Bastion Point
Ocean Access Boat Ramp

Economic Impact Assessment
Report

<Revised November 14 2010>

Buchan

Business Strategy | Communication | Public Policy

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Executive Summary

The Report

This report provides an economic impact assessment of the proposed development of the boat ramp at Bastion Point in Mallacoota. The modeling and impact assessment is based on information that has been provided on the project, a review of previous reports, additional research and consultations. The potential economic impacts of the development are assessed and these are expressed in terms of the regional income and jobs that would be generated by the growth in visitor numbers associated with recreation boating use of the new ramp. The report also analyses the structure of the Mallacoota economy and the jobs that are associated with the fishing sector, tourism and local services. This report contains revisions from the July 22 report (due to new higher capital costs and the assumption of no ramp user charges) and to correct an error in the modeling.

Regional Economy

In 2006 Mallacoota had a resident population of 973 (approximately 2.4% of the East Gippsland Shire population). The population of Mallacoota, is ageing, and has experienced a decline in the five years to 2006.

The age structure of Mallacoota is older with the median age in Mallacoota in 2006 being 51 years, compared to 45 years in East Gippsland Shire as a whole, and 37 years for Victoria and Australia. The older age profile of Mallacoota is also reflected in lower labour force participation rates. Nearly half (49.5%) of the Mallacoota population aged 15 years and above was not in the labour force in 2006, compared to 42.5% for East Gippsland and 33.4% for Victoria.

ABS employment data shows that in 2006 there were 359 residents of Mallacoota who were in employment. A more detailed analysis of the industry of employment shows the structure of local jobs. These jobs are focused in 3 major areas - tourism activities (83), fishing and related services (67); and services for the regional population (201). Over 40% of jobs in the region involve tourism and fishing, with 56% involving services to the regional population.

The narrow base of the local economy is reflected in higher unemployment rates (8.9% in Mallacoota, compared to 6.2% in the Shire overall), and the higher proportion of people who are employed part-time (47.1% in Mallacoota, compared to 33.7% in the Shire overall).

Tourism

Tourism is a significant activity for Mallacoota. It has been estimated that the total population reaches around 6000 (around 1000 residents and 5000 visitors) during the summer season (5 weeks) and the Easter period. There is significant accommodation capacity available in Mallacoota. This comprises holiday homes, and commercial accommodation (units and apartments; hotels and motel rooms; caravan parks and camping areas. An analysis of ABS Census data shows that there were a total of 110 businesses in Mallacoota in 2006, and an estimated 45-50 were tourism related businesses and these tourism businesses employed 83 persons.

The Mallacoota & District Business and Tourism Association sees the major advantage of the proposed development as being able to bring in additional tourism numbers outside of the existing season. The association sees the potential to expand the recreational fishing market to increase visitor numbers during the off-season.

Other groups comprising the *Save Bastion Point Campaign* have a different view and are concerned about the impacts on the overall environment and the surf break of the development of the ramp and associated roadways and car parking at the site. They have expressed concern that the impacts on surfers and other non boating visitors to the region have not been taken into account. There are concerns about the financial viability of the ramp due to the scale of operating costs and the level of user charges that would be required. The Campaign has put forward proposals for the provision of a different type of ramp at the site.

Commercial Fishing

The abalone industry is significant for Mallacoota. The abalone industry in the area catches approximately 400 tonnes per year, which is the total allowable commercial catch, and is worth between $18-20 million. There is also some wild commercial fishing that takes place in the ocean, involving reef and crayfishing. These operations are far smaller in scale than the abalone industry and are worth approximately $2 million per year.

It is important to estimate the size of the sector. ABS Census data for 2006 showed that there were a total of 67 residents of Mallacoota, who were employed in the fishing and related services area. Taking into account abalone licence holders and contract divers, who live outside the region (estimated at 17 licence holders and 5 divers), this would imply a total of 89 persons working in the industry. When the multiplier impacts are taken into account (multiplier of 1.25), this would imply a total of 111 persons (89 direct employment and 22 persons employed due to the local expenditure of abalone industry employees). This figure does not include employment in any support business (eg. maintenance and engineering support).

Services

There were a total of 201 persons employed in local service jobs, with the major groups being education, health services, retail and building and construction services.

Economic Impacts

The current ramp at Bastion Point is recognised as hazardous for small boats, particularly for retrieval and this limits current recreational boating use. The ramp is used by professional abalone fishermen and other users, who use a tractor to launch and retrieve boats.

The major measurable economic impacts that are associated with the development of the ramp are the impacts of increased recreational boating usage. These are reflected in an increase in expenditure in Mallacoota and an increase in regional income and employment. These are the major impacts that are examined in this report. There are other impacts as well, and these include increased efficiency and safety of boat launches. A new boat ramp would improve the efficiency of launches for the abalone industry and commercial fishing, but would not generate an increase in economic activity in this sector (although the launch cost may be reduced). In the case of government agencies, safety would be increased for the current level of launches required for policing and rescue activity.

The economic impacts occur at two stages: during the construction phase; and during the ongoing operations phase of the ramp.

Construction Phase

The estimated construction costs of the project (excluding GST) are $5.790 million, with other costs of $625,000 for a total cost of $6.415 million. The construction phase of the project would generate an estimated 24 short-term construction jobs. Additional benefits would be generated through expenditure of these employees on accommodation and other services during the construction phase. Based on a multiplier of 1.2, this would imply another 4.8 indirect jobs in the local area during construction activity.

Use of Ramp – Recreational Boating

There are two categories of recreational boat users who are potential users of the ramp. These are tourist visitors with boats and local residents with boats. The increase in recreational boating generates the major economic benefits to the region, mainly due to recreational fishing and boating visitors, who stay for several days on each trip. The recreational boating/fishing segment has been estimated on the basis of a number of assumptions. This estimation is required as there is no local survey data or other information available on boat usage or visitors with boats. The assumptions used are based on review of earlier reports and qualitative information obtained in consultations.

The following table aggregates the estimated expenditure generated by recreational boating users (who would use the ocean ramp), both visitors and local residents. It shows total spending of $3.9 million with the major components being tourist related spending.

Total Spending –Ocean Ramp Users Recreational Boating

All Users Expenditure	Recreational Boating Visitors	Share	Local Recreational Boating Users	Share	Total All Recreational Boating	Share
Boating Expenditure						
Ramp/Parking	0	0	0	0.0	0	0
Boat fuel	239200	6.9	99720	22.2	338920	8.7
Marine supplies	149500	4.3	62325	13.9	211825	5.4
Repair & Maintenance	149500	4.3	62325	13.9	211825	5.4
Bait/fishing supplies	89700	2.6	37395	8.3	127095	3.3
Total Boating	**627900**	**18.2**	**261765**	**58.3**	**889665**	**22.8**
Tourism Expenditure						
Accommodation (2 per room)	941850	27.3	0	0.0	941850	24.1
Restaurant/Takeaway	672750	19.5	112185	25.0	784935	20.1
Groceries (& Drinks)	403650	11.7	74790	16.7	478440	12.3
Car Fuel	134550	3.9	0	0.0	134550	3.4
Recreation & Entertainment	403650	11.7	0	0.0	403650	10.3
Shopping	269100	7.8	0	0.0	269100	6.9
Total Tourism	**2825550**	**81.8**	**186975**	**41.7**	**3012525**	**77.2**
Total All	**3453450**	**100.0**	**448740**	**100.0**	**3902190**	**100.0**
Revised Nov 2010						

Source: Buchan Consulting estimates

An estimate was also made of the local share of this expenditure. This local share of expenditure was estimated at $2.0 million per year.

Local Share of Expenditure –Ocean Ramp Users Recreational Boating

All Users – Local Share of Expenditure	Total Spending Recreational Boating $	Local Share of Spending (Ratio)	Local Share of Spending $
Boating Expenditure			
Ramp/Parking	na	na	na
Boat fuel	338920	0.1	33892
Marine supplies	211825	0.4	84730
Repair & Maintenance	211825	0.7	148277
Bait/fishing supplies	127095	0.5	63547
Tourism Expenditure			
Accommodation	941850	0.6	565110
Restaurant/Takeaway	784935	0.6	470961
Groceries (& Drinks)	478440	0.5	239220
Car Fuel	134550	0.1	13455
Recreation & Entertainment	403650	0.7	282555
Shopping	269100	0.5	134550
Total All	**3902190**		**2036298**
Revised Nov 2010			

Source: Buchan Consulting estimates

The analysis shows that the recreational boat users would generate a total of 21.2 direct jobs, with most of the jobs being in tourism related activity and is associated with overnight stays by tourist visitors with boats.

Summary Estimated Direct Jobs Generated

Summary Direct Jobs	No of Jobs
Boating Expenditure	
Ramp/Parking	0.0
Boat fuel	0.4
Marine supplies	1.0
Repair & Maintenance	1.5
Bait/fishing supplies	0.7
Total Boating	**3.6**
Tourism Expenditure	
Accommodation	5.2
Restaurant/Takeaway	5.1
Groceries (& Drinks)	2.9
Car Fuel	0.2
Recreation & Entertainment	2.8
Shopping	1.3
Total Tourism	**17.6**
Total Direct Jobs	**21.2**
Revised: Nov 2010	

Source: Buchan Consulting estimates

The expenditure of these 21.2 employees will generate additional income and jobs in the region. These jobs would generate an additional 5.5 jobs in the region, for a total of 26.7 jobs. Based on an assumption of this level of ramp use continuing, then these jobs would be ongoing in the region.

