzios Consulting. This document and its information and data is for the use of the authorised recipient and this document may not be used, copied or reproduced in whole or in part for any purpose other than for which it was supplied by Bitzios Consulting. Bitzios Consulting makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or its information and data.

# CONTENTS

		Page
1.	Background	1
2.	METHODOLOGY AND KEY ASSUMPTIONS	2
2.1 2.2	Methodology Key Assumptions	2 2
3.	Moruya Township Parking Assessment	3
3.1 3.2 3.3 3.4	Study Area Moruya Parking Requirements Moruya Parking Survey Determination of the Need for Pay Parking	3 4 5 5
4.	NAROOMA TOWNSHIP PARKING ASSESSMENT	6
4.1 4.2 4.3 4.4	Study Area Narooma Parking Requirements Narooma Parking Survey Determination of the Need for Pay Parking	6 7 8 8
5.	RECOMMENDATIONS	9

#### Tables

Moruya Block Details
Moruya Parking Requirements (non-residential)
Moruya Occupancy Surveys
Narooma Block Details
Narooma Parking Requirements (non-residential)
Narooma Occupancy Surveys

### Figures

Figure 3.1:	Moruya Parking Study Area
Figure 4.1:	Narooma Parking Study Areas

### Appendices

Appendix A:	Moruya Calculation Worksheets
Appendix B:	Moruya Parking Surveys
Appendix C:	Narooma Calculation Worksheets
Appendix D:	Narooma Parking Surveys

# 1. BACKGROUND

Eurobodalla Shire Council has engaged Bitzios Consulting to undertake a parking study of the three major business centres in the shire: Batemans Bay, Moruya and Narooma. The study brief was to provide advice relating to future parking needs, future parking policy requirements and to assess the need for additional pay parking schemes. A key component of these investigations was to identify the need for "consolidated" or shared parking areas rather than only requiring each development to provide site-specific parking. The use of common parking areas, and generating schemes for developments to contribute towards constructing/upgrading these parking areas will potentially allow better site-specific outcomes to be achieved, particularly for smaller sites and particularly those sites with shop fronts and limited or no on-site parking.

This report covers parking needs for the Moruya and Narooma town centres based on a review of the development potential of each centre and the associated development-related parking demands generated. It also includes the results of parking occupancy surveys undertaken in December 2010 and January 2011 in order to quantify existing parking demands, and to determine the need for pay parking.

A separate report will be provided for Batemans Bay.

# 2. METHODOLOGY AND KEY ASSUMPTIONS

### 2.1 METHODOLOGY

Each centre was investigated in two parts. Part 1 was the assessment of future parking needs based on Eurobodalla Shire Council Planning Scheme "code" rates. Part 2 provides a broader parking policy and strategy with consideration of the potential need for pay parking in accordance with RTA requirements.

Part 1 of the work involved identifying, under the Local Environment Plan (LEP), changes in floor space allowable in each "block" within each township. Any key development sites already identified were overlaid to establish floor space growth by type of use by block in each study area.

The development parking rates contained in the Eurobodalla Shire Council Planning Scheme were then applied at block level to determine what additional parking will be required under "full development". This data was then assessed spatially (in GIS) to determine the best strategy of aggregating this supply to key, consolidated parking areas.

This process involved:

- identifying potential sites for parking stations, their area, tenure/ownership (through Council) and access opportunities; and
- based on the location and size of available sites, determine the number of levels of parking required in consolidated parking stations or whether a balance needed to be struck between the amount of parking provided in consolidated off street parking "stations" and what amount should be provided on site for specific developments.

Key outputs for Part 1 for each centre include:

- maps/tables showing recommended sites for consolidated parking and the number of bays each would require (including number of levels if relevant); and
- how to achieve consolidated parking stations, as well as any balance between on-street/off-street parking required. Staging of development/construction of these parking areas were a key consideration.

Part 2 involved the analysis of parking demand and supply data, based on two surveys of parking space occupancy. The first survey was conducted on a 'normal' weekday (Thursday 2<sup>nd</sup> December 2010), while the second was conducted on a 'tourist-peak' weekday (Thursday 6<sup>th</sup> January 2011). Both surveys consisted of recording the number of parking spaces occupied in each 30 minute period between 10:00am and 4:00pm. The results of the surveys provided an occupancy proportion, and indicated the level of need for a pay parking scheme that would increase parking space turnover.

#### 2.2 KEY ASSUMPTIONS

From information supplied by Council, and from discussion with Council officers, it is clear that Moruya and Narooma will continue to be of a lesser scale of development than Batemans Bay. These areas are also subject to flooding and/or tidal inundation in some parts of each town. Accordingly, in such areas that were zoned "B2" it was agreed to adopt a future year (2030) development scenario growth of 20% more than the existing floor space. Further, in these same areas, it was assumed that the types of development would be 50% retail, 25% commercial, and 25% residential (most likely in the form of shop-top housing).

