



FISHERMAN'S BAY

SUSTAINABILITY REPORT



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Edited By Bronson Hayter and Claire Kearton



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FISHERMAN'S BAY

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VISION STATEMENT





VISION STATEMENT

FISHERMAN'S BAY 2008 - 2020

1. Vision Statement
2. Current Challenges
3. Outcomes
4. Strategies
5. Measuring Progress
6. Conclusion





VISION STATEMENT

1. VISION



“Maintaining an open, laid-back quality - a true rural town atmosphere”

The township of Fisherman's Bay is on the verge of a substantial period of change. Situated on the coast, they have already felt some of the effects of coastal climate change, having recorded their largest king tide ever in late 2007. Further, it is in the midst of a change from licensed land to freehold, allowing great opportunities to boost the growth of the town, however it leaves some of the tenants unsure about their futures. The town is at a point where meticulous thinking and planning are needed to ensure the survival of Fisherman's Bay environmentally, economically and socially through the next 50 years

Fisherman's Bay has a unique character. The fenceless allotments give the town a communal feel, which is reinforced by the friendly locals. The town is largely characterised as safe, which is particularly due to the roadblocks that slowdown traffic and the quiet nature of the town. The fluctuation of the population due to the large fishing/holiday shack community gives it a periodic festive feel and the local native vegetation adds to the coastal atmosphere.

The character of the town is to be enhanced by careful and precise planning, not only so the current residents are not disturbed but also to allow for the town to grow.

The foreshore is an important aspect of Fisherman's Bay, as it is the main focus point for visitors to launch their boats, relax and gather together. A stronger foreshore will help the town progress as a key holiday point. It will also help further accommodate for the significant amount of holiday visitors.





VISION STATEMENT

1. VISION



When the town grows it will start to have an impact on the current infrastructure. This will place new importance on the upgrade and ongoing maintenance of the infrastructure.

Fisherman's Bay will lead the way in environmental awareness. The town will establish the conservation of energy, water and resources, in turn reducing the town's environmental footprint. The current placement of roadblocks hinders the use of cars and promotes the use of bicycles and walking, a positive within a small township.

Fisherman's Bay will become an improved holiday destination and promote self growth. This will ensure that in 10, 50, or 100 years from now the town is still energetic and alive.





VISION STATEMENT

2. CURRENT CHALLENGES



Fisherman's Bay is an isolated coastal town and is currently privately owned by Fishman Bay Management Pty Ltd. In the near future free holding of the land will occur leading to a number of social, political and economic issues. This is a major concern for the residents but also an opportunity for innovative design development within the town.

The town's permanent population is steadily decreasing while the number of visiting or semi permanent residents is increasing. The quiet, friendly and safe atmosphere of the town has led to an increase in the number of visitors. Attracting more permanent residents, particularly young families is now a priority to ensure the growth of the town.

Free holding presents the opportunity to improve and upgrade the existing infrastructure of the town. Addressing issues such as the road systems, storm water and sewerage infrastructure that will require improvement to enhance the public perception and image of the town.

Redevelopment of the foreshore, streetscape and existing shacks within the town is another potential issue facing the community. It is crucial that future development is managed so that it enhances and reinforces the existing character of the town.

Climate change, in particular sea level rise and tides will inevitably affect the town in the future. Measures will need to be taken to manage this issue with the town's development. Restrictions in foreshore development may be needed to protect the rest of the town.

Sustainable water supply will inevitably become a key issue associated with the development of the town. Additional sources to the current SA Water Port Broughton pipeline, which is then distributed into the town by Fisherman's Bay Management LTD., will need to be developed to secure the town's future water supply.





VISION STATEMENT

2. CURRENT CHALLENGES



As a major concern throughout Australia and particularly in rural towns, water and sourcing a sustainable water supply will inevitably become a key issue associated with the development of the town. Additional sources to the current SA Water Port Broughton pipeline, which is then distributed into the town by Fisherman's Bay Management LTD., will need to be developed to secure the town's future water supply, for households and upgraded public open spaces.

The presence of mosquitoes is proving to be the single biggest drawback of the town. Innovative methods to reduce the number or impact of mosquitoes on the town will need to be explored.

However, the vision and desire to progress the town into the future requires further planning and strategies.





VISION STATEMENT

3. OUTCOMES



1. Enhance Town Character

- Provide design guidelines for new development, which enhances the character of the town.
- Maintain open feel while creating a progressive town atmosphere.

2. Dynamic Foreshore Upgrade

- A central public space which is designed for coastal environmental factors.
- Improve foreshore public facilities and landscape amenity.

3. Town Redevelopment

- Improve and upgrade existing infrastructure.
- Provide vibrant streetscapes which creates a distinctive town character.
- Modern facilities which provide for visitors and Residents.
- Provide low cost housing options.

4. Environmentally & Economically Sustainable Town

- Address climate change and conserve water, energy and natural resources.
- Provide greater awareness of the town's ecological habitats.
- Measures to ensure future economic and environmental success and recognition.

5. Create Greater Awareness

- Upgrade and improve existing signage within and around the town.
- Upgrade facilities, infrastructure and landscapes of the town.





VISION STATEMENT

4. STRATEGIES



1. Enhance Town Character

Use council guidelines to standardize the scope of growth and development to maintain the open character of the town. Limit traffic speeds, through traffic calming devices, to maintain a safe environment for pedestrians, cyclists and children. Increase priority of cycling and walking circulation methods within the town. Work with existing regulations to maintain open areas in the progression of the future development. Determine building regulations such as height and setback from the street.

2. Dynamic Foreshore Upgrade

Incorporate coastal climate change into considerations for foreshore development. Consider current council site level regulations regarding reduction of risk from flooding and investigate strategies to reduce this risk whilst still enhancing the foreshore character. Improve foreshore public facilities e.g. toilets BBQ areas.

3. Urban Redevelopment

To work collectively with council in advancing the road quality both for existing sealed and unsealed roads, and creates a user friendly environment for vehicular and pedestrian traffic. Include storm water management in the design of roads and connect housing and low lying areas to stormwater systems. Direct focus towards the new vacuum sewerage system and ensure all houses and new developments are connected to the systems quickly. Improve the visual quality of the surrounding green spaces with new tree plantings, landscaping and maintenance programs in forming an area that is both accessible and functional – possibly designed in accordance with CPTED* principles.

*Crime Prevention Through Environmental Design





VISION STATEMENT

4. STRATEGIES



4. Sustainability

The height above sea level of Fisherman's Bay is an area of concern for this township that has already experienced a real flooding emergency in 2007 from King Tides. The current research into sea levels and climate change suggest that within a few decades the sea levels around Fisherman's Bay could become a major concern for the area and to ensure the future of Fisherman's Bay this issue will be addressed. There would also be focus on working with council to create its own operations direction, meeting the challenge of promoting recycling and reducing waste to landfill, using energy and water conservation strategies. Include coastal management planning with further awareness and maintenance programs to control seaweed build up and waste disposal. Ensure new local native plantings are appropriate for the region, are endemic, can tolerate high temperatures and have low watering requirements. Provide signage at key locations informing about the type of habitat, flora and fauna found at the particular locations. Include about general information and the population status of the particular subject. These measures are all in the objective of educating the community.

5. Create Greater Awareness and Community Spirit

Together with council address the problem of town promotion through the installation of signs at adjacent towns and along joining roads to the town. Provide adequate information at the entrance of town and in the town centre. Include key information about the town and up and coming events. Promote and inform the community of up and coming advancements and involve the town as much as possible e.g. community plantings, involvement with green space design and clean up days.





VISION STATEMENT

5. MEASURING PROGRESS



To ensure planned future outcomes designed for our vision are successful, we must measure their progress with outlines and strategies. A time line must be put in place as a target in order to structure and guarantee our visions success.

Using a timeline and a target year of 2020, we will be able to aim towards fulfilling the vision for Fisherman's Bay.

Infrastructure Upgrade:

Unsealed roads proved to be the largest concern within the community as a whole. Continual uplifting of dirt and dust, especially in dry seasons, has been an ongoing problem. Sealed roads are the first step. We aim to have all major streets and roads sealed by 2015. This will provide safer roads, alleviate noise pollution and eliminate dust and dirt lifted from traffic. Within this timeline also street signs and information boards will be assembled, ensuring the town become a further user friendly town. Heading towards 2020 improvements to infrastructure such as adding gutters to roads are vital. Catching stormwater is essential, therefore by providing gutters throughout the town and wetlands to clean the water will both improve water sustainability. Detention Basins will also be considered in the interest of reducing flood impacts.





VISION STATEMENT

5. MEASURING PROGRESS




Marina/Foreshore Development:

The Marina and Foreshore are the heart of this town. It attracts not only professional fisherman, but also attracts tourists to relax. It was evident that both permanent and temporary residents agree that the foreshore needs to be further developed. It is our aim to provide further picnic benches and tables, greater shaded areas, better playground facilities and a broader public area for people to gather. To combat the issue of the decrease of youth in Fisherman's Bay BMX tracks, skate parks and other activities that appeal to youth will be introduced. Increasing the size of the foreshore will not only open up the space but also cater for the rapid increase in population during peak holiday periods. The current break wall will also need to be upgraded to reduce the extent of town inundation from king tides.

Water Catchment:

Town flooding and inundation due to king tides and rainfall are an issue that needs to be addressed. Systems are to be put in place to use the existing detention basins to the full potential to slow the stormwater down and reduce the cost of extra drainage associated with peak periods. This will reduce/limit the amount of flooding risk in peak rainfall events. Large water tanks will be encouraged for every property ensuring maximum collection of water from rainfalls. Placing roadside gutters will also assist in a much greater town collection of storm water and also in reducing inundation from heavier rainfalls. The use of roadside gutters will allow better collection of stormwater of the roads; this will then be able to be stored by various means (Wetlands, ASR, etc) and reused to irrigate the upgraded public spaces.