The following table shows the net regional income for the first year of operation (assumed to be 2012) and the summed income for 10 years (2012 -2021) and for 20 years of operation (2012-2031).[1] It shows that based on the recreational boating use estimated in this report, regional income would be $11.4 million higher over 10 years and $22.8 million higher over a 20 year period (in constant 2012 dollars).

Estimated Net Regional Income Impacts - Use by Recreational Boating Users (Bastion Ramp Users Only)

Impacts of Ramp (2012 $s)	Year 1 2012 $ million	Total 10 Years 2012-2021 $ million	Total 20 years 2012- 2031 $ million
Net Regional Income -Direct Employment (after tax)	0.892	8.927	17.853
Indirect Jobs			
Net Regional income – indirect employment (after tax)	0.250	2.500	5.000
Total Net Regional Income	**1.1427**	**11.427**	**22.854**

Source: Buchan Consulting estimates. (Constant Prices 2012 dollars)

The analysis shows a regional benefit/cost ratio of 1.6 for 2012. It should be noted that the value of the net benefit is sensitive to any changes in the assumptions that have been made in relation to the modeling of the number of launches and the expenditure patterns of visitors. This net income is income earned by businesses and the additional employees, which is generated by the growth in boating visitor numbers. This income accrues to persons (employees and businesses) in the region and not to the operators of the ramp.

1 These estimates are all expressed in constant 2012 dollars.

Benefit/Cost Comparisons (Constant 2012 Dollars)

	2012	20 Year Period (constant prices 2012 dollars)
	$	$
Revenue		
Revenue - Fees (assume worst case, no user charges recovered).	0	0
Costs		
Capital Cost (2012= $6.415 m))		
Amortised Capital Cost (20 years)	320,750	6,415,000
Operating Costs		
Dredge & maintenance	225,000	4,500,000
Depreciation (3% of construction cost of $5,790,000)	173,700	3,474,000
Total Operating Cost	**398,700**	**7,974,000**
Total Operating Costs + Capital Cost	**719,450**	**14,389,000**
Difference (revenue-(operating costs+ capital cost))	-719,450	-14,389,000
Net Regional Income (Benefit)		
Increase in net regional income	**1,142,737**	**22,854,743**
Ratio Regional Benefit/Cost Ratio (Based on capital + operating costs)	**1.6**	**1.6**
Revised Nov 2010 (capital cost , ramp revenue, & regional income)		

1 Introduction

This report has been prepared by Buchan Consulting's Business Strategy Group.

This report provides an economic impact assessment of the proposed development of the boat ramp at Bastion Point in Mallacoota. The modeling and impact assessment is based on information that has been provided on the project, a review of previous reports, additional research and consultations.

The potential economic impacts of the development are assessed and these are expressed in terms of the regional income and jobs that would be generated by the growth in visitor numbers associated with recreation boating use of the new ramp.

For transparency all of the assumptions that are used in the modelling and the impact assessment are outlined.

The report also analyses the structure of the Mallacoota economy and the jobs that are associated with the fishing sector, tourism and local services.

A major issue is the limited information that is available on visitors to the region and the boating activity in the region. As a consequence we have developed some estimates of current boat ramp use based on information in the previous reports.

It should be emphasised that this benefit/cost ratio is based on the modelling and estimation outlined in this report and would be sensitive to any changes in assumptions in relation to user numbers and expenditure patterns of boating visitors.

This is a revised version of the report of July 22 2010, which takes account of revised capital costs (increased costs) for the ramp and an assumption of no fee revenue from user charges for the ramp. It corrects an error in the modelling in the original report. These changes have the impact of reducing the employment impacts and the benefit/cost ratios of the project, from those outlined in the earlier report.

2 Regional Context

2.1 The Mallacoota Region

Mallacoota is approximately 240 kilometres north-east of Bairnsdale, the main population centre of East Gippsland Shire. Mallacoota constitutes an approximate half-way point when travelling between Melbourne and Sydney along Australia's east coast.[2] The nearest larger town is Eden (population 3006), which is in New South Wales, 86 kilometres north of Mallacoota.

In 2006 Mallacoota had a resident population of 973 (approximately 2.4% of the East Gippsland Shire population). The population of Mallacoota has experienced a decline in the five years to 2006.

Table 1. Population of Mallacoota and East Gippsland Shire 2001 and 2006

Resident Population	Males	Females	Persons
Mallacoota			
Mallacoota 2006	488	485	973
Mallacoota 2001	528	513	1041
Change no	-40	-28	-68
Change %	-7.6	-5.5	-6.5
East Gippsland Shire			
East Gippsland Shire 2006	19691	20343	40034
East Gippsland Shire 2001	18,734	19294	38028
Change no	957	1049	2006
Change %	5.1	5.4	5.3

Source: ABS Census 2006 and 2001 Resident Population Data

2 Mallacoota lies 523 kilometres from Melbourne, and 526 kilometres from Sydney.

Table 2. Population in the Region (within 100 minutes travel)

	Males	Females	Total	Distance from Mallacoota (km)	Distance from Mallacoota (time)
VIC					
Mallacoota	486	486	972	N/A	N/A
Genoa	136	168	304	19.5	16 minutes
Bemm River	86	65	151	103.8	94 minutes
Noorinbee	101	78	179	86.2	71 minutes
Orbost	1191	1261	2452	144.4	101 minutes
VIC Total	**2000**	**2058**	**4058**		
NSW					
Wonboyn	166	144	310	72.2	65 minutes
Towamba	201	166	367	100.7	88 minutes
Nethercote	256	227	483	91.9	66 minutes
Broadwater (Bega Valley)	285	280	565	98.7	73 minutes
Eden	1488	1518	3006	85.3	62 minutes
NSW Total	**2396**	**2335**	**4731**		
Catchment Total	**4396**	**4393**	**8789**		

2.2 Age Structure

The age structure of Mallacoota is older than the broader East Gippsland Shire. It should be further noted that East Gippsland Shire, like many regional LGAs, has an age structure that is older than the Victorian and Australian average. This is due to an ageing population, with younger persons leaving to pursue education, work or lifestyle opportunities in larger population centres, while older persons are moving to coastal regional areas for retirement (or during the final stages of their working life in preparation for retirement).

The median age in Mallacoota in 2006 was 51 years, compared to 45 years in East Gippsland Shire as a whole, and 37 years for Victoria and Australia. Additionally, 45% of Mallacoota's population was aged 55 years or above in 2006, compared to 36% of East Gippsland's population. At the same time, 21% of the Mallacoota population was aged below 25, compared to 29% of East Gippsland's population.

In the pre-retirement age cohort (55-64 years), 20.4% of the Mallacoota population were in this category, compared to 15.2% of the East Gippsland Shire population.

Table 3. Age Profile of Population - Mallacoota and East Gippsland 2006

	Mallacoota				East Gippsland LGA			
Age Group	**Males**	**Females**	**Total**	**Share (%)**	**Males**	**Females**	**Total**	**Share**
0-4	23	20	43	4.4	1116	1018	2134	5.3
5-14	50	40	90	9.3	2711	2527	5238	13.1
15-24	46	27	73	7.5	2084	1990	4074	10.2
25-44	82	91	173	17.8	3885	4364	8249	20.6
45-54	73	96	169	17.4	2818	3027	5845	14.6
55-64	98	100	198	20.4	3055	3045	6100	15.2
65-74	73	55	128	**13.2**	2367	2275	4642	11.6
75-84	34	42	76	**7.8**	1368	1500	2868	7.2
85+	8	14	22	**2.3**	288	597	885	2.2
Total	**487**	**485**	**972**	**100.0**	**19692**	**20343**	**40035**	**100.0**

Source: ABS Census 2006 Resident Population Data

2.3 Employment and Industry

Labour Force Participation

The relatively older age profile of Mallacoota is reflected to some degree in lower labour force participation rates. Nearly half (49.5%) of the Mallacoota population aged 15 years and above was not in the labour force in 2006, compared to 42.5% for East Gippsland and 33.4% for Victoria.

The narrow base of the local economy is reflected in higher unemployment rates (8.9% in Mallacoota, compared to 6.2% in the Shire overall), and the higher proportion of people who are employed part-time (47.1% in Mallacoota, compared to 33.7% in the Shire overall).

Table 4. Labour Force Participation Persons Aged 15 Years and Over - Mallacoota and East Gippsland 2006

	Mallacoota		East Gippsland LGA		% of persons in the labour force in Victoria
	Persons	Share %	Persons	Share %	Share %
Employed full-time	144	36.6	8872	52.4	60.1
Employed part-time	185	47.1	5710	33.7	28.4
Employed & away from work	21	5.3	797	4.7	3.4
Employed hours not stated	8	2	498	2.9	2.7
Unemployed	35	8.9	1046	6.2	5.4
		% of total persons 15+		% of total persons 15+	% of total persons 15+
Not in the labour force	415	49.5	13870	42.5	33.4
Total labour force (includes employed and unemployed persons)	393	46.8	16923	51.8	60.4
Total persons 15 years and over	839	100	32663	100	100

Source: ABS Census 2006 Resident Population Data

Employed Residents

The employment data shows that in 2006 there were 359 residents of Mallacoota who were in employment. Compared to the East Gippsland LGA average, Mallacoota has a higher proportion of residents employed in manufacturing, accommodation and food services and in education, but a lower proportion employed in retail trade or in health care and social assistance.