Some of the blocks in Moruya and Narooma are zoned "R3". For these blocks, it was assumed that the future development would be 80% low density residential (typically 600m<sup>2</sup> blocks), and 20% motels or similar. The floor space ratio according to the LEP was applied in the R3 zones, but not in the B2 zones.

Further, it was assumed in all cases that parking spaces required for residential land use types would be provided on-site due to the practicalities of selling this type of development, whereas spaces for other development could be provided by a combination of on-site and consolidated public car parking.

# 3. MORUYA TOWNSHIP PARKING ASSESSMENT

### 3.1 STUDY AREA

The study area is shown in Figure 3.1. It extends from the Moruya River in the north and straddles the Princes Highway (Vulcan Street) through the town centre to Campbell Street in the south. All blocks are zoned B2 in the LEP, except for the south western block which is a mixture of R3 and RE1. Details of each block are contained in Table 3.1 below.

Table 3.1:	Moruya Block Details
------------	----------------------

Block No.	Bounded by Roads	LEP Zoning	Area (m²)	Flood or Tide Affected?
M1	Vulcan Street, Church Street and the River	B2	3,177	Yes
M2	Vulcan Street, Shore Street, Church Street	B2	8,511	Yes
M3	Vulcan Street, Church Street, Queen Street	B2	4,830	Partly
M4	Vulcan Street, Church Street, Ford Street, Queen Street	B2	14,025	Yes
M5	Vulcan Street, Queen Street, Page Street, Mirrabooka Avenue	B2	16,614	Partly
M6	Vulcan Street, Mirrabooka Avenue, Page Street, Campbell Street	R3 & RE1	13,613 (R3 only)	Partly
M7	Vulcan Street, Queen Street, Ford Street, Campbell Street	B2	32,642	Yes
M8	Queen Street, Ford Street (BiLo site)	B2	8,736	Yes



#### Figure 3.1: Moruya Parking Study Area

In discussion with Council staff, it was agreed to include the swimming centre car park in the north east, in the assessment of existing car parking spaces.

### 3.2 MORUYA PARKING REQUIREMENTS

The detailed calculations for future parking requirements in Moruya are contained in Appendix A. A summary of each block's zoning, existing supply, estimated future demand and future surplus/deficit is shown in Table 3.2.

Block No.	LEP Zoning	Existing Spaces	Required Spaces	Surplus	Deficit
M1	B2	57	47	16	
M2	B2	235	108	127	
M3	B2	15	61		46
M4	B2	236	179	57	
M5	B2	126	211		85
M6	R3 and RE1	69 (R3 only)	0		
M7	B2	223	416		193
M8	B2	111	111		

Table 3.2: Moruya Parking Requirements (non-residential)

In seeking to address the future deficiencies in parking spaces, it is prudent to consider the ability to share spaces in a common public parking area. A reasonable rule of thumb applied in these calculations is that it is reasonable to walk up to a maximum 200 metres to or from a parking station to the ultimate destination.

In block M1, although there is a surplus of 16 spaces Council has expressed a need to increase the availability of parking for the businesses on the western side of Vulcan Street. Accordingly, the spaces in the existing car park off Church Street should be limited to two hours. There are unrestricted parking spaces nearby on Church Street for those requiring a longer duration.

With the inclusion of the swimming centre car park, the parking space supply in block M2 is increased (by 31 spaces) to 235, and the surplus to 127. Council has suggested that the swimming centre car park could be redesigned to maximise spaces, and it would appear possible to create a total of 50 spaces. This would take the total M2 supply to 254, with a surplus of 146. It is suggested that this surplus can be used by adjacent blocks and the weekly markets in nearby Riverside Park.

The parking space requirement of block M3 (a deficit of 46) could be met by the surplus of 57 spaces in block M4, immediately across Vulcan Street. There appears to be at least one arcade that would facilitate access to the car parks behind the businesses on the eastern side of Vulcan Street.

Block M5 has a deficit of 85 spaces and is directly opposite Block 7 (the very large block), with a deficit of 193 spaces. Council owns land (Lot 80 of DP613866) on the southern side of Mirrabooka Avenue to the west of the existing car park on the northern side. This land, together with another one or two lots nearby, could be used to create another car park, and thus help to address the parking deficit in blocks M5 and M7, given that there is a public access pathway in Vulcan Street, opposite Mirrabooka Avenue.

Block M7, with a deficit of 193 spaces, has several medium size car parks at its core, accessed via Ford Lane and a drive off Queen Street. Future developers of the undeveloped land on the western side of Ford Street between Queen Street and Ford Lane (Lot 200 of DP855112 and Lot 101 of DP776235) should be required to provide all necessary parking on-site.