VISION STATEMENT

6. CONCLUSION



To ensure the town's survival in the next 10 to 100 years and beyond, Fisherman's Bay has to be very attentive of the impacts that it will have on many different aspects of the town. There are many factors that they have to take into account in the long term; the environment; tourism; residents; and maintenance. Although one of the biggest issues to overcome will happen by late 2008 or early 2009 and that is free holding.

To ensure the town's survival growth is needed, but most of the residents and visitors don't want to lose the character of the town. To ensure the character isn't lost strict guidelines will be addressed. To promote growth a foreshore development will be happen and awareness of the town through signage, and a general re-development will occur. From this infrastructure, streetscape and public facilities will need to be improved. The sustainability of the town also needs to be addressed; Fisherman's Bay will pave the way in environmentally sustainable solutions, as a leader of communities on the Yorke Peninsular of South Australia.

Fisherman's Bay will maintain an open, laid-back quality while creating a rural town atmosphere.

By Andrew Van Zanten, Kristofer Gladigau, Nathan Noack and Thomas





SITE ANALYSIS





SITE ANALYSIS

1. WELCOME TO FISHERMAN'S BAY

1.1 History

1.2 Indigenous Heritage of
the Yorke Peninsula

1.3 Views and Vistas





SITE ANALYSIS

1. WELCOME TO FISHERMAN'S BAY



Above: Fisherman's Bay 1956



Above: Fisherman's Bay 1966

1.1 History

By Kellie Dowdy

Fisherman's Bay has always been a small fishing village, characterised by its quiet and safe lifestyle making it a popular family getaway. The area has always been recognised as a holiday retreat for working class families and the residents want it to stay that way. Shacks first began to be built there in the late 20's. Some even being constructed from shipping boxes and to this day are still in almost original condition, with few changes being made.

The land was originally owned by the Hornby family and the shack owners paid them an amount to live on the land, called a casual licence. In 1973 the Hornby family offered to sell the land, inviting all shack owners to make a bid for it. The top 10 bidders were accepted and together they formed the Fisherman's Bay Management Pty Ltd. The company is still running today, but there are now only 8 families left.

Today shack owners hold a license to the footprint of their shack and pay approximately \$800 depending on the size, terms and conditions. Therefore their main asset, their house, is not secure as they do not own the land it's located on. Residents are unable to develop outside of the footprint of their shacks, consequently extensions and developments are effectively unattainable. Further, it is virtually impossible to gain financial support for any modifications; therefore any substantial developments could be seen as overcapitalising in the town.





SITE ANALYSIS

1. WELCOME TO FISHERMAN'S BAY



Above: Fisherman's Bay 1976



Above: Fisherman's Bay 1988

The company also lets a farmer, work on the rural area in Fisherman's Bay but they obtain a percentage of the profits he makes from using that land.

Throughout Fisherman's Bay the Barunga West Council in general, manages the foreshore, including boat ramps, signage, trees and the beach area. Whilst the company deals with issues such as the roads, putting in road blocks, planting trees and managing and constructing reserves.

Today the main concern for both permanent residents and visitors is the free holding of Crown Land that will take place by the end of the year. Many residents feel their property has no real value as they are unable to sell it or pass it onto family or friends. All the properties on the Crown Land will eventually be knocked down and as a result the owners have no appeal to upgrade their residence.

1.2 Indigenous Heritage of the Yorke Peninsula

By Cameron Flentje

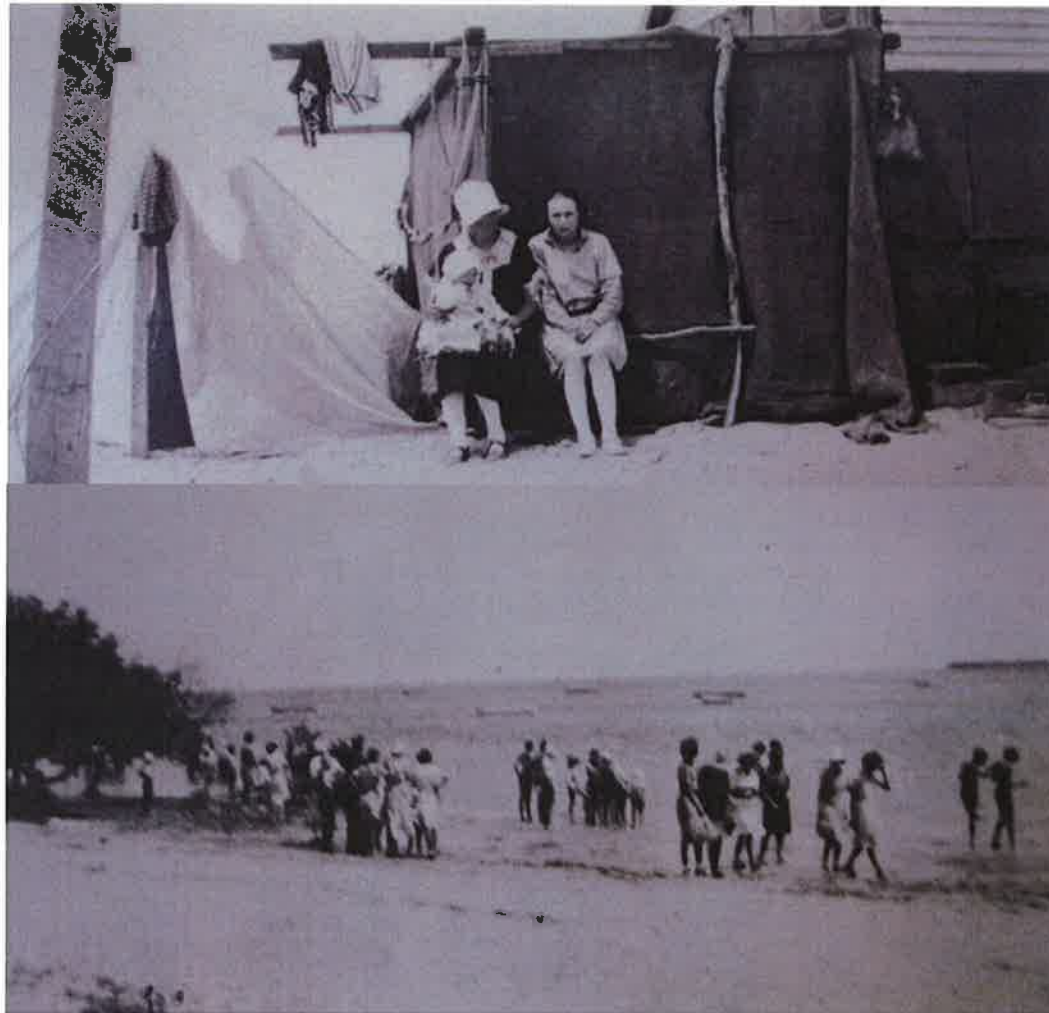
Aboriginal people lived in South Australia for a long time before the English settlers arrived. The Narungga people were the aboriginal people of the Yorke Peninsula and their territory extends from the Hummock Ranges in the east and the areas surrounding Port Broughton in the north. The Narungga people were broken up into a number of tribes, Kurnara in the north, Winderera in the east, Wari in the west and Dilpa in the south. The clan of the Kurnara people therefore would have been the people living in and or close to the Fisherman's Bay area.





SITE ANALYSIS

1. WELCOME TO FISHERMAN'S BAY



Like the people in Fisherman's Bay now, fishing was very important to the Narungga people and early settlers were surprised at how effective their fishing methods were. The aboriginal people of the Yorke Peninsula also looked after their lands, using fire to clear old grasses and plants to bring new growth. They also looked after their water sources, covering water holes to keep water clean and prevent it from being stolen by the native wildlife.