Table 5. Employed Persons in Mallacoota and East Gippsland 2006

Residential population	Mallacoota				East Gippsland LGA			
	Males	Females	Total	Share %	Males	Females	Total	Share %
Agriculture, forestry & fishing	26	9	35	9.7	1,109	450	1,559	9.8
Mining	0	0	0	0.0	107	3	110	0.7
Manufacturing ##	24	16	40	11.1	914	435	1,349	8.5
Electricity, gas, water & waste services	3	0	3	0.8	145	32	177	1.1
Construction	25	0	25	7.0	1,343	153	1,496	9.4
Wholesale trade	6	6	12	3.3	318	122	440	2.8
Retail trade	**17**	**19**	**36**	**10.0**	918	1,211	2,129	13.4
Accommodation & food services	**23**	**30**	**53**	**14.8**	514	865	1,379	8.7
Transport, postal & warehousing	9	9	18	5.0	514	135	649	4.1
Information media & telecommunications	0	0	0	0.0	61	50	111	0.7
Financial & insurance services	0	0	0	0.0	87	151	238	1.5
Rental, hiring & real estate services	0	0	0	0.0	86	104	190	1.2
Professional, scientific & technical services	7	0	7	1.9	254	215	469	3.0
Administrative & support services	3	9	12	3.3	213	171	384	2.4
Public administration & safety	5	3	8	2.2	406	307	713	4.5
Education & training	**14**	**34**	**48**	**13.4**	393	951	1,344	8.5
Health care & social assistance	6	23	29	8.1	376	1,552	1,928	12.1
Arts & recreation services	9	3	12	3.3	96	123	219	1.4
Other services	6	3	9	2.5	332	220	552	3.5
Inadequately described/Not stated	6	6	12	3.3	244	190	434	2.7
Total	189	170	359	100.0	8,430	7,440	15,870	100.0

Source: ABS Census 2006 Resident Population Data. Note for Mallacoota, manufacturing includes employment in abalone processing and some light industrial.

Table 6. Employed Persons by Sector -Mallacoota (Urban Centre/Locality) 2006

Employed Persons by Sector 2006	Males	Females	Persons
Commonwealth Government	4	3	7
State/Territory Government	20	25	45
Local Government	3	0	3
Private Sector	162	142	304
Not stated	5	0	5
Total	**194**	**170**	**364**

Source: ABS Census 2006 Resident Population Data

A more detailed analysis of the industry of employment shows the structure of local jobs. These jobs are focused in 3 major areas - tourism related activities; fishing and related services; and services for the regional population.

Table 7. Share of Total Jobs by Industry Segment -Mallacoota (Urban Centre/Locality) 2006

Industry of Employment (2006 Anzic Industries)	Males	Share %	Females	Share %	Persons	Share %
Tourism Related	42	22.11	41	24.55	83	23.25
Fishing and Related Services	50	26.32	17	10.18	67	18.77
Local Services	91	47.89	110	65.87	201	56.30
Total	**190**	**100.00**	**167**	**100.00**	**357**	**100.00**

Source: ABS Census 2006 Resident Population Data

The following table shows a detailed break down of the industry of employment of Mallacoota residents.

Table 8. Industry of Employment – Mallacoota Residents 2006

Industry of Employment (2006 Anzic industries)	Males	Females	Persons
Tourism Related			
Accommodation	**15**	**19**	**34**
Amusement and Other Recreational Activities, nec	0	4	4
Cafes and Restaurants	0	8	8
Pubs, Taverns and Bars	5	3	8
Other Specialised Food Retailing	0	4	4
Jewellery and Silverware Manufacturing	3	0	3
Other Gambling Activities	3	0	3
Scenic and Sightseeing Transport	4	0	4
Travel Agency and Tour Arrangement Services	0	3	3
Nature Reserves and Conservation Parks Operation	8	0	8
Building and Other Industrial Cleaning Services	4	0	4
Fishing and Related Services			
Aquaculture, nfd	**3**	**0**	**3**
Boatbuilding and Repair Services	**4**	**0**	**4**
Fish and Seafood Wholesaling	**3**	**4**	**7**
Fishing, nfd	**5**	**0**	**5**
Other Fishing	**18**	**3**	**21**
Seafood Processing	**13**	**10**	**23**
Services - Local			
Ambulance Services	3	0	3
Architectural Services	4	0	4
Arts Education	0	3	3
Automotive Electrical Services	4	0	4
Automotive Repair and Maintenance, nfd	4	0	4
Bakery Product Manufacturing (Non-factory based)	0	6	6
Building Construction, nfd	4	0	4
Carpentry Services	4	0	4
Central Government Administration	3	3	6
Combined Primary and Secondary Education	7	27	34
Creative Artists, Musicians, Writers and Performers	3	0	3
Defence	3	0	3
Education and Training, nfd	0	3	3
Employment Placement and Recruitment Services	0	4	4
Forestry	3	3	6
Fuel Retailing	3	0	3
Gardening Services	3	0	3
General Practice Medical Services	3	0	3
Hardware and Building Supplies Retailing	0	6	6
Hospitals (except Psychiatric Hospitals)	0	8	8
House Construction	4	0	4
Medical and Other Health Care Services, nfd	0	3	3
Non-Residential Building Construction	3	0	3
Other Agriculture and Fishing Support Services	**4**	**0**	**4**
Other Allied Health Services	0	7	7
Other Automotive Repair and Maintenance	5	0	5
Other Social Assistance Services	0	5	5
Postal Services	0	4	4
Preschool Education	0	3	3
Primary Education	0	5	5
Real Estate Services	0	3	3
Road and Bridge Construction	4	0	4
Road Freight Transport	6	3	9
Road Passenger Transport, nfd	3	0	3
Secondary Education	3	0	3
Social Assistance Services, nfd	0	4	4
Supermarket and Grocery Stores	4	9	13
Waste Treatment and Disposal Services	3	0	3
Water Supply	4	0	4
Inadequately described	4	0	4
Total	**190**	**167**	**357**

Source: ABS Census 2006 Resident Population Data

2.4 Tourism in the Region

2.4.1 Accommodation and Visitor Numbers

Tourism is a significant activity for Mallacoota. It has been estimated that the total population reaches around 6000 (around 1000 residents and 5000 visitors) during the summer season (5 weeks) and the Easter period.[3]

There is significant accommodation capacity available in Mallacoota. This comprises holiday homes, and commercial accommodation (units and apartments; hotels and motel rooms; caravan parks and camping areas. Census data shows that there were a total of 422 dwellings in 2006.[4] It was estimated that 34% of these dwellings were holiday houses[5], which indicates that there were a total of 143 holiday homes and 278 houses that were occupied by permanent residents.

The following are estimates of visitor capacity of Mallacoota, which are based on analysis of accommodation in the area. It shows that including holiday houses, there is an estimated overnight visitor capacity of around 4700 persons. Allowing for visitors that stay with friends and relatives, this would imply that there is total capacity for around 5000 visitors.[6]

Table 9. Tourist Accommodation Capacity – Mallacoota Area 2010

Accommodation Type	Number Properties	Estimated Capacity
Holiday Houses[7]	143 houses(4 persons per dwelling)	572
Units and Apartments	26 properties - 124 units (4 persons per unit)	496
Hotels & Motels	4 properties - 60 rooms (3 person per room)	180
B&Bs	3 (2 person per room)	18
Caravan Parks/Campsites	5 – 850 sites (4 person per site)	3400
	Total Estimated	**4666**

Source: Buchan Consulting Estimates June 2010

2.4.2 Businesses and Employment

An analysis of ABS Census data shows that there were a total of 110 businesses in Mallacoota in 2006.

Table 10. Businesses by Employment Size Mallacoota 2006-

Size of Business	No of Businesses
Nil employees	56
1-19 employees	54
20 or more employees	0
Not stated	0
Total	**110**

Source: ABS Census 2006 Resident Population Data (Cat. No. 2068.0)

The small business structure is also reflected in the fact that 111 of the 361 employed persons were owner managers of businesses and 236 were employees.

Table 11. Employees by Employment Type - Mallacoota 2006

Employment Type	Males	Females	Persons
Employee not owning business	117	119	236
Owner managers of incorporated enterprises	21	16	37
Owner managers of unincorporated enterprises	48	26	74
Contributing family workers	6	8	14
Total	**192**	**169**	**361**

Source: ABS Census 2006 Resident Population Data (Cat. No. 2068.0)

3 Stage 2 Ocean Access Boat Ramp, Bastion Point, Mallacoota Social, Economic and Infrastructure Impacts, Pryor Knowledge (ACT) P5
4 ABS Census Data 2006: 422 dwellings - 371 separate houses; 36 units/flats; 15 other dwellings
5 Stage 2 Ocean Access Boat Ramp, Bastion Point, Mallacoota Social, Economic and Infrastructure Impacts, Pryor Knowledge (ACT) P5
6 Tourism Victoria survey data indicates that around 14% of visitors to East Gippsland stay with friends and relatives.
7 Stage 2 Ocean Access Boat Ramp, Bastion Point, Mallacoota Social, Economic and Infrastructure Impacts, Pryor Knowledge (ACT)P5. Based on the estimate that 34% of dwellings were holiday homes.

Of the total of 110 businesses, an estimated 45-50 were tourism related businesses. A 2007 study showed that there were 45 tourism businesses in Mallacoota.[8] Of these businesses 60% were accommodation businesses (27), 4 were restaurants, cafes and bars, 9 were tours and attractions (20%) and 9 were other services businesses(20%). The analysis conducted by Buchan indicated that there were a total of 35 accommodation businesses (units and apartments -26, hotels/motels- 4, B&Bs-3 and Caravan/Camping Parks – 5).