## 3.3 MORUYA PARKING SURVEY

The overall parking occupancy rates from the parking surveys in Moruya are shown in Table 3.3.

Start Time	2 <sup>nd</sup> D	ecember S	mber Survey 6 <sup>th</sup> January Survey			Occupancy Difference December -January		
	Occupied	Vacant	% Occupied	Occupied	Vacant	% Occupied	January +/-	% more in January
10:00	603	450	57%	640	413	61%	37	4%
10:30	594	459	56%	677	376	64%	83	8%
11:00	636	417	60%	706	347	67%	70	7%
11:30	639	414	61%	733	320	70%	94	9%
12:00		Not Counte	ed	736	317	70%		
12:30	627	426	60%	688	365	65%	61	6%
13:00	627	426	60%	660	393	63%	33	3%
13:30	566	487	54%	669	384	64%	103	10%
14:00	562	491	53%	688	365	65%	126	12%
14:30	540	513	51%	653	400	62%	113	11%
15:00	536	517	51%	615	438	58%	79	8%
15:30	500	553	47%	611	442	58%	111	11%
TOTAL	6,430	5,153	56%	8,076	4,560	64%	910	8%

Table 3.3:Moruya Occupancy Surveys

Total available spaces = 1,053

It can be seen that the maximum occupancy rate of 70% occurred in the 11:30am to 12:30pm period of the January survey. The greatest occupancy increase (between the December and January surveys) occurred in the 2:00pm time period. The average occupancy in December was 56%, while in January it was 64%. The detailed survey results, shown on maps by time period are in Appendix B.

#### 3.4 DETERMINATION OF THE NEED FOR PAY PARKING

Clear requirements in the RTA Pay Parking Policy for the justification of pay parking include:

- to provide equitable access;
- for "rationing" on street spaces where demand exceeds supply; or
- to achieve public transport objectives.

The level of demand and the level of public transport provision in Moruya do not provide sufficient justification for the introduction of pay parking.

# 4. NAROOMA TOWNSHIP PARKING ASSESSMENT

### 4.1 STUDY AREA

The study area is shown in Figure 4.1. It comprises two precincts: "The Flat" and the "Town Centre". The Flat precinct extends from the Wagonga Inlet in the north to McMillan Road in the south east. This precinct is subject to flooding and tidal inundation, and both blocks are zoned B2 in the LEP. The Town Centre precinct is in a higher part of the town and extends from Wharf Street in the north to Garvan Lane in the south. It is a mixture of B2 and R3 zones. Details of each block are contained in Table 4.1 below.

Block No.	Bounded by Roads	LEP Zoning	Area (m²)	Flood or Tide Affected?
N1	Princes Highway, Burrawang Street, Graham Street, Field Street	B2	14,371	Yes
N2	Princes Highway, McMillan Street	B2	5,034	Yes
N3	Campbell Street, Bowen Street	R3	10,087	No
N4	Campbell Street, Wharf Street, Iane opposite Bowen Street	R3	11,736	No
N5	Wagonga Street, Bowen Street, Canty Street	B2	11,363	No
N6	Wagonga Street, Montague Street, Angle Street, Wharf Street, lane opposite Bowen Street	R3 & RE1	8,827	No
N7	Wagonga Street, Canty Street Carvan Street, Garvan Lane	B2	9,346	No
N8	Wagonga Street, Montague Street (B2 zone)	B2	7,190	No

Table 4.1: Narooma Block Details



Figure 4.1: Narooma Parking Study Areas

### 4.2 NAROOMA PARKING REQUIREMENTS

The detailed calculations for future parking requirements in Narooma are contained in Appendix C. A summary for each block follows in Table 4.2.

Block No.	LEP Zoning	Existing Spaces	Required Spaces	Surplus	Deficit
N1	B2	208	184	24	
N2	B2	83	64	19	
N3	R3	76	0		
N4	R3	47	0		
N5	B2	127	145		18
N6	B2	102	112		10
N7	B2	40	120		80
N8	B2	25	92		67

 Table 4.2:
 Narooma Parking Requirements (non-residential)

Although the calculations suggest there is a surplus of parking in The Flat precinct (Blocks N1 and N2), Council is aware of local complaints about lack of parking in the tourist season. To address this perceived shortfall, the following actions are proposed:

- introduce two hour parking limits for the available on-street spaces in Field Street between the Princes Highway and Graham Street;
- introduce two hour parking limits for the available on-street spaces in Burrawang Street between the Princes Highway and Graham Street;
- construct an indented kerb on the western side of Burrawang Street between Graham Street and the Princes Highway, in order to create parallel parking spaces;
- install blue 'P' parking signs with appropriate arrows, in order to direct Princes Highway motorists to the parking spaces in Field Street and Burrawang Street; and
- investigate options to improve pedestrian safety near the intersection of the Princes Highway and Field Street.