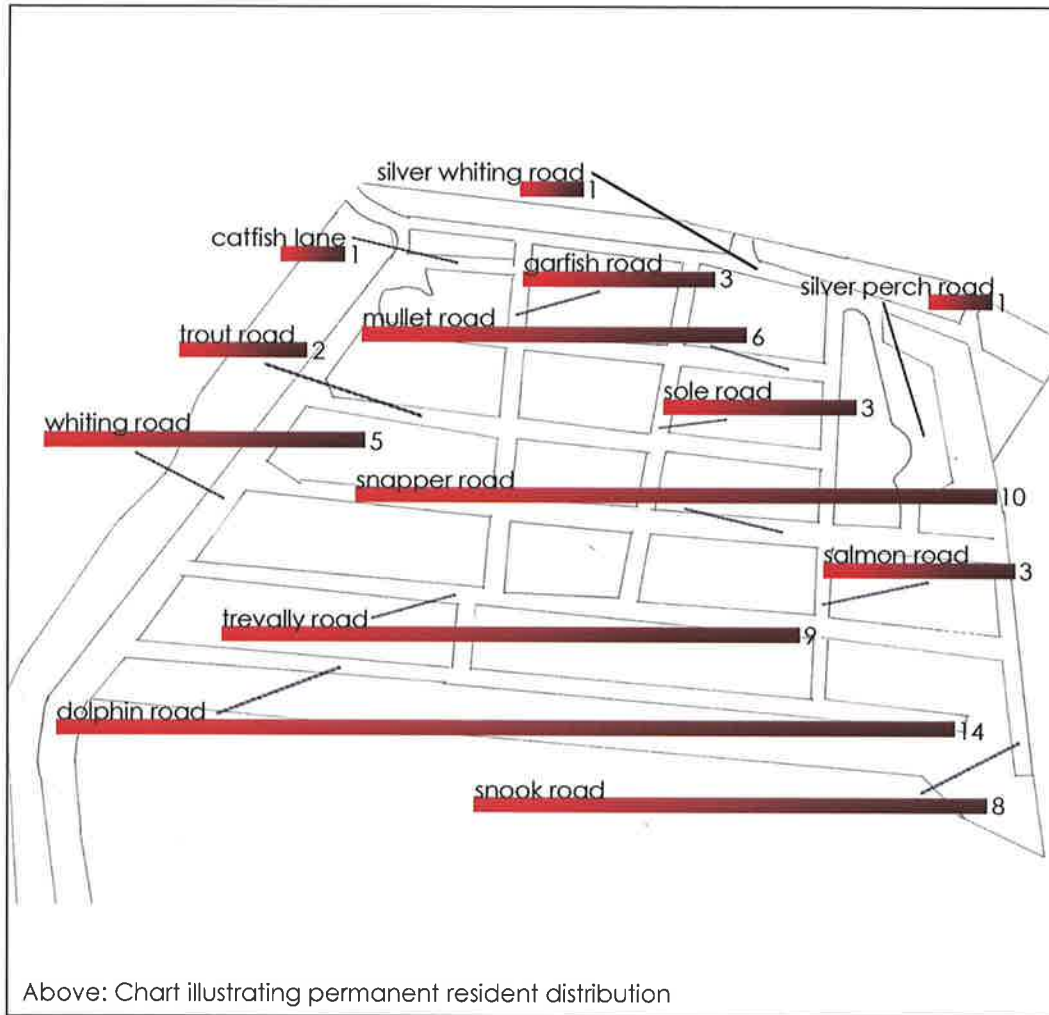
Key Points

- Residents want to maintain the area as a holiday retreat for working class families.
- Free holding of the Crown Land lessens peoples respect for the quality of their property and the desire to renovate or improve their residence.
- In contrast to the point above, residents throughout the rest of the town have the opportunity to modify, develop and extend their residence without the issue of overcapitalising on their land. Further, they will have a greater chance of successfully gaining financial support from banks as their shack is a secured asset.
- Due to this there are issues concerning the safety of the shack and the aesthetic impacts that result regarding the towns appearance.



SITE ANALYSIS

2. PEOPLE



Above: Chart illustrating permanent resident distribution

2.3 Population & Demographics

By Jiahao Yeo and Chuan-Lin Liu

The below information is a compilation of the statistics of the population and demographics of Fisherman's Bay. It is important to note that in this statistical report, from the Australian Bureau of Statistics, only 209 persons were included. The report covers main statistical elements like person characteristics, age, marital status, occupation. It also covers minor components like country of birth, industry of employment etc.

All statistics will be presented in a visual format of graphs, charts and other graphics.

2.3.0 Dwelling Distribution Chart

By Jiahao Yeo and Chuan-Lin Liu

The chart on the left illustrates the dwelling distributions of the permanent residents of Fisherman's Bay. There are a total of 66 permanent residents in Fisherman's Bay. The distributions are based on the streets in which the houses are located.

Key Points

- The majority age group is 25-54 years.
- Most of the permanent residents live along Dolphin Road.





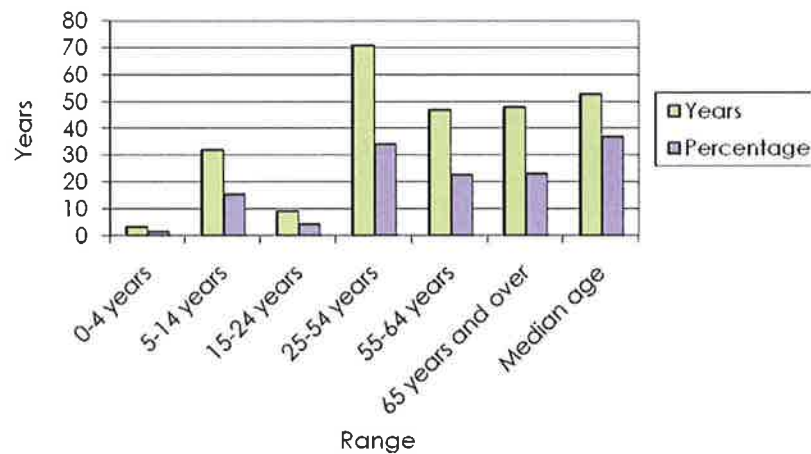
SITE ANALYSIS

2. PEOPLE

Persons Characteristics



Age Group Distribution



2.3.1 Person Characteristics

By Jiahao Yeo and Chuan-Lin Liu

In the 2006 Census (held on 8th August 2006), there were 209 persons usually resident in Fishermans Bay (L) (Urban Centre Localities): 54.1% were males and 45.9% were females. Of the total population in Fishermans Bay (L) (Urban Centre Localities) 0.0% were Indigenous persons, compared with 2.3% Indigenous persons in Australia.

2.3.2 Age

In the 2006 Census 16.7% of the population usually resident in Fishermans Bay (L) (Urban Centre Localities) were children aged between 0-14 years, and 45.5% were persons aged 55 years and over. The median age of persons in Fishermans Bay (L) (Urban Centre Localities) was 53 years, compared with 37 years for persons in Australia.



SITE ANALYSIS

2. PEOPLE

Visitors Distribution



2.3.3 Selected Characteristics

In the 2006 Census, 75.1% of persons usually resident in Fishermans Bay (L) (Urban Centre Localities) were Australian citizens, 6.7% were born overseas and 0.0% were overseas visitors.

2.3.4 Country of Birth

In the 2006 Census, 67.9% of persons usually resident in Fishermans Bay (L) (Urban Centre Localities) stated they were born in Australia. Other common responses within Fishermans Bay (L) (Urban Centre Localities) were: (Thailand) (1.9%) and (England) (1.9%).

Country of Birth

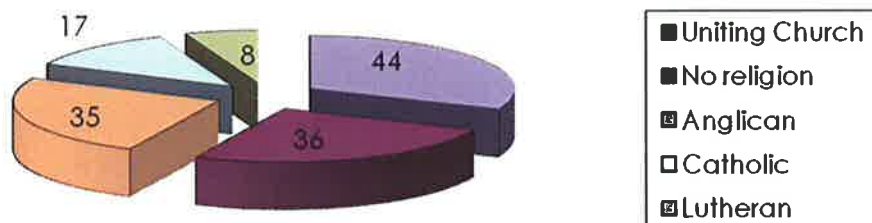




SITE ANALYSIS

2. PEOPLE

Religion Distribution



2.3.5 Religious Affiliations

In the 2006 Census, the most common responses for religious affiliation for persons usually resident in Fishermans Bay (L) (Urban Centre Localities) were Uniting Church 20.6%, No Religion 17.7%, Anglican 16.3%, Catholic 8.1% and Lutheran 3.8%.

2.3.6 Marital Status

In the 2006 Census, 62.3% of persons aged 15 years and over usually resident in Fishermans Bay (L) (Urban Centre Localities) were married, 12.0% never married, 16.6% separated or divorced and 9.1% widowed.

Marital Status

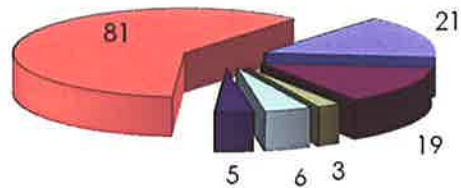




SITE ANALYSIS

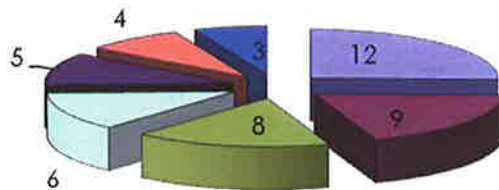
2. PEOPLE

Labour Force



- Employed full-time
- Employed part-time
- Employed away from work
- Employed hours not stated
- Unemployed
- Not in the labour force

Occupation



- Labourers
- Professionals
- Managers
- Community & Personal Workers
- Technicians & Trades Workers
- Clerical & Administrative Workers
- Machinery Operators & Drivers

2.3.7 Labour Force

During the week prior to the 2006 Census, 54 people aged 15 years and over who were usually resident in Fishermans Bay (L) (Urban Centre Localities) were in the labour force. Of these, 37.0% were employed full-time, 35.2% were employed part-time, 7.4% were employed but away from work, 11.1% were employed but did not state their hours worked and 9.3% were unemployed. There were 81 usual residents aged 15 years and over not in the labour force.

2.3.8 Occupation

In the 2006 Census, the most common responses for occupation for employed persons usually resident in Fishermans Bay (L) (Urban Centre Localities) were Labourers 24.5%, Professionals 18.4%, Managers 16.3%, Community and Personal Service Workers 12.2% and Technicians and Trades Workers 10.2%.