The industry of employment data shows that a total of 83 persons were employed in tourism related activities and associated services.

Table 12. Industry of Employment - Tourism Related Mallacoota 2006

Industry of Employment (2006 Anzic industries)	Males	Females	Persons
Accommodation	15	19	34
Cafes and Restaurants	0	8	8
Pubs, Taverns and Bars	5	3	8
Other Specialised Food Retailing	0	4	4
Jewellery and Silverware Manufacturing	3	0	3
Amusement and Other Recreational Activities, nec	0	4	4
Other Gambling Activities	3	0	3
Scenic and Sightseeing Transport	4	0	4
Travel Agency and Tour Arrangement Services	0	3	3
Nature Reserves and Conservation Parks Operation	8	0	8
Building and Other Industrial Cleaning Services	4	0	4
Total	**42**	**41**	**83**

Source: ABS Census 2006 Resident Population Data (Cat. No. 2068.0)

2.4.3 Future Tourism

The *Mallacoota & District Business and Tourism Association* is the local business group and is an advocate of the development of the Ramp. The support is based around maintenance of the abalone fishing industry and encouraging more recreational fishing, boating and charter boats.[9]

The Mallacoota & District Business and Tourism Association sees the major advantage of the proposed development as being able to bring in additional tourism numbers outside of the existing season, which runs from approximately November until June (though the length of this season can vary depending on conditions such as the weather).[10]

The association sees the potential to expand the recreational fishing market to increase visitor numbers during the off-season.[11] They indicate that Mallacoota hosts approximately 5000-6000 recreational boats per year, with the peak coming in January, with around 600-700 boats in the area during that month.

The Mallacoota & District Business and Tourism Association anticipates two areas of expansion if the new boat ramp is constructed – the development of game fishing activity and visits to Gabo island.

- Game Fishing – The Association sees an opportunity to expand big-game marlin, tuna and mackerel fishing off the Mallacoota coast and into the ocean through the launching of large boats that could be supported by the proposed ramp. These species tend to come through the area during what is traditionally the off-season in the area, but fishermen could be attracted with the appropriate facilities. Additionally, a number of fishing clubs in Melbourne have indicated to them that they would be willing to hold

8 Urban Enterprise Pty Ltd 42 Gippsland Sustainable Tourism Project 2 April 2007 P 86

9 Buchan Consulting consultations with a representative of the Mallacoota and District Business and Tourism Association, June 2010.

10 For example, it was specified during consultation that the 2009-10 tourist season effectively ended following Easter).

11 The Association indicated that around 60-70% of those fishing at Bermagui (180km north of Mallacoota) and Eden (85km north of Mallacoota) are from Victoria, and would prefer to fish closer to home if the infrastructure was in place. According to the 1998 Coastal Engineering Solutions report, the actual number of Victorian fishermen who go to Bermagui is not recorded, but correspondence with the clubs indicates that a majority of the fishermen are Victorian in origin. Estimates from the Victorian Game Fishing Club at the time put the figure at 70%.

fishing competitions in the area and those fishermen would make stops in the area on the way to and from existing fishing competitions along the East Coast.[12]

- Gabo Island **-** The Association sees an opportunity to expand tourism to Gabo Island, which lies 13 kilometres off the Mallacoota coast, through additional charter tours.

Other groups comprising the *Save Bastion Point Campaign* have a different view, and are concerned about the impacts (on the overall environment and the surf break) of the development of the ramp and associated roadways and car parking at the site. They have expressed concern that the impacts on surfers and other non boating visitors to the region have not been taken into account. They have concerns about the financial viability of the ramp due to the scale of operating costs and the level of user charges that would be required. The Campaign has put forward proposals for the provision of a different type of ramp at the site.

2.5 Commercial Fishing

The economy of Mallacoota relies heavily on tourism and commercial fishing, with abalone fishing being the only major form of commercial fishing following the closure of the inland commercial fishery. The existing ramp is the only existing way for abalone fishers to launch or retrieve boats. They had previously been able to launch via the entrance to the lake system, but this is no longer possible for larger boats at most times of the year.

The abalone industry in the area catches approximately 400 tonnes per year, which is the total allowable commercial catch, and is worth between $18-20 million, depending on the landed price of abalone. The Abalone Fisherman's Co-operative has a processing plant in Mallacoota, which includes a cannery. The abalone industry is labour-intensive, and the industry has indicated that when direct employment and support functions such as maintenance, are taken into account, the total industry employment in Mallacoota is approximately 200 persons.

There is also some wild commercial fishing that takes place in the ocean, involving reef and Cray fishing. These operations are far smaller in scale than the abalone industry, and are worth approximately $2 million per year.

It is important to estimate the size of the sector. ABS Census data for 2006 showed that there were a total of 67 residents of Mallacoota were employed in the fishing and related services area. Taking into account abalone licence holders and contract divers, who live outside the region (estimated at 17 licence holders and 5 divers), this would imply a total of 89 persons working in the industry. When the multiplier impacts are taken into account (multiplier of 1.25), this would imply a total of 111 persons (89 direct employment and 22 persons employed due to the local expenditure of abalone industry employees). This figure does not include employment in any support business (eg. maintenance and engineering support).

Table 13. Industry of Employment – Fishing and Related Services - Mallacoota 2006

Industry (ANZIC 2006 classification)	Males	Females	Persons
Aquaculture, nfd	3	0	3
Boatbuilding and Repair Services	4	0	4
Fish and Seafood Wholesaling	3	4	7
Fishing nfd	5	0	5
Other Fishing Support Services	4	0	4
Other Fishing	18	3	21
Seafood Processing	13	10	23
Total	**50**	**17**	**67**

Source: ABS Census 2006 Resident Population Data (Cat. No. 2068.0)

The study by *Pryor Knowledge* indicated the following: abalone divers -20, deckhand -10, processing -35 full time employee equivalents, 5 management, making a total of 70 direct

12 In the 1998 Coastal Engineering Services report, the South Gippsland Game Fishing club advised that most of their then-150 members headed for Bermagui as their primary fishing location due to an inability to fish at Mallacoota. They typically went to Bermagui 4 times per year, and stayed for between 3 days and 2 weeks. They indicated that they would look to host fishing events in Mallacoota if facilities were available. Coastal Engineering Solutions, *Mallacoota Ocean Access – Economic Benefit and Demand Access* – February 1998, P26

employees. The study estimated employee spending in the region at between $4.0 million and $4.7 million.[13]

There are concerns that in the absence of the upgraded ramp, the ability for the abalone industry to operate in Mallacoota would be compromised.

2.6 Recreational Fishing and Boating

Mallacoota is recognised as a major recreational fishing location, which includes fishing in the Mallacoota Inlet, rivers and ocean.

According to visitor surveys for the East Gippsland region, around 14% of visitors to the region go to the area for fishing.[14]

Table 14. Fishing in Mallacoota Area

Location	Fish
Either side of entrance to Mallacoota Inlet	Australian salmon, tailor
Mouth of Betka River	Australian salmon, tailor
Betka River estuary and upstream	Flathead, bream, estuary perch
Mallacoota boat ramp	Luderick
Captains Point	Luderick
John Bull Light	Flathead, snapper, bream
Cemetery Bight	Flathead
The Narrows	Mulloway
Double Creek Arm	Bream, garfish
Top Lake	Bream, flathead
Cape Horn	Mulloway, bream, flathead
Genoa River	Bream, estuary perch, bass
Wallagaraugh River	Bream, estuary perch, bass
The Back Water	Estuary perch, bass
Offshore Mallacoota	Tuna, marlin, flathead, gummy shark, snapper
Tullaberga Island	Australian salmon, tailor, yellowtail kingfish, gummy shark
Gabo Island	Australian salmon, tailor, yellowtail kingfish, gummy shark

Source: Department of Sustainability and Environment – "Recreational Fishing Spots – Bairnsdale" Profile

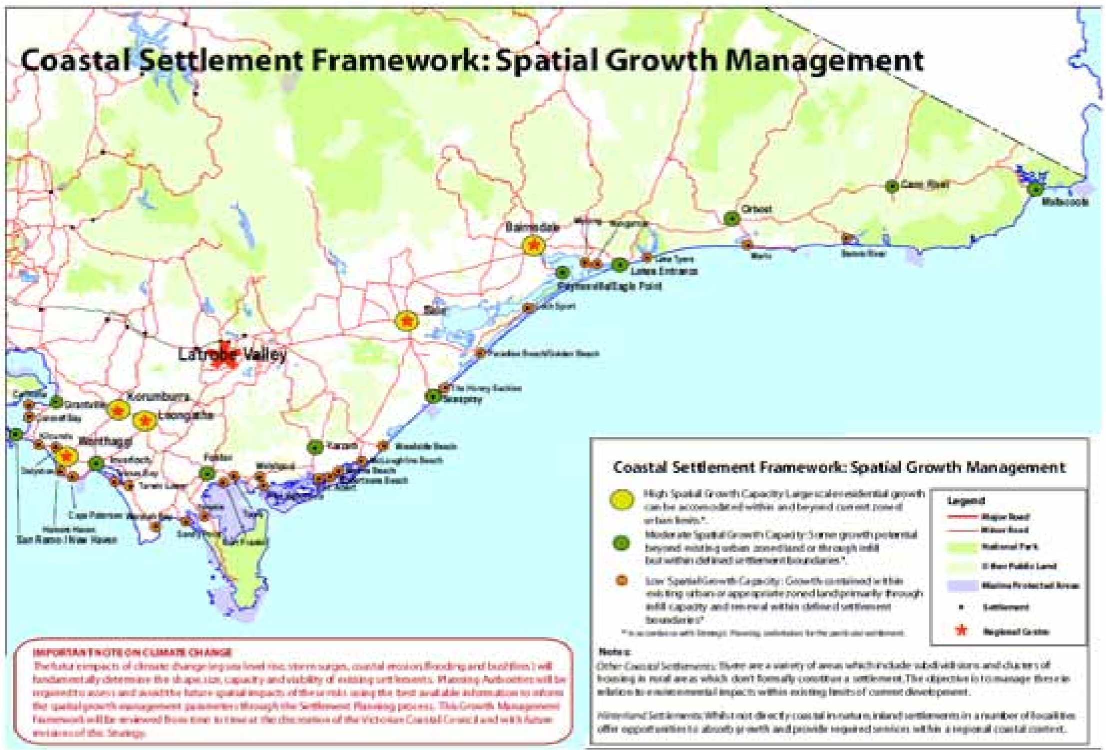
A significant share of tourist visitors to the region, bring their boats for recreational fishing and boating.