It can be seen that there is a total deficit of 175 spaces in the B2 zones in the town centre precinct (Blocks N5 to N8). Public car parks that are centrally located to these blocks should help to address the deficiency.

There is an existing car park on the corner of Wagonga and Canty Streets (about 60 spaces), and another on the corner of Montague and Angle Streets (about 40 spaces). These car parks are located within reasonable walking distances of Blocks N5 and N7, and Blocks N6 and N8, respectively.

For Blocks N5 and N6, it is proposed to construct a new car park on Council owned vacant land (Lot 2 of DP1069097) behind the shops on the western side of Wagonga Street. This new car park could be accessed from the lane that provides access to the existing Canty Street car park, and it is estimated that up to 24 spaces may be created. (Block N5 is also serviced by two existing sealed car parks at the north western corner, accessed from Bowen Street. These existing spaces have been counted in Blocks N5 and N3).

Blocks N7 and N8 have a combined deficit of 147 parking spaces. Some of this may be addressed by the parking spaces in Blocks N5 and N6, but any future developments in Blocks N7 and N8 should be required to provide on-site parking as part of development consent.

## 4.3 NAROOMA PARKING SURVEY

The overall parking occupancy rates from the parking surveys in Narooma are shown Table 4.3.

Start Time	2 <sup>nd</sup> December Survey 6			6 <sup>th</sup> .	January S	Survey	Occupancy Difference December -January	
	Occupied	Vacant	% Occupied	Occupied	Vacant	% Occupied	January +/-	% more in January
10:00	316	292	52%	349	259	57%	33	5%
10:30	384	224	63%	390	218	64%	6	1%
11:00	381	227	63%	425	183	70%	44	7%
11:30	379	229	62%	404	204	66%	25	4%
12:00	336	272	55%	421	187	69%	85	14%
12:30	314	294	52%	402	206	66%	88	14%
13:00	313	295	51%	395	216	65%	82	13%
13:30	315	293	52%	381	227	63%	66	11%
14:00	305	303	50%	367	241	60%	62	10%
14:30	295	313	49%	342	266	56%	47	8%
15:00	290	318	48%	334	274	55%	44	7%
15:30	295	313	49%	343	265	56%	48	8%
TOTAL	3,923	3,373	54%	4,553	2,743	62%	630	9%

Table 4.3:Narooma Occupancy Surveys

Total available spaces = 608

It can be seen that the maximum occupancy rate of 70% occurred in the 11:00am – 11:30am period in the January survey. The greatest occupancy increase (between the December and January surveys) occurred in the 12:00 noon to 1:00pm time period. The average occupancy in December was 54%, while in January it was 62%. The detailed survey results, shown on maps by time period are in Appendix D.

### 4.4 DETERMINATION OF THE NEED FOR PAY PARKING

Clear requirements in the RTA Pay Parking Policy for the justification of pay parking include:

- to provide equitable access;
- for "rationing" on street spaces where demand exceeds supply; or
- to achieve public transport objectives.

The level of demand and the level of public transport provision in Narooma do not provide sufficient justification for the introduction of pay parking.



## 5. **RECOMMENDATIONS**

In order to address future parking needs in Moruya and Narooma townships, Bitzios Consulting recommends that Eurobodalla Shire Council require all residential development in both towns to provide on-site parking.

For Moruya, we recommend that Council:

- introduce a two hour limit for the spaces in the existing car park off Church Street;
- redesign the existing swimming centre car park off Shore Street to maximise the number of spaces;
- construct a car park on the Council owned land (Lot 80 of DP613866) on the southern side of Mirrabooka Avenue to the west of the existing car park on the northern side;
- explore options to acquire other lots near Lot 80 in order to maximise the number of parking spaces in this new car park; and
- require future developers of the undeveloped land on the western side of Ford Street between Queen Street and Ford Lane (Lot 200 of DP855112 and Lot101 of DP776235) to provide all necessary parking on-site.

For Narooma, we recommend that Council:

- introduce two hour parking limits for the available on-street spaces in Field Street between the Princes Highway and Graham Street;
- introduce two hour parking limits for the available on-street spaces in Burrawang Street between the Princes Highway and Graham Street;
- construct an indented kerb on the western side of Burrawang Street between Graham Street and the Princes Highway, in order to create parallel parking spaces;
- install blue 'P' parking signs with appropriate arrows, in order to direct Princes Highway motorists to the parking spaces in Field Street and Burrawang Street;
- investigate options to improve pedestrian safety near the intersection of the Princes Highway and Field Street;
- construct a new car park on Council owned vacant land (Lot 2 of DP1069097) behind the shops on the western side of Wagonga Street; and
- require future developers of the properties in Blocks N7 and N8 to provide all necessary parking onsite.

We further recommend no further consideration of pay parking in Moruya or Narooma at this time as neither township meets the RTA pay parking requirements even at peak times.