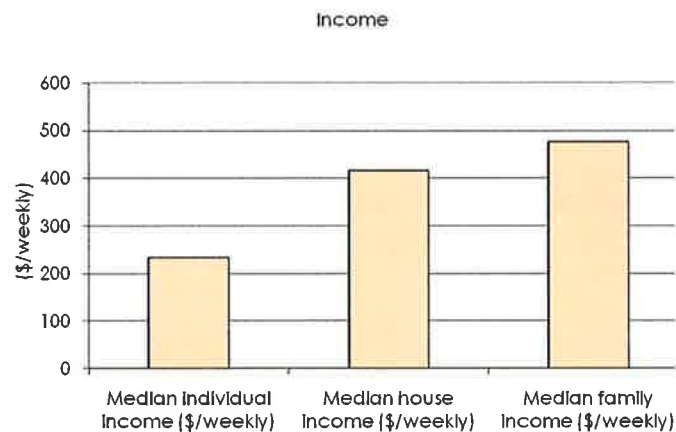


SITE ANALYSIS

2. PEOPLE

2.3.9 Industry of Employment

In the 2006 Census, the most common industries of employment for persons aged 15 years and over usually resident in Fishermans Bay (L) (Urban Centre Localities) were Hardware, Building and Garden Supplies Retailing 10.2%, Road Freight Transport 8.2%, Cafes, Restaurants and Takeaway Food Services 6.1%, Building Cleaning, Pest Control and Gardening Services 6.1% and Personal Care Services 6.1%.



2.3.10 Income

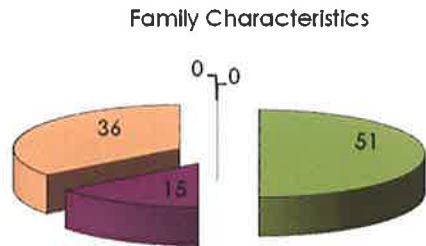
In Fishermans Bay (L) (Urban Centre Localities), the median weekly individual income for persons aged 15 years and over who were usual residents was \$234, compared with \$466 in Australia. The median weekly household income was \$416, compared with \$1,027 in Australia. The median weekly family income was \$477, compared with \$1,171 in Australia.



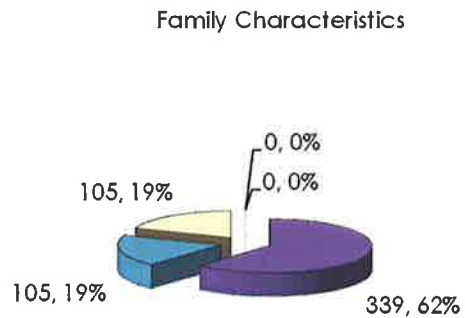


SITE ANALYSIS

2. PEOPLE



- Total Families
- Couple families with children
- Couple families without children
- One parent families
- Other families



- Unoccupied private dwellings
- Occupied private dwellings
- Separate House
- Semi-detached, row or terraced house, townhouse, etc.
- Flat, unit or apartment

2.3.11 Family Characteristics

In the 2006 Census, there were 51 families in Fishermans Bay (L) (Urban Centre Localities): 29.4% were couple families with children, 70.6% were couple families without children, 0.0% were one parent families and 0.0% were other families.

2.3.12 Dwelling Characteristics

In the 2006 Census there were 105 occupied private dwellings counted in Fishermans Bay (L) (Urban Centre Localities): 100.0% were separate houses, 0.0% were semi-detached, row or terraced houses, townhouses etc, 0.0% were flats, units or apartments and 0.0% were other dwellings.



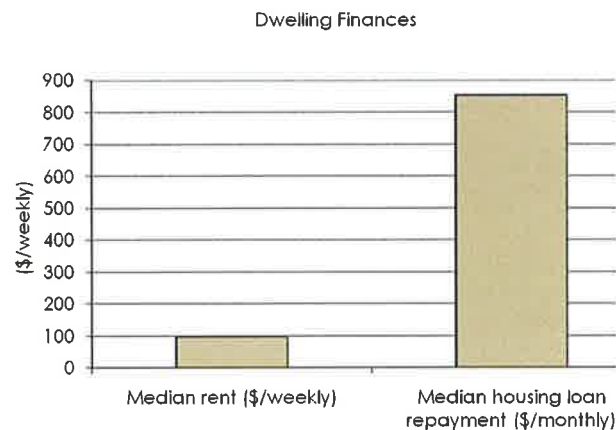


SITE ANALYSIS

2. PEOPLE

2.3.13 Family Characteristics Occupied/ Private

In Fishermans Bay (L) (Urban Centre Localities), the median weekly rent was \$100, compared to \$190 in Australia. The median monthly housing loan repayment was \$856, compared to \$1,300 in Australia. The average household size was 2.1 and the average number of persons per bedroom was 1.1.



2.3.14 Tenure Type

In Fishermans Bay (L) (Urban Centre Localities), 60.0% of occupied private dwellings were fully owned, 0.0% were being purchased and 10.5% were rented.

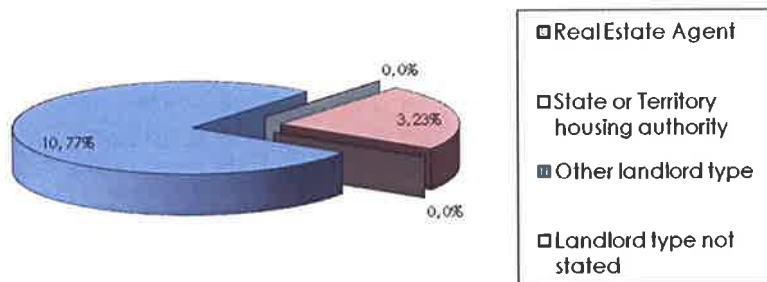




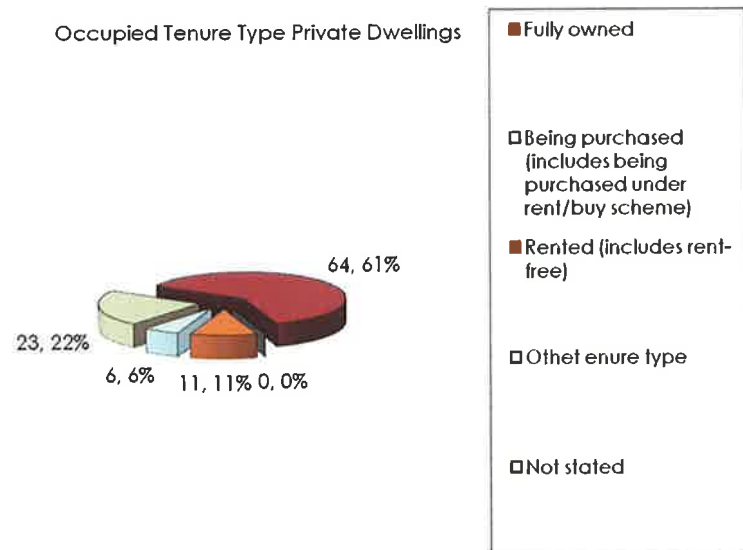
SITE ANALYSIS

2. PEOPLE

Landlord Type Rented Occupied Private Dwellings



Occupied Tenure Type Private Dwellings



2.3.15 Household Composition

In the 2006 Census in Fishermans Bay (L) (Urban Centre Localities), 51.4% of occupied private dwellings were family households, 25.7% were lone person households and 0.0% were group households.

2.3.16 Landlord Type

In Fishermans Bay (L) (Urban Centre Localities), of the occupied private dwellings being rented, 27.3% were rented from a real estate agent, 0.0% were rented from a State or Territory housing authority and 90.9% were rented from other landlord type. In comparison, in Australia 50.5% were rented from a real estate agent and 14.9% from a state or territory housing authority.