The Pryor Knowledge report quoted Boat Industry Association information (2004), which indicated that there were 5243 registered boats, within a 3 hour drive of Mallacoota, and 277 registered motor boats in Mallacoota. The report indicated that due to the popularity of boating in the region, it assumed a ratio of 1 boat per 16 persons (or one boat for every 4-5 families visiting the region). The report indicated that at tourism peak periods, when there are 5000

13 Stage 2 Ocean Access Boat Ramp, Bastion Point, Mallacoota, Report C Social, Economic and Infrastructure Impacts, Pryor Knowledge (ACT) P22-23. There are seasonal employees employed during the year, but these translate into 35 FTE employees.
14 Gippsland Market Profile, Tourism Victoria, Year ending 2004.

visitors, there would be around 300 visitor boats. This when combined with local boats, indicates that there would be an estimated 580 boats in the town during the peak season.

Under the Coastal Settlement Framework: Spatial Growth Management, Mallacoota is classified as *Moderate Spatial Growth Capacity.* This means that there is some growth potential beyond existing urban zoned land or through infill but within defined settlement boundaries.[15]



2.7 The Service Economy

Over 40% of jobs in the region involve tourism and fishing with 56% involving services to the regional population.

Table 15. Share of Total Jobs – Key Sectors Mallacoota 2006

Industry of Employment (2006 Anzic industries)	Males	Share %	Females	Share %	Persons	Share %
Tourism Related	42	22.1	41	24.6	83	23.2
Fishing and Related Services	50	26.3	17	10..2	67	18.8
Local Services	91	47.9	110	65.9	201	56.3
Total	**190**	**100.0**	**167**	**100.0**	**357**	**100.0**

Source: ABS Census 2006 Resident Population Data

The following data shows that there were a total of 201 persons employed in local service jobs, with the major groups being education, health services, retail and building and construction services.

15 Victorian Coastal Strategy 2008, Victorian Coastal Council 2008 P87

Table 16. Industry of Employment - Local Services – Mallacoota 2006

Industry of Employment (2006 Anzic Classification)	Males	Females	Persons
Health			
Ambulance Services	3	0	3
General Practice Medical Services	3	0	3
Medical and Other Health Care Services, nfd	0	3	3
Hospitals (except Psychiatric Hospitals)	0	8	8
Other Allied Health Services	0	7	7
Social Assistance Services, nfd	0	4	4
Other Social Assistance Services	0	5	5
	6	**27**	**33**
Education			
Arts Education	0	3	3
Combined Primary and Secondary Education	7	27	34
Education and Training, nfd	0	3	3
Preschool Education	0	3	3
Primary Education	0	5	5
Secondary Education	3	0	3
	10	**41**	**51**
Retail			
Bakery Product Manufacturing (Non-factory based)	0	6	6
Fuel Retailing	3	0	3
Hardware and Building Supplies Retailing	0	6	6
Other Specialised Food Retailing	0	4	4
Other Automotive Repair and Maintenance	5	0	5
Supermarket and Grocery Stores	4	9	13
Automotive Electrical Services	4	0	4
Automotive Repair and Maintenance, nfd	4	0	4
	20	**25**	**45**
Building Services			
Architectural Services	4	0	4
Building Construction, nfd	4	0	4
Carpentry Services	4	0	4
House Construction	4	0	4
Non-Residential Building Construction	3	0	3
Road and Bridge Construction	4	0	4
Gardening Services	3	0	3
	26	**0**	**26**
Government Services			
Central Government Administration	3	3	6
Defence	3	0	3
Waste Treatment and Disposal Services	3	0	3
Water Supply	4	0	4
	13	**3**	**16**
Transport Services			
Road Freight Transport	6	3	9
Road Passenger Transport, nfd	3	0	3
Postal Services	0	4	4
	9	**7**	**16**
Business Services			
Employment Placement and Recruitment Services	0	4	4
Real Estate Services	0	3	3
Other			
Creative Artists, Musicians, Writers and Performers	3	0	3
Inadequately described	4	0	4
Total	**91**	**110**	**201**

Source: ABS Census 2006 Resident Population Data

3 Bastion Point Development

3.1 Regional Boating Facilities

3.1.1 Gippsland Coastal Region

The majority (75%) of all recreational boating infrastructure, such as boat ramps and jetties, are located in the East Gippsland Shire at destinations such as Paynesville and Metung. East Gippsland Shire contains 83% of marinas, 84% of jetties/piers and 53% of boat ramps in the Gippsland Coastal Region. Wellington Shire has 15% of all facilities, primarily located at Port Albert and Lake Wellington.

Table 17. Inventory of Existing Public Facilities in the Region by Municipality

Gippsland Coastal Region	Ramps	Jetty/Pier	Marina	Other Infrastructure	Total	%
East Gippsland Shire Council	35	185	5	35	260	75%
South Gippsland Shire Council	12	15	0	8	35	10%
Wellington Shire Council	19	20	1	13	53	15%
Total	66	220	6	56	348	100%

Source: Gippsland Boating Coastal Action Plan P54

3.1.2 Mallacoota Facilities

Under the Victorian Coastal Strategy 2008, Mallacoota is identified as a *Regional Boating Facility*.[16] A *Regional Boating Facility* accommodates a significant amount of recreational boating in appropriate conditions. These include multiple boat ramps, jetties, substantial car parking, safety measures where required and significant onshore facilities such as fish cleaning facilities, wash down areas and toilets. Such a site is seen as generating a significant level of boating activity from a wide catchment. In the Gippsland Coastal Region other locations identified as *Regional Boating Facilities* are Loch Sport and Metung. Two areas Paynesville and Lakes Entrance are classified as *State Marine Precincts*.[17]

Mallacoota is surrounded by Croajingolong National Park and has an extensive estuarine system that is suitable for a variety of boating activities. In Mallacoota there are a series of jetties and moorings and public wharfs and boat ramps in the estuary. Access to the ocean, is usually via the existing ramp at Bastion Point.

3.1.3 Bastion Point

While access to the ocean for boats can at times be made via the entrance to the inlet, it is mainly at Bastion Point seaward of the estuary. The existing boat ramp which provides access to the open ocean is used by: Mallacoota commercial abalone fishing licence holders; commercial fishing licence holders; Fisheries Victoria for policing Victoria's fisheries; the Victoria Police, Australian Federal Police, SES and other enforcement agencies for their policing and rescue functions; natural resource management agencies, such as Parks Victoria, for access to areas off-shore or along the coast; and private and recreational boating users.[18]

The current ramp at Bastion Point is recognised as hazardous for small boats, particularly for retrieval and this limits current recreational boating use. The ramp is used by professional abalone fishermen and other users, who use a tractor to launch and retrieve boats.[19]

The existing ramp was constructed in the 1960s, and consists of a small concrete slab that is used as a launching point for commercial abalone fishing and diving, recreational fishing as well as for the purposes of launching fisheries patrols and for servicing Gabo Island. The existing

16 Victorian Coastal Strategy 2008, Victorian Coastal Council 2008 P86

17 A State Marine Precinct incorporates facilities of international, national, State, regional and local significance. These include ports, marinas, charter boat facilities, slip facilities, waterfront activities, marine services, piers, jetties and ramps. Such a location would generate major investment to harness and use the synergy of facilities. Victorian Coastal Strategy 2008, Victorian Coastal Council 2008 P86

18 The commercial users and agencies use tractors to recover boats and trailers.

19 Currently seven (7) tractors operate from and park on the beach and nearby parking area. The operation of these tractors is seen to represent a safety hazard to other beach users and to be a polluter of the beach.

ramp is usable, but is in a state of disrepair due to cracking and the accumulation of silt. East Gippsland Shire Council, which is currently managing the proposed upgrade or replacement of the boat ramp, regards the existing ramp as having insufficient capacity to safely launch and retrieve boats under all tide conditions. This is particularly true during the busy summer and Easter tourist seasons.[20].

Bastion Point was identified as the preferred site for an upgraded ocean access facility, and the site has been the subject of a series of studies.