SITE ANALYSIS

3. TOWN PLANNING

3.1 Zoning

3.2 Land Use

3.3 Housing Stock




3.4 Town Planning Summary

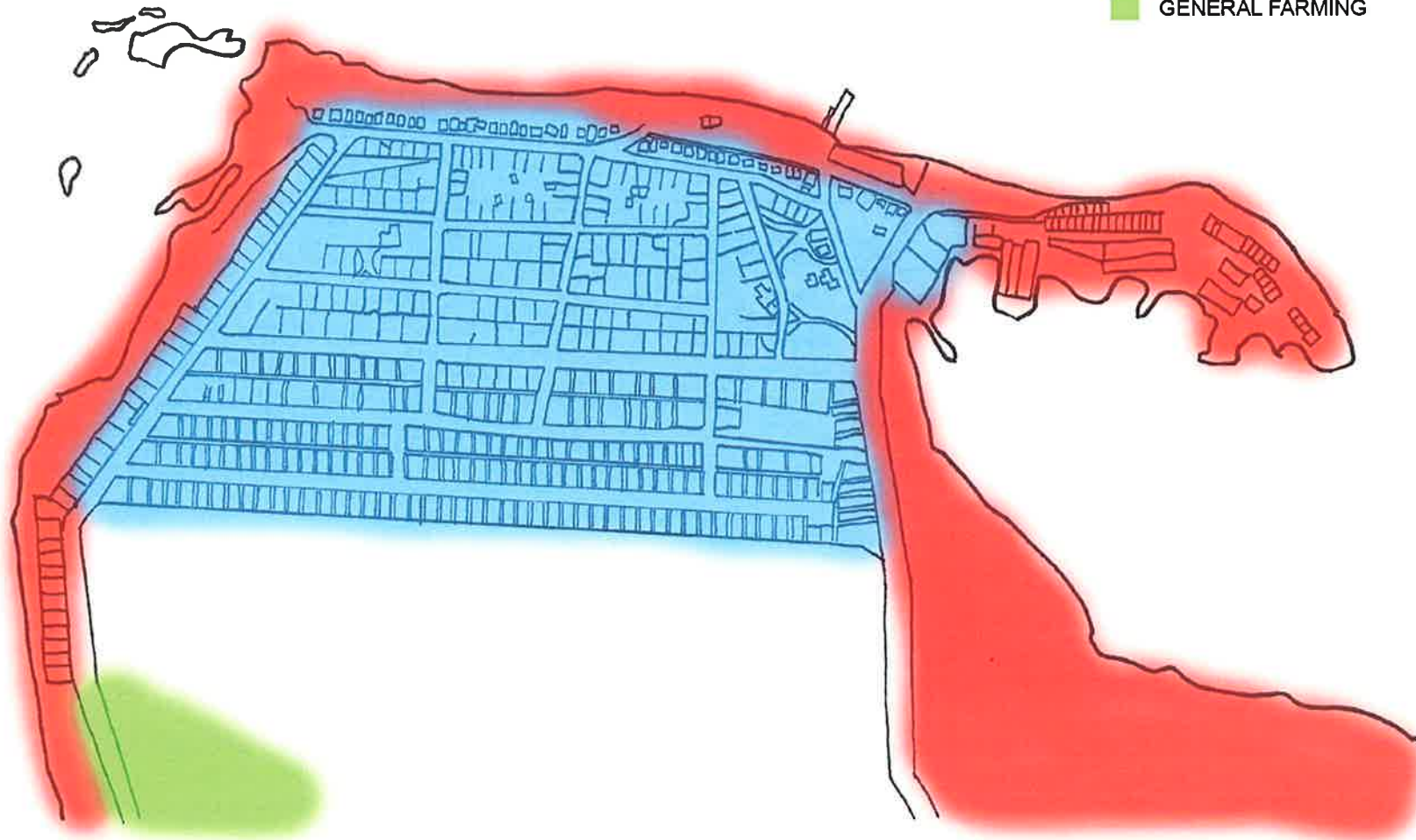




SITE ANALYSIS

3. TOWN PLANNING

-  COASTAL
-  SETTLEMENT
-  GENERAL FARMING





SITE ANALYSIS

3. TOWN PLANNING



3.1.1 Zoning

By Mei-Lin Schwarz

The town of Fisherman's Bay has been divided into three different zones; coastal, general farming and settlement. The section on zoning will try to define what each zone is, how it affects development within the town and precautions which need to be taken to maintain the area within the zone.

3.1.2 Coastal Zone

This refers to a zone/place which borders the coast and is currently being affected by flooding from the coast line and erosion.

Any development within this zone will be subject to flooding or/and erosion in the future. For new development there may need to be protection strategies, as well as new development being set back from the coast and built to minimum floor levels to minimise risk. Development should not be undertaken in environmentally-sensitive areas (sand dunes etc) or in an area where it will create or aggravate coastal erosion.

All development within this zone whether it is an alteration, addition or total replacement must be referred to the Coastal and Marine Section of the Department for Environmental, Heritage and Aboriginal Affairs.





SITE ANALYSIS

3. TOWN PLANNING



Key Points

- There is a restriction of intensive coastal recreation and camping
- Significant environmental, cultural and ecological features within the zone must be protected and maintained. These features include lakes, wetlands, dunes, native vegetation, wildlife habitat, exposed cliffs, hilltops and any area which forms an attractive background to urban and tourist developments
- Any activity whether it be agricultural or housing development must conserve the land and should maintain or enhance public use and access to the coastline
- All development to be constructed must be designed to complement the amenity of the environment
- Development which may adversely have an effect on the coast by pollution, erosion or damage by reduction must be avoided
- Dwellings should not be built unless they can not be seen from the beach or sea
- Only building development which is essential for public shelter or public utilities should be undertaken within sand dune, wetland and coastal wildlife areas, no other development should occur





SITE ANALYSIS

3. TOWN PLANNING



3.1.3 General Farming Zone

By Mei-Lin Schwarz

This refers to a zone/place which is primarily used for agricultural production and grazing of stock on large properties.

The zone is generally open and rural. The climate, soil and land form characteristics of the zone favour continual agricultural production and live stock grazing. These activities are desired to continue, however, land management techniques are encouraged to prevent pest plants, vermin and erosion.

Large scale proliferation of intensive development should not occur as it would threaten the proper function and render the rural landscape damaged. It is important that the size of land used for agricultural purposes is not significantly reduced or over used to maintain the stability of the zone.

All developments such as aquaculture, horticulture and commercial forestry within this zone should take into consideration land capability, drainage and availability of ground water. Commercial or industrial business should not take place unless the primary produce would benefit the rural community, not cause traffic problems, would not damage the amenity of the environment and would be more suited at a rural location.





SITE ANALYSIS

3. TOWN PLANNING



Key Points

- New agricultural development should not exceed the capability of the land to sustain them
- Buildings should be concealed, where necessary, with suitable native trees and shrubs to ensure they do not obstruct the amenity and character of the rural landscape
- Areas of native vegetation should be preserved and coincide with replanting of native vegetation
- The flow of traffic should not be affected by any commercial or industrial development
- Advertisements should not distract drivers
- The following buildings do not comply with the General Farming Zone: bank, boarding house, consulting room (unless used by a veterinarian), hotel, and indoor recreation centre therefore they are not authorized to be built within the zone
- Landfill which constitutes as solid waste disposal is required to be licensed as a waste depot under the Environment Protection Act 1993, except in certain circumstances such as if the proposed site "is located a minimum distance of 100 metres from any creek, river, inlet, wetland or marine estuarine area and not within the area of a 1-in-100 year flood event." (Development Act 1993, Page 43)





SITE ANALYSIS

3. TOWN PLANNING



3.1.4 Settlement Zone

By Mei-Lin Schwarz

This refers to the settlement within Fisherman's Bay. The settlement though small serves the population, surrounding farming community and visitors with a variety of facilities.

The standard of development in the settlement has improved in recent years. While the population of Fisherman's Bay is approximately 300, during the holiday season it can peak to approximately 2000.

There is opportunity for further growth within the defined boundaries to satisfy visitors and holiday makers, however, it is desirable that new development is complementary to and does not compete with the services and function of the township of Port Broughton.

Development must not have an adverse impact on the character or amenity of the settlement. It should also be well integrated and limited in scale to that necessary for the township and visitors. The character and style of existing buildings should be reflected within the design any new development.





SITE ANALYSIS

3. TOWN PLANNING



Key Points

- Development should be of the same appearance and scale that is compatible with the existing character of the town
- Development primarily intended for visitors must display a high standard of design and appearance, and be located where they will not adversely affect the character and amenity of the township
- Any new business whether it is commercial or industrial should be limited in scale to provide necessary goods and services required by the local population, surrounding farming community and visitors
- All development must comply with the Council's Hazard Risk Minimisation Standards. This means that all developments should have a minimum site level of 3.15 metres and a minimum floor level of 3.40 metres

3.1.5 Summary

From exploring all the different zones within Fisherman's Bay it is easy to see what developments are able to be undertaken, and what areas can be/need to be conserved to maintain the character and amenity of the town.

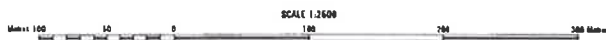
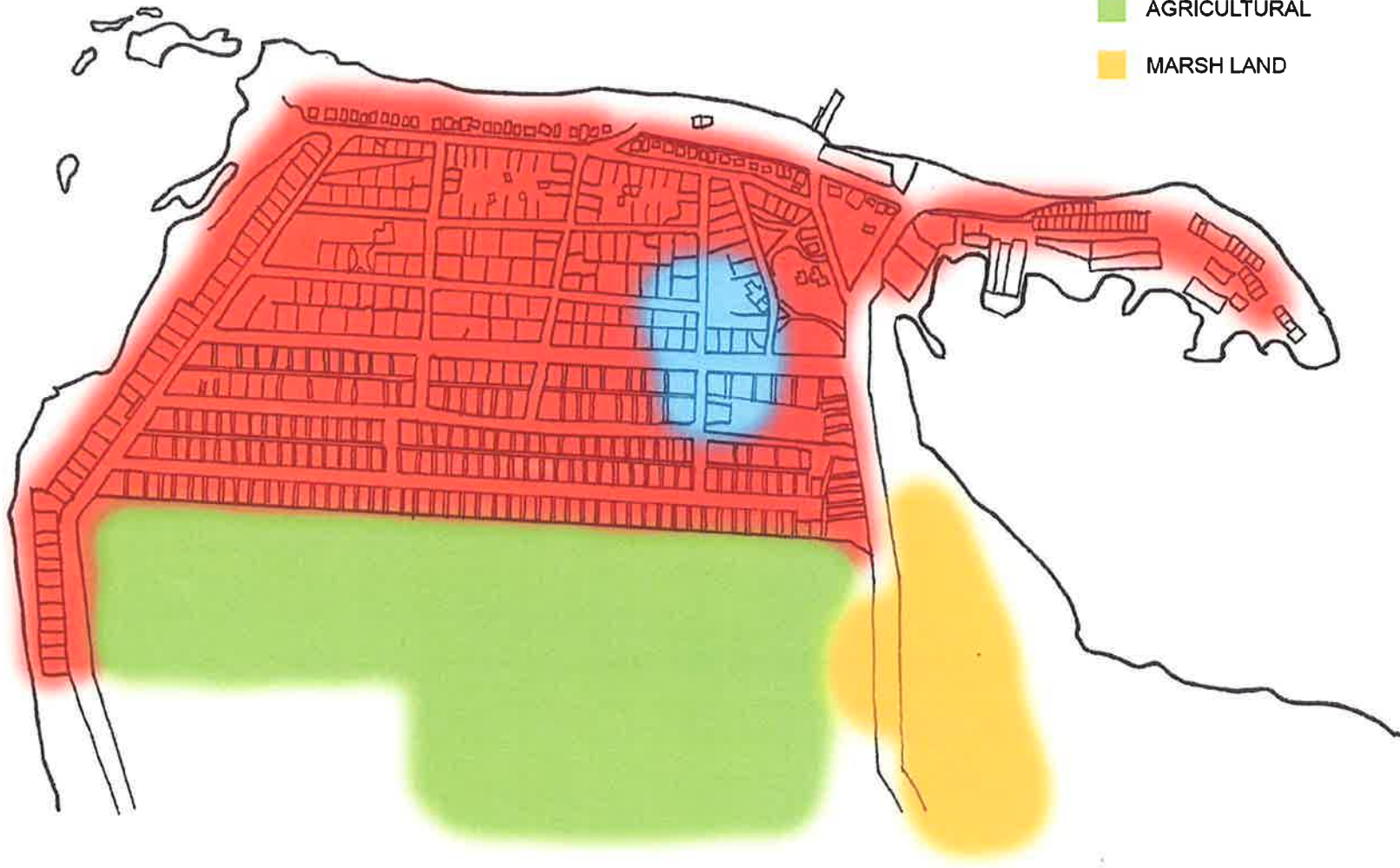




SITE ANALYSIS

3. TOWN PLANNING

- HOUSING (SHAKS, SHEDS)
- INDUSTRIAL/COMMERCIAL
- AGRICULTURAL
- MARSH LAND





SITE ANALYSIS

3. TOWN PLANNING



3.2.1 Land Use

By Mei-Lin Schwarz

The land within Fisherman's Bay has many uses for the population. Some of these uses are housing, industrial/commercial and agricultural. This section will endeavour to describe how the land is used.

There are four different uses for the land in Fisherman's Bay. The main use is for housing, this may include shacks, sheds and a few vacant lots. Within the housing area of Fisherman's Bay there is an industrial/commercial area. This area is where the local shop/petrol station, town hall and other public buildings are situated. There are also public facilities within the housing area, mainly along the foreshore. These facilities enhance the character of the area and provide a place for visitors and the local population with a recreation area.

The agricultural area of Fisherman's Bay is primarily used for farming of crops such as wheat, barley etc. This area of land is located on the edge of town and is near the marsh land. The marsh land is not being used agriculturally or for housing.





SITE ANALYSIS

3. TOWN PLANNING



3.4.1 Town Planning Summary

By Mei-Lin Schwarz

The section on town planning looks at the different zones, land uses and building types within Fisherman's Bay. It defines what each zone is and what that means in regards to further development, re-development or simple upgrades. It also explores the designs of the buildings within Fisherman's Bay, which helps to define the town character.

When surveying the town of Fisherman's Bay it is important to look at the town planning as it defines the character of the town. The reason for this is that Fisherman's bay is predominantly a holiday destination. By analysing the town planning of Fisherman's Bay it is easier to understand the needs of the town in regards to further or re-development of the buildings.





SITE ANALYSIS

4. LOCAL GOVERNMENT SERVICES



4.1 Council Services

4.2 Progress Association

4.3 Road Condition

4.4 Signage

4.5 Streetscape Facilities





SITE ANALYSIS

4. LOCAL GOVERNMENT SERVICES



Fisherman's Bay is a part of the Burunga West Council District. Along with the council the Fisherman's Bay Progress Association works with Fisherman's bay Pty Ltd to provide for its residents suitable facilities and services which facilitate their lifestyle and increase their enjoyment in the town

4.1 Council Services

By Sophie Wilkinson

Fisherman's Bay is a part of the Burunga West Council District and residences pay council rates in return for a number of services which are provided. Due to the current ownership situation in the area, the council has mainly taken responsibility for the foreshore, whilst the Fisherman's Bay Management Pty Ltd Group is primarily responsible for the greater Fisherman's Bay area. Currently the Burunga West Council provides for Fisherman's Bay: maintenance of their boat ramp, the public toilet block located on the foreshore, dredging of the seaweed on the beach around Easter and Christmas holiday times, provision of extra portable toilets at these busy times, dog registration, and rubbish collection from properties.

At present one council member on the Burunga West Council represents Fisherman's Bay. For this reason it is understandable that the area receives less attention than bigger towns in the council district however it is understood that residences of Fisherman's Bay benefit from council services in the neighbouring town of Pt Broughton, such as the public library and recycling centre.





SITE ANALYSIS

4. LOCAL GOVERNMENT SERVICES



4.2 Progress Association

By Sophie Wilkinson

The Barunga West Council however have facilitated and encouraged the introduction of the Fisherman's Bay Progress Association. This group of residents and shack owners (14 members of the committee, 50% residents, 50% shack owners) have brought to Fisherman's Bay a large proportion of services and public structures that all residents and visitors benefit from. The Progress Association raises funds through community events, grants from the Barunga West Council and from members of the Progress Association and subscriptions to their newsletter.

In Fisherman's Bay the Progress Association has provided two playgrounds near the beach, large shade shelters, public seating produced from recyclable materials, helps maintain the town hall and encourages recycling by providing appropriate bins in the town centre. The Progress Association also help to run events in the holiday time.

Key Points

- Fisherman's Bay is currently managed and supported by both the Barunga West Council District, Fisherman's Bay Management Pty Ltd and the Fisherman's Bay Progress Association.
- As the land moves to free hold the responsibility of the Barunga West Council will increase in Fisherman's Bay.
- Due to the small representation for Fisherman's Bay on the Barunga West Council it has proved very productive to promote the progress association's role in the town. This dynamic should be considered when contemplating the new free hold issues.





SITE ANALYSIS

4. LOCAL GOVERNMENT SERVICES



4.3 Road Condition

By Bronson Hayter

Only the primary routes utilized by traffic within Fisherman's Bay are sealed with bitumen. Whilst these roads: Whiting, Snapper, Silver Perch and Snook are sealed they possess limited use of curbs, which could collect surface flow water and direct it to storage sites for later use. The only use of roadside curbs within the township have been limited to the car park overlooking the bay. However, careful consideration should be taken as the catchment of water is an important issue, similarly the lack of curbs add to the character of Fisherman's Bay.

The secondary streets are unsealed, which produce unpleasant dusty conditions when combined with strong coastal winds. Nevertheless, the unsealed roads similar to the minimal use of curbing, adds to the unique caravan park character which defines the township.

4.4 Signage

By Bronson Hayter

The street signage within Fisherman's Bay is insufficient, as several corners lack any directional signage, therefore visitors unfamiliar with the township may be unable to navigate their journey with the ease possible.

Currently two welcome signs exist within the township; however graphic presentations are not uniform. In particular, the welcome sign located at the gateway to the town does not reflect the unique character of Fisherman's Bay.





SITE ANALYSIS

4. LOCAL GOVERNMENT SERVICES



4.5 Streetscape Facilities

By Bronson Hayter

The current frequency of street lighting, along the main traffic routes, is sufficient to illuminate such areas of the township at night and provide a sense of security for anyone outside during nightfall. However, the secondary routes do not possess a consistent occurrence of street lights and residents are forced to rely on distant street lighting, moonlight or touches to see their way.

Furthermore, a small number additional permanent bins, seats and barbeques could be provided, however to balance against periods when substantial summer crowds are present, portable facilities could be made available along the foreshore, as this public space is the most frequently utilized by visitors.

Key Points

- Whilst the unsealed roads and lack of curb add the character of Fisherman's Bay issues of dust, safety and water catchment should all be considered.
- Signage within Fisherman's Bay is insufficient to guide unfamiliar visitors with ease, additionally it is recommended that the town considers a more unique and obvious greeting sign to welcome visitors to this holiday location.
- Insufficient street lighting.
- Insufficient: toilet facilities, shade structures, bins, seating and barbeques to accommodate substantial summer visitors on foreshore.