Figure 1 – Location of Existing Boat Ramp

Source: Environment Effects Statement – Ocean Access Boat Ramp, Bastion Point, Mallacoota P4

20 *Bastion Point Ocean Access Boat Ramp – Assessment under Environment Effects Act 1978 – Minister for Planning – June 2009. P2*

3.2 The Proposed Development

3.2.1 The Need for a Ramp

The Ocean Access Boat Ramp at Bastion Point has been identified as a major project, of local and regional significance. The current ramp at Bastion Point is the only ocean access boat ramp available for recreational, commercial and emergency services boat launching and retrieval between Cape Conran (Victoria) and Eden (NSW) a distance of some 150 kilometres.

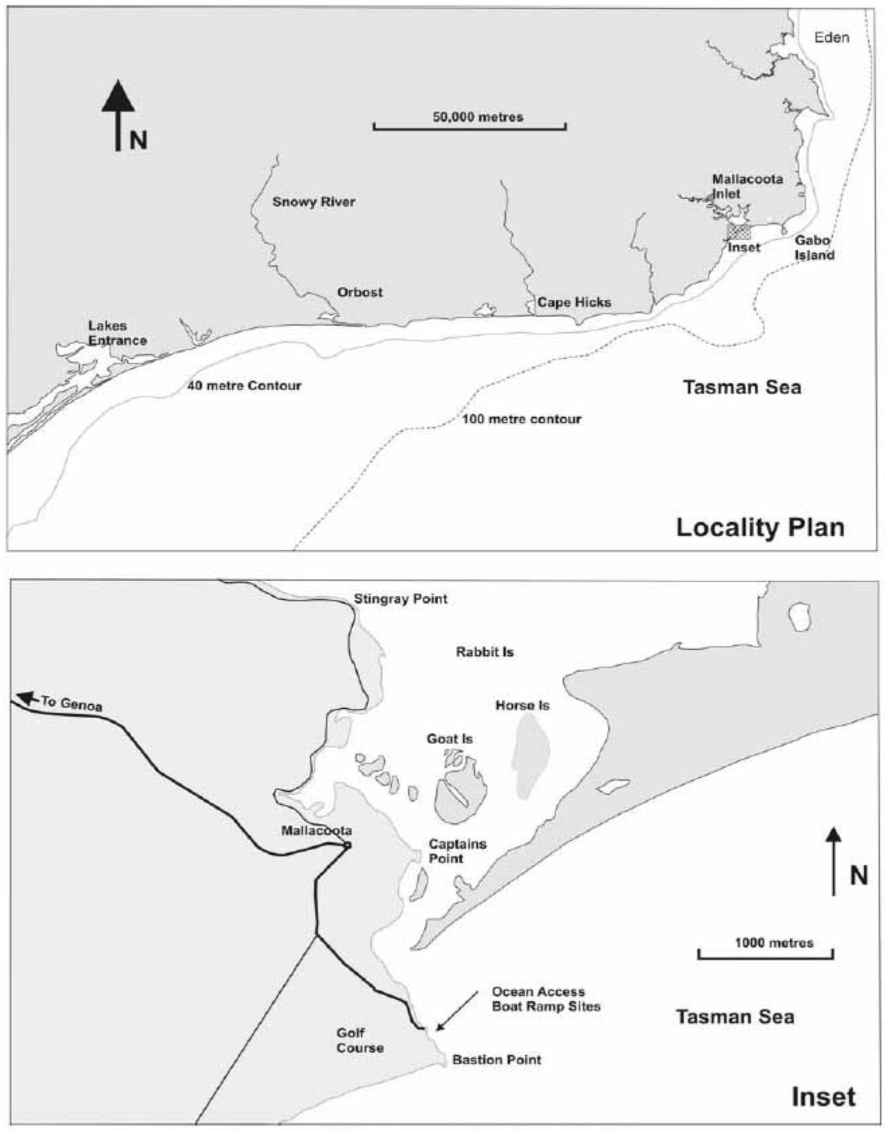


Figure 1.1 Project locality plan

2

Ocean Access Boat Ramp, Bastion Point, Mallacoota Environmental Effects Statement - Coastal Processes Study Final Report *04-0282-hprrp-041222f feb 07*

Source: Ocean Access Boat Ramp Bastion Point, Mallacoota EES – Coastal Processes Study Final Report February 2005 Revised 14th February 2007, Coastal Engineering Solutions P2

From a commercial use perspective, the Bastion Point boat ramp is the primary launching place for members of the Mallacoota Abalone Cooperative. It is also used by government agencies, including Parks Victoria in relation to management of the Cape Howe Marine Park and Gabo Island.

East Gippsland Shire Council has focused on a number of issues in relation to the proposed new ramp at Bastion Point.[21]

- Concern that the existing structure has reached the end of its economic life and a decision is required in respect to the future provision and operation of the boat ramp.
- Concern about the standard of safety for operators using the existing facilities and for other users of the beach and water at Bastion Point.
- The need to provide an adequate level of infrastructure to support commercial and recreational fishing activities presently occurring at Mallacoota, and to support their ongoing development.
- The need to ensure that any development at Bastion Point does not impact adversely on the character and amenity of Mallacoota for residents and visitors.
- The need to appropriately manage the mix of users at Bastion Point.
- The need to provide an adequate level of infrastructure to support and improve access for emergency and enforcement activities.
- The need to minimise ongoing maintenance and operating costs of the facility.

3.2.2 Development Option

East Gippsland Shire Council and Coastal Engineering Solutions (a coastal and marine consulting engineering company retained by the Department of Sustainability and Environment) developed a series of design options.

Option 3 was originally identified in the Environmental Effects Statement as the preferred option for the development of a new ramp. This development would have been located approximately 150 metres south of the existing ramp at a naturally occurring ‘slot’ on the reef. This would have consisted of: a 30 bay car and trailer park; a 300 metre access road and suspended pedestrian boardwalk leading through native vegetation to the boat ramp from the car and trailer park; a two-lane boat launching ramp; and a single breakwater on the south side, approximately 130 metres in length and 2.8 metres high.

A revised option (Option 3b) has been selected, with the major design variations being: a change in design of the car and trailer park to expand its capacity to 60 bays; and changes in the positioning of the access road so that it is tucked in along the existing scarp face (to minimise the need to cut through the existing vegetation).

21 Environment Effects Statement – Ocean Access Boat Ramp, Bastion Point, Mallacoota, PE-i

Figure 4 – Option 3b

Source: Ocean Access Ramp, Bastion Point, Mallacoota – Panel Report – October 2008 P9

3.2.3 Current Users

The Pryor Knowledge report provided some estimates of current users of the existing ramp.[22] These are: abalone divers launch about 100 days per year and account for 1100 launches; a local in-shore fishing vessel goes out approximately 300 days per year; the charter boat to Gabo Island goes out about 130 days per year; other users (recreational boating) are estimated at 750 launches per year; Parks Victoria and other government agencies account for an estimated 1000 launches per year.

3.3 Economic Impacts

The major measurable economic impacts that are associated with the development of the ramp are the impacts of increased recreational boating usage. These are reflected in increase expenditure in Mallacoota and its impact on regional income and employment. These are the major impacts that are examined in this report.

There are other activities that could come from the development of the ramp and these include: expansion in boat storage and servicing; development of ocean fishing charters; game fishing tournaments; whale watching; coastal waters and shoreline charters and tours; and diving activity.[23]

There are other impacts as well and these include increased efficiency and safety of boat launches. A new boat ramp would improve the efficiency of launches for the abalone industry and commercial fishing, but would not generate an increase in economic activity in this sector (although the launch cost may be reduced).[24] In the case of government agencies, safety would be increased for the current level of launches required for policing and rescue activity. The economic impacts occur at two stages - during the construction phase and during the ongoing operations phase of the ramp.

22 Stage 2 Ocean Access Boat Ramp, Bastion Point, Mallacoota Social, Economic and Infrastructure Impacts, Pryor Knowledge (ACT) P13-15

23 Stage 2 Ocean Access Boat Ramp, Bastion Point, Mallacoota Social, Economic and Infrastructure Impacts, Pryor Knowledge (ACT) P17-18

24 Launch costs by tractor were estimated at $70 per launch for abalone licence holders. See Discussion Paper Future Management Options, Bastion Point Ocean Access Boat Ramp, East Gippsland Shire Council –March 2005

4 Economic Impacts of the Development

4.1 Overview

This section provides estimates of the potential economic impacts of the development of the ramp. This covers both the construction phase and the operations phase. In each section, the assumptions outlining the modelling are outlined and impact estimates are provided.

The major economic impacts associated with the ramp will come from an increase in recreational boat users (visitors and local residents), and in particular visitors who stay in Mallacoota over several days.

The other user groups (abalone, fishing and government agencies) do not have a major impact, as they are assumed to continue with their current use rates. The major benefits for these groups are increased efficiency in launching and improved safety.

4.2 Construction Phase

The following table provides estimates of the construction of the facility. It is assumed that design and construction is completed in one year. The estimated construction costs of the project (excluding GST) are $5.790 million, with consultant, and project management fees and other costs of $625,000 for a total cost of $6.415 million. The following cost estimates differ from those in the July 2010 report, and are based on the latest information provided by East Gippsland Shire Council.

Table 18. Construction Cost Estimates – Bastion Point Ramp

Bastion Point Development	Estimate $	Sources
Construction Cost (Building Works)	**4,800,000**	Estimates from CrossCo Engineers and Currie & Brown Peer Review
Contingency and provisions	990,000	Estimates from CrossCo Engineers and Currie & Brown Peer Review
Total Estimated Construction Cost	**5,790,000**	
Other Costs		
Vegetation Offset	150,000	Estimates from Currie & Brown Peer Review
Consultant Fees (heritage and other)	100,000	
Project Management Costs	375,000	
Total Other Cost	**625,000**	
Total Costs Building & Fees	**6,415,000**	
Revised Oct 2010		

Source: Information provided by East Gippsland Shire Council October 2010

The construction phase of the project would generate an estimated 23-24 construction related jobs. Additional benefits would be generated through expenditure of employees on accommodation and other services during the construction phase. Based on a multiplier of 1.2, this would imply another 4-5 indirect jobs in the local area during the construction phase.