SITE ANALYSIS

5. SERVICES AND INFRASTRUCTURE



5.1 Telecommunications

5.2 Electricity and Gas

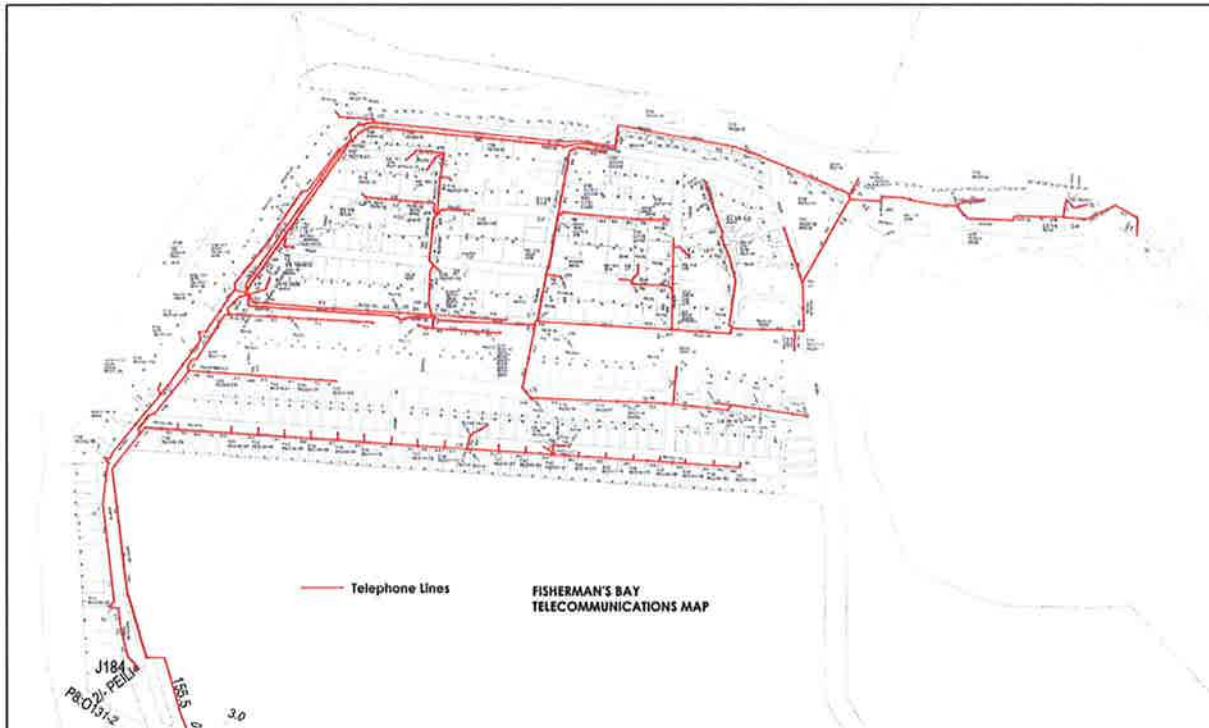
5.3 Sewerage

5.4 Water



SITE ANALYSIS

6. ORGANISATIONS



5.1 Telecommunications

By Kristofer Gladigau

Fisherman's Bay has a reasonable telecommunications infrastructure. There are telephone lines which cover the majority of the town, (See Map) and connect most of the shacks in the town providing widespread phone access. The mobile phone coverage in the town varies depending on the network provider. Most networks receive some coverage except for Vodaphone which has no network coverage. There are also Telstra public payphones scattered around the town. Therefore whether it is a landline, mobile phone or pay phone there is sufficient telecommunication access within Fisherman's Bay.

Internet access is another telecommunications service in Fisherman's Bay with either broadband or dial up available. Pay television is also available within the town, however a satellite is required to provide the service.

Fisherman's Bay already has an adequate telecommunications infrastructure with phone lines that cover the majority of the town. However with the prospect of future development associated with free holding of the land a significant upgrade of the telecommunications system would be required. Phone lines would need to be upgraded and connected to every property so that every shack had a reliable landline. An improvement in mobile phone coverage would also be desirable.

Key Points

- Adequate Telecommunications infrastructure.
- Telephone lines cover majority of town.
- Public Payphones.
- Internet Access.
- Telecommunications upgrade required for future development.





SITE ANALYSIS

5. SERVICES AND INFRASTRUCTURE



5.2a Electricity

By Andrew Van Zanten

Fisherman's Bay is powered by above ground power cables, strung together between stobie poles, like the majority of other power cables in South Australia. The height and amount of cables the stobie pole carries varies depending on the location and the hierarchy of the lines, the main power lines are taller and carry more power where as the smaller stobie poles may only have one line. The main powerlines into the town is from the South-East which intersects at Fisherman's Bay Road and Whiting Road, it then Travels North up Whiting Road on the ocean side (West). These powerlines are set back quite far from the road and the stobie poles are almost un-noticeable due to this since they almost blend in with the houses. From this there is a secondary power line travelling up the east side of Whiting road. The powerlines then branch off on all the east-west roads and then branch off on the north-south roads. There are two main powerlines into the crown land. The overall look of the powerlines is ugly, but when the roads are upgraded it would be a perfect time to upgrade the above ground power cables to underground cables, giving the town a much better look, although this would be an extremely costly exercise it would help improve the town character. The residents of Fisherman's Bay are required to find their own electricity provider.

5.2b Gas

By Andrew Van Zanten

There are no gas mains in Fisherman's Bay. Although Port Broughton has mains gas it would be a costly and irresponsible to install gas to Fisherman's Bay. It would not be cost effective for the installation until more residents are permanent in the town. Currently all residents have to use LPG gas stored in the usual manner of small gas bottles. The town's local shop has a fill up station for the residents to fill their gas bottles close to home.





SITE ANALYSIS

5. SERVICES AND INFRASTRUCTURE



Key Points

- Above ground powerlines.
- Good opportunity to upgrade to underground lines with infrastructure upgrade.
- Residents required to go to own electricity provider.
- No Mains gas.
- No Plans for Mains Gas.
- All residents use self purchased gas bottles.

5.3 Sewerage

By Andrew Van Zanten

The current status of the sewerage is poor; all the households have their own trench septic tanks. Each house varies on the type and size and there is no collective system. The public toilets are long drops, also referred to as outhouses. They working in the same manner as a composting toilet, where there is no water used in the toilet. They are a toilet built over what is simply a long shaft, where the name long drop comes from. All the waste is left to decompose. The Barunga Council and Fisherman's Bay Management has proposed a new sewerage system that will incorporate all households.

The new sewerage and waste disposal system will improve health and sanitary standards along with protecting the ground water from contamination due to the wastewater just being emptied into the ground. It is a low cost and also environmentally safe method to transport the waste water to the treatments plants. It is a vacuum system by FloVac.





SITE ANALYSIS

5. SERVICES AND INFRASTRUCTURE

The system works by using gravity to send the waste into a collection pit. Once it reaches 40l the valve opens and the vacuum starts. From here it travels through the pipes to the treatment facility. There is a 0,2% grade to the pipes, which allows the trenches to be shallow; it is a smaller grade than a gravity sewer. The drawback of this is that the sewers can only be placed over 4-5km in flat terrain, but this can be overcome by the strategic placing of more pump-stations around the town. The pump-station consists of the main pump and also a collection tank, for the short term holding of the wastewater. The vacuum treatment plant has been proposed to be located on the southern side of Fisherman's Bay.

Some of the benefits of this system are; water saving; power saving; better health standards for operators; low construction cost; faster construction; lower-long term maintenance costs; and lower treatment costs and infrastructure costs as compared to the common treatment plants and collection methods. The proposed system is environmentally friendly but the problem with it lies with what happens with the treated water once it has been pumped from the houses. Currently there are no plans to treat the water to a standard that can be reused. The treatment is by aeration and sediment ponds.

Key Points

- Current systems – Individual Septic tanks.
- New vacuum sewerage and wastewater system being installed.
- Cheaper running costs, better water and energy conservation for new system.
- Inadequate method to dispose of waste water.





SITE ANALYSIS

5. SERVICES AND INFRASTRUCTURE



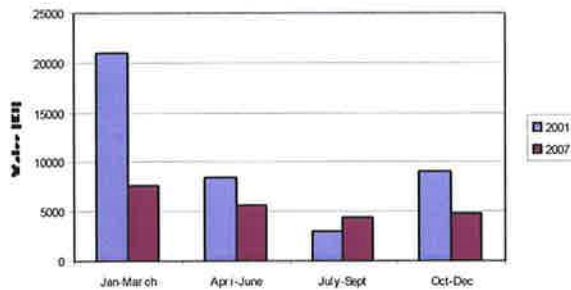
5.4 Water

By Kristofer Gladigau

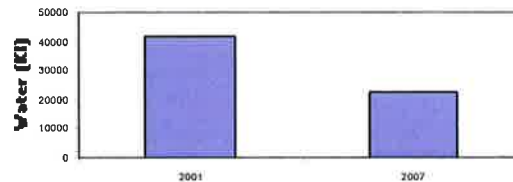
Water supply is a vital issue facing Fisherman's Bay which will have an enormous impact on future development of the town. Fisherman's Bay's main water supply is pipelined from Port Broughton (3 kilometres south of Fisherman's Bay) by SA Water. However, once the pipeline reaches Fisherman's Bay, water supply of the town becomes a private utility. Fisherman's Bay Management Pty Ltd assumes control over the water and distributes it to the residents of the town through an underground pipeline system. Fisherman Bay Management then makes separate accounts twice a year for the leasing properties. The crown land has one account where each resident, either permanent or semi-permanent must pay an equal percentage of the overall account.

The issue with the pipeline is that after Port Broughton, Fisherman's Bay is the last in line to receive water. Therefore while the pressure is generally satisfactory, there are times in the peak holiday season where the pressure is particularly low due to the strain on the resource. However, the town's water usage has significantly decreased in the past six years, highlighting that along with water restrictions, the residents are becoming more aware of the water shortage. However, an expanding town population with the same size water pipes would put further strain on water supply and pressure. Furthermore, the issue of sustainable water supply for the town will only increase with the water shortage in South Australia.

Fisherman's Bay Water Usage (Quarterly)



Fisher man's Bay Yearly Water Usage





5. SERVICES AND INFRASTRUCTURE



Excluding mains water, the only other current water supply for the town is from privately owned rainwater tanks. Since there are no publicly accessible water storage tanks, the vast majority of shacks have their own rainwater storage tanks. In many cases these rainwater storage tanks are the primary source of water for the households. The absence of any stormwater catchment or water storage facility within the town is a major concern for future water supply.

Identifying a sustainable water supply to provide for the future of Fisherman's Bay is an issue that needs to be addressed. With the unsure times of water shortage in South Australia and the dry climate of the Mid North region the town needs to lessen its reliance on mains pipelined water. The future outlook is that water resources will be further strained and since Fisherman's is last in line for distribution this will be an issue. Therefore a diversity of water supply sources is the best way forward for the town. Potential water supply solutions include public accessible rainwater tanks, an effective stormwater catchment system, desalination plant and other forms of water storage such as wetlands need to be explored for the future development of the town. A desalination plant in particular is a realistic option as one has recently been installed in Marion Bay, funded by local community to ensure future water supply.

Key Points

- Water is private utility & distributed by Fisherman Bay Management.
- Water usage decreased since 2001.
- Majority of residents had rainwater tanks.
- No town water storage or stormwater catchments.
- Sustainable water supply major future issue.