Table 19. Construction Jobs Estimate – Bastion Point Ramp

Construction of Ramp	Construction Cost	Materials	Profit	Labour	No. of Construction Jobs
Shares: %		50%	15%	35%	Based on average wage (incl allowances= $85,000 pa.
Construction Costs $	5,790,000	2895000	868500	2026500	23.8
Revised Oct 2010					Indirect jobs: 4.8 (multiplier 1.2)

Source: Buchan Consulting Estimates

4.3 Use of the Ramp - Recreational Boating

There are two categories of recreational boat users, who are potential users of the ramp. These are tourist visitors with boats and local residents with boats. The increase in recreational boating generates the major economic benefits to the region, mainly due to recreational fishing and boating visitors, who stay for several days on each trip. The recreational boating/fishing segment has been estimated on the basis of a number of assumptions. This estimation is required as there is no local survey data or other information available on boat usage or visitors with boats. The assumptions used are based on review of earlier reports and qualitative information obtained in consultations.

4.3.1 Tourist Visitors - Recreational Boating

There is a need to estimate the potential use of the new ramp by visitors, who have boats. The following is the basis of the estimates that we have developed for the impact assessment. An analysis was undertaken of visitor capacity in the available accommodation and estimates made of occupancy during the year - covering season peaks, off peak periods and week-ends. Estimates were then made of total visitor days, visitor numbers and the share of visitor groups with boats. From this we estimated the potential for a total of 2990 visitor boat launches per year or an average of 58 launches per week by visitor recreational boat users.

Table 20. Estimate - Tourist Visitor and Recreational Boating Visitors Bastion Point Ramp Use

	No
Annual Visitor Days	
Holiday Houses	45,903
Tourism sites/motels etc	253,080
Total Visitor Days	**298,983**
Annual Average Visitors	
Average length of stay = 3 nights	
Average visitors (number)	99,661
Average party size = 4	
Average Visitors Groups (number)	24,915
Groups with boats (20% of visitor groups)	
Visitor Groups with Boats (annual - number)	4983
Ocean Launches (30% of boats)	
Number of visitor boats for ocean launches (annual)	1495
Launches per visit = 2	
Total Visitor Boat Launches (annual)	2990
Average per week	**57.5**

Source: Buchan Consulting estimates

The following shows the estimated expenditure of visitors across a range of expenditure items. In terms of period of stay, we have assumed that each boat has an average of 3 persons and the average stay of the group is 3 nights. The total expenditure of this group of users would be $3.513 million per year. The following differs from the July 2010 report in that, based on information provide by Council, the analysis in this report assumes no charges for ramp use/parking and a revision has been made to correct an error.

Table 21. Estimated Expenditure –Recreational Boating Visitors (Bastion Point Ramp Users only)

Expenditure	Ramp users Visitors	No weeks	Launches = 2990 Ave per week = 57.5 Boat Launches	Ramp Users- Visitors Annual Spending $
	$ Per day		average per week	
Boating Expenditure				
Ramp/Parking	0	52	**57.5**	0
Boat fuel	80	52	**57.5**	239200
Marine supplies	50	52	**57.5**	149500
Repair & Maintenance	50	52	**57.5**	149500
Bait/fishing supplies	30	52	**57.5**	89700
	Average of 3 days Group of 3		Groups (ave per week) =28.8	
Tourism Expenditure				
Accommodation	630	52	28.8	941850
Restaurant/Takeaway	450	52	28.8	672750
Groceries (& Drinks)	270	52	28.8	403650
Car Fuel	90	52	28.8	134550
Recreation & Entertainment	270	52	28.8	403650
Shopping	180	52	28.8	269100
				3513250
Revised Nov 2010				

Source: Buchan Consulting estimates

The following are the assumptions that underpin these expenditure estimates.

Table 22. Assumptions on Recreational Boating Visitor Expenditure

Boating Related Expenditure	Expenditure Per Trip $
Ramp use /Parking	0
Boat fuel	80
Marine supplies	50
Repair & Maintenance	50
Bait/fishing supplies	30
Tourist Related Expenditure	
Average group size = 3 persons	
Average stay = 3 night	**< $ Per Person per Day>**
Accommodation (per person expenditure)	70
Restaurant & Cafes (per person expenditure)	50
Groceries/drinks (per person expenditure)	30
Recreation & Entertainment (per person expenditure)	30
Shopping (per person expenditure)	20

Source: Buchan Consulting estimates

4.3.2 Local Boat Owners - Recreational Boating

The *Pryor Knowledge Report* indicated that there were 277 register boats in Mallacoota. In estimating ramp use by these local boat owners, we have assumed the following: 30% of owners would use the ocean ramp (83 boats); and on average they would make 15 ocean launches per year. This implies a total of 1247 launches by local boat owners or an average of 24 launches per week. The total expenditure of the local user group is $448,740. The expenditure patterns of local differ as there is no overnight accommodation or other associated tourism expenditure. We have assumed the same expenditure profile in terms of boating related expenditure. Consultations indicated that there is limited current use by recreational boat owners because of the difficulties associated with launches from the current.

Table 23. Estimated Expenditure – Recreational Boating– Local Boat Owners (Bastion Ramp Users Only)

	Local Ramp Users = 83			
	Ave Trips per year = 15			1247 launches
Expenditure	Total local launches = 1247	No weeks	Boats	Annual Expenditure $
	$ Per day		Average per week	
Boating Expenditure				
Ramp/Parking	20	52	24	0
Boat fuel	80	52	24	99720
Marine supplies	50	52	24	62325
Repair & Maintenance	50	52	24	62325
Bait/fishing supplies	30	52	24	37395
	Average 1 day Group of 3		24	
Tourism Expenditure				
Accommodation	0	52	24	0
Restaurant/Takeaway ($30 per person)	90	52	24	112185
Groceries (& Drinks) ($ 20 per person)	60	52	24	74790
Car Fuel	0	52	24	0
Recreation & Entertainment	0	52	24	0
Shopping	0	52	24	0
Total				**448740**
Revised Oct 2010				

Source: Buchan Consulting estimates

4.3.3 Total Expenditure All Users (Recreational Boating – Visitors and Local Boat Owners)

The following table aggregates the estimated expenditure generated by recreational boating users, who use the proposed ocean ramp and covers both visitors and local residents. It shows total annual spending of $3.9 million with the major components being tourist related spending.[25]

Table 24. Total Expenditure -Recreational Boating (Bastion Ramp Users Only)

All Users Expenditure	Recreational Boating Visitors	Share	Local Recreational Boating Users	Share	Total All Recreational Boating	Share
Boating Expenditure						
Ramp/Parking	0	0	0	**0.0**	0	0
Boat fuel	239200	6.9	99720	**22.2**	338920	8.7
Marine supplies	149500	4.3	62325	**13.9**	211825	5.4
Repair & Maintenance	149500	4.3	62325	13.9	211825	5.4
Bait/fishing supplies	89700	2.6	37395	8.3	127095	3.3
Total Boating	627900	18.2	261765	58.3	889665	22.8
Tourism Expenditure		0.0		0.0		0.0
Accommodation (2 per room)	941850	27.3	0	0.0	941850	24.1
Restaurant/Takeaway	672750	19.5	112185	25.0	784935	20.1
Groceries (& Drinks)	403650	11.7	74790	16.7	478440	12.3
Car Fuel	134550	3.9	0	0.0	134550	3.4
Recreation & Entertainment	403650	11.7	0	0.0	403650	10.3
Shopping	269100	7.8	0	0.0	269100	6.9
Total Tourism	**2825550**	**81.8**	**186975**	**41.7**	**3012525**	**77.2**
Total All	**3453450**	**100.0**	**448740**	100.0	**3902190**	100.0
Revised Nov 2010						

Source: Buchan Consulting estimates

An estimate was also made of the local share of this expenditure. This local share of expenditure was estimated at $2.0 million.

Table 25. Estimated Local Share of Expenditure Recreational Boating (Bastion Ramp Users Only)

All Users – Local Share of Expenditure	Total Spending Recreational Boating $	Local Share of Spending (Ratio)	Local Share of Spending $
Boating Expenditure			
Ramp/Parking	0	0	0
Boat fuel	338920	0.1	33892
Marine supplies	211825	0.4	84730
Repair & Maintenance	211825	0.7	148277
Bait/fishing supplies	127095	0.5	63547
Tourism Expenditure			
Accommodation	941850	0.6	565110
Restaurant/Takeaway	784935	0.6	470961
Groceries (& Drinks)	478440	0.5	239220
Car Fuel	134550	0.1	13455
Recreation & Entertainment	403650	0.7	282555
Shopping	269100	0.5	134550
Total All	**3902190**		**2036298**
Revised Nov 2010			

Source: Buchan Consulting estimates

25 The only change has been the assumption of no charges for ramp use or parking.

4.3.4 Jobs Generated

From the estimates of the local share of spending, estimates were made of the number of jobs generated in each sector. This was based on estimating the wage share of the local share of the spending and applying an average wage/salaries figure to estimate the number of jobs. We have utilised a higher average wage figure, as the analysis of the local economy shows that all the businesses are small business and around one third of businesses comprise working proprietors.

The analysis shows that the recreational boat users would generate a total of 21.2 direct jobs, with most of the jobs being in tourism related activity and is associated with overnight stays by tourist visitors with boats.

Table 26. Recreational Boating Users (Bastion Ramp Users Only) - Expenditure and Jobs Generated

Direct Jobs	Total Spending Recreational Boating $	Local Share %	Local Share Local Share of Spending	Wage Share of local spend %	Local Wages $	Average Wage <employee/prop>	No of Jobs
		Spending				Employee/prop	Direct Jobs
Boating Expenditure							
Ramp/Parking	0	0	0		0	0	0.0
Boat fuel	338920	0.1	33892	0.6	20335	50000	0.4
Marine supplies	211825	0.4	84730	0.6	50838	50000	1.0
Repair & Maintenance	211825	0.7	148277	0.6	88966	60000	1.5
Bait/fishing supplies	127095	0.5	63547	0.6	38128	55000	0.7
							3.6
Tourism Expenditure							
Accommodation	941850	0.6	565110	0.6	339066	65000	5.2
Restaurant/Takeaway	784935	0.6	470961	0.6	282576	55000	5.1
Groceries (& Drinks)	478440	0.5	239220	0.6	143532	50000	2.9
Car Fuel	134550	0.1	13455	0.6	8073	40000	0.2
Recreation & Entertainment	403650	0.7	282555	0.6	169533	60000	2.8
Shopping	269100	0.5	134550	0.6	80730	60000	1.3
							17.6
Total	**3902190**		**2036298**		**1221778**		**21.2**
Revised: Nov 2010							

Source: Buchan Consulting estimates

Table 27. Summary Estimated Direct Jobs Generated

Summary Direct Jobs	No of Jobs
Boating Expenditure	
Ramp/Parking	0.0
Boat fuel	0.4
Marine supplies	1.0
Repair & Maintenance	1.5
Bait/fishing supplies	0.7
	3.6
Tourism Expenditure	
Accommodation	5.2
Restaurant/Takeaway	5.1
Groceries (& Drinks)	2.9
Car Fuel	0.2
Recreation & Entertainment	2.8
Shopping	1.3
	17.6
Total Direct Jobs	**21.2**
Revised: Nov 2010	

Source: Buchan Consulting estimates

The expenditure impact of these 21.2 employees will generate additional income and jobs in the region. These jobs would generate an additional 5.5 jobs in the region, for a total of 26.7 jobs.

Based on an assumption of this level of ramp use continuing, then these jobs would be ongoing in the region.

Table 28. Estimated Job Impacts Use by Recreational Boating Users (Bastion Ramp Users Only)

	Jobs
Direct Jobs	21.2
Indirect Jobs	
Multiplier Impacts of Employee Spending	5.5
Total Direct & Indirect	**26.7**
Multiplier	1.26
Revised Nov 2010	

Source: Buchan Consulting estimates

4.3.5 Regional Income

The following table shows the net regional income for the first year of operation (assumed to be 2012) and the summed income for 10 years (2012 -2021) and for 20 years of operation (2012-2031).[26] It shows that based on the recreational boating use estimated in this report, regional income would be $11.4 million higher over 10 years and $22.8 million higher over a 20 year period.

Table 29. Estimated Net Regional Income Impacts - Use by Recreational Boating Users (Bastion Ramp Users Only)

Impacts of Ramp (2012 $s)	Year 1 2012 $ million	Total 10 Years 2012-2021 $ million	Total 20 years 2012 – 2031 $ million
Net Regional Income -Direct Employment (after tax)	0.892	8.927	17.853
Indirect Jobs			
Net Regional income – indirect employment (after tax)	0.250	2.500	5.000
Total Net Regional Income	**1.1427**	**11.427**	**22.854**

Source: Buchan Consulting estimates

4.4 Ramp Operations

The following are the estimates of the annual users of the ramp. The existing user numbers are based on the information included in the Pryor Knowledge Report, and the recreation use is base on the analysis in this report. The July report included user charges based on differential charges for commercial and government agency users ($50) and for recreational boats ($20). These charges are outlined in Table 30, but are not included in the analysis in this report.

Table 30. Estimates of Users and Revenue

User Group	Annual Use Launches	Ramp Charges Per launch	Total Revenue
Existing Users			
Abalone Boats	1100	50	55000
Other Commercial Users (charters etc)	750	50	37500
Parks Victoria	365	50	18250
Other Agencies	365	50	18250
Increase in Recreational Boating Use			
Recreational Boating - Visitors	2990	20	59800
Recreational Boating Users - Locals	1247	20	24940
Total	**6817**		**213740**

Source: Buchan Consulting estimates and information from Pryor Knowledge Report

The following are indicative estimates of operation costs associated with the operation of the ramp.

Table 31. Indicative Costs of Ramp Operations

Annual Costs		Assumptions
Operating Costs	$	
Dredging Costs and maintenance costs (annual)	225,000	Per year
Total Operating Costs	**225,000**	
Depreciation (annual)	173,700	3% of construction cost $5.790 million
Total operating costs + depreciation	**398,700**	
Source: Information provided by East Gippsland Shire. Note: depreciation based on 30 year asset life		
Revised Oct 2010		

26 These estimates are all expressed in constant 2012 dollars.

4.5 Benefit/Cost Comparisons

The following table shows the estimated costs and regional benefits for 2012 and for a 20 year period. It is based on the following assumptions:

- Capital cost of $6.415 million is amortised over 20 years.
- Annual operating costs are as estimated in Section 4.4.
- Regional benefit is the net increase in regional income (businesses and additional employees) as estimated in Section 4.3.5, and which is generated by the increase in spending by recreational boating users (mainly visitors) that use the ocean ramp.
- The costs used in calculating the regional benefit/cost ratio are operating costs plus capital cost.
- Construction is undertaken in 2011 and operations commence in 2012.

It should be noted that the value of the net benefit is sensitive to any changes in the assumptions that have been made in relation to the modeling of the number of launches and the expenditure patterns of visitors. This net income is income earned by business and the additional employees that is generated by the growth in boating visitor numbers and ocean launches. This income accrues to persons in the region and not to the operators of the ramp.

The analysis shows a regional benefit/cost ratio of 1.6 for 2012.

The table below analyses the costs associated with the development of the ramp and compares it with the estimated benefits (increase in net regional income associated with the project). It differs from the report of July 2010 in two respects.[27] The capital cost of construction of the ramp has increased from $5.250 million to $6.415 million. It is assumed that there is no revenue from ramp user fees (these user fees were estimated in the July 22 report, at $213,740 for 2012 – the first year of operation of the ramp).[28] The impacts of the no revenue assumption are to increase the estimated annual net costs (operating and capital costs) of the ramp.

Table 32 Benefit/Cost Comparisons (constant 2012 dollars)

	2012	20 Year Period (constant prices 2012 $s)
	$	$
Revenue		
Revenue - Fees (assume worst case, no user charges recovered).	0	0
Costs		
Capital Cost (2012= $6.415 m))		
Amortised Capital Cost (20 years)	320,750	6,415,000
Operating Costs		
Dredge & maintenance	225,000	4,500,000
Depreciation (3% of construction cost of $5,790,000)	173,700	3,474,000
Total Operating Cost	**398,700**	**7,974,000**
Total Operating Costs + Capital Cost	719,450	14,389,000
Difference (revenue-(operating costs+ capital cost))	-719,450	-14,389,000
Net Regional Income (Benefit)		
Increase in net regional income	**1,142,737**	**22,854,743**
Ratio Regional Benefit/Cost Ratio (Based on capital + operating costs)	**1.6**	**1.6**
Revised Nov 2010 (capital cost , ramp revenue, & regional income)		

27 Bastion Point Ocean Access Boat Ramp, Economic Impact Assessment Report July 22 2010, Buchan Consulting.
28 Bastion Point Ocean Access Boat Ramp, Economic Impact Assessment Report July 22 2010, Buchan Consulting P29

5 Concluding Comments

The major measurable economic impacts that are associated with the development of the ramp are the impacts of increased recreational boating usage. These are reflected in an increase in expenditure in Mallacoota and an increase in regional income and employment.

These are the major impacts that are examined in this report. There are other impacts as well, and these include increased efficiency and safety of boat launches. A new boat ramp would improve the efficiency of launches for the abalone industry and commercial fishing, but would not generate an increase in economic activity in this sector (although the launch cost may be reduced).

In the case of government agencies, safety would be increased for the current level of launches required for policing and rescue activity.

The economic impacts occur at two stages - during the construction phase and during the ongoing operations phase of the ramp.

The analysis shows that the recreational boat users would generate a total of 21.2 direct jobs, with most of the jobs being in tourism related activity and is associated with overnight stays by tourist visitors with boats. There would also be the potential to develop charter fishing operations.

The analysis shows a regional benefit/cost ratio of 1.6 for 2012, based on estimates of annual project cost (operations and capital cost) and the net regional income generated by the increase in recreational boating visitors using the ocean ramp.[29]

The overall user numbers are dependent on achieving the increase in recreational boating use of the ramp that is projected in the modelling contained in this report.

29 It should be emphasised that this ratio is based on the modelling and estimation outlined in this report and would be sensitive to any changes in assumptions in relation to user numbers and expenditure patterns.

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Victorian Coastal Strategy 2008, Victorian Coastal Council 2008

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