SITE ANALYSIS

6. EMPLOYMENT & EDUCATION

6.1 Employment

6.2 Education

6.3 Sporting Clubs





SITE ANALYSIS

6. EMPLOYMENT & EDUCATION

6.1 Employment

By Isaac McNicol

Employment within the Fisherman's Bay is very limited. The town functions almost solely as a holiday housing community. The current businesses operating from the town are the general store, a taxi service and the Fisherman's Bay Company, which is planning to sell the properties it currently owns. Once the leased properties have gone to freehold the company will continue to function, managing infrastructure issues such as the water pipeline.

Most of the permanent residents of Fisherman's Bay are retired citizens. The vast majority of residents visit their shacks for a few weeks each year purely for recreation, usually during the holiday seasons. This results in massive surges in population from less than 100 residents to up to 4000. The general store relies heavily on these population surges to survive the rest of the year and the store has suffered many changes of management and a recent nine month period where it was closed altogether. Currently there are council regulations prohibiting more than one store developing in the town. In the past there were two general stores competing for very limited business and neither survived. When the population of Fisherman's Bay increases, this is likely to change. It must, however, be only permitted when it does not compromise the sustainability of the general store.

Key Points

- Employment in Fisherman's Bay is very limited.
- Sustainability of businesses is threatened by lack of patrons for much of the year.



SITE ANALYSIS

6. ORGANISATIONS



6.2 Education

By Claire Kearton

Fisherman's Bay has a quiet, safe atmosphere that lends itself to raising young children. They can experience a freedom they wouldn't find anywhere else. However schooling is an issue for residents of the coastal town. The nearest school is Port Broughton Area School, situated on East Terrace in Port Broughton. The school teaches children from reception to year twelve, but senior school subjects are limited. Many older students need to travel to Port Pirie for a wider range of courses or attend a boarding school in a city.

Transport to and from the area school is also an issue. Many of the locals said that they need local bus service, both to take children to and from school and for elderly residents. There was a school bus for many years, but it was cancelled in the late 1980s due to lack of demand. Most parents drive their children to school and back. These Parents receive a government rebate for transport associated costs, because they live outside a regular school zone area. To partake in tertiary education, Fisherman's bay residents can attend the local TAFE or move to a city to attend University.

Key Points

- Pt Broughton Area School is the only school close to Fisherman's Bay.
- Transport to and from school is difficult and a bus would improve the situation.

Left: Playgrounds are widely considered safe for children to play unsupervised in Fisherman's bay. **Inset:** Children at Pt. Broughton area school perform at a celebration.



SITE ANALYSIS

6. ORGANISATIONS



6.3 Sporting Clubs

By Lachlan McColl

Sporting clubs in the majority rural towns, almost become the centre or hub of that particular community. Fishermans Bay is unique in its set up and the effect of that agreement, combining with the town's small population makes for very small sporting clubs and community groups. The town primarily used for its boat ramp. That offers the town the greatest opportunity for a club. But there are some significant hurdles. The town's permanent residents only believe that 15 - 20% actively uses the ramp, therefore the ramp is run by the council, and subsequently the ramp attracts fees.

Traditional sporting clubs that offer oval space or open grounds are not available at Fishermen's Bay. There isn't any oval space. Therefore people contributing to sporting clubs must play for Port Broughton, six kilometres away. The Broughton Munderoo Football club attracts 6 permanent residents of Fishermans bay, 3 of them juniors. By far the most popular sporting club with residents at the Bay is the golfing and bowls club, due to the demographic residing there. Weekly competitions held at Port Broughton attract a noteworthy size of Fishermans Bay residents. The location, population size, and demographic all attribute to the lack of sporting and social clubs at Fishermans Bay.

Key Points

- No sporting clubs or oval spaces exist within Fisherman's Bay.
- Port Broughton offers the nearest oval space.
- The boat ramp offers Fisherman's Bay the greatest opportunity for a sporting club.





SITE ANALYSIS

7. NATURAL SYSTEMS



7.1 Vegetation

By Krista Jensen

The sandy coastal soils of Fisherman's Bay are a fragile environment where only the very hardy vegetation survives. Mangrove Low forest and coastal dune shrub land are the predominate natural vegetation present in the area. Many of the Permanent residence have 'cottage style' garden with roses and open lawns.

Surrounding land around Fisherman's bay has been cleared for farming therefore many of the existing natural vegetation is located along the coast line and around the houses and parks. Mangrove low forests are all along 'dunny lane' and surrounding area. The small amount of coastal dune shrub land around the parks and coastland could be further developed and protected to improve the beauty of the area for locals and visitors to stop and have picnics. The hot, dry climate and relatively barren surroundings of fisherman's bay could be improved by planting more street trees to create a more shadier, cool town,

Key Points

- Protect and improve existing Mangrove and coastal dune shrub land.
- Street tree planting to create more shade and habitat for wildlife.

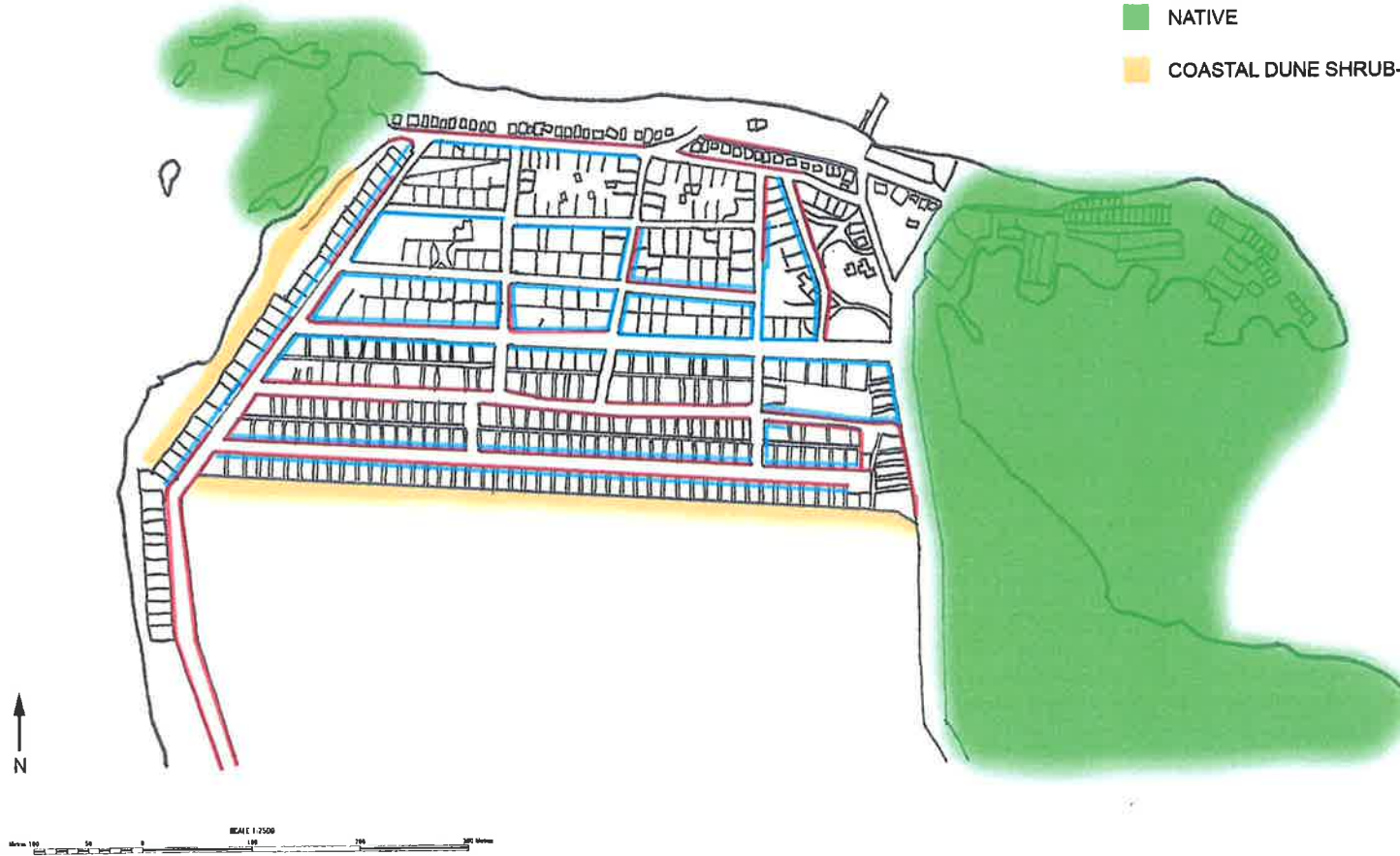




SITE ANALYSIS

7. NATURAL SYSTEMS

- STREET TREES
- COTTAGE GARDENS
- NATIVE
- COASTAL DUNE SHRUB-LAND





SITE ANALYSIS

7. NATURAL SYSTEMS



7.2 Soils & Geology

By Thomas Heneker

Description	Coastal
Latitude	33.55881°S 33" 31.72' S
Longitude	137.9588°E 57" 31.68' E
Altitude	0 (Foreshore) – 8.8 (Farm Land) metres

The geographic elements (refer to map) found at Fisherman's Bay include:

- Mangrove Swamp
- Farm Land
- Coastal Vegetation
- Boating Channel
- Foreshore

The Fisherman's Bay water quality is affected by the Port Broughton Estuary. This means that the estuary has a low sediment trapping efficiency, naturally high turbidity, well mixed circulation and there is a low risk of sedimentation. This estuary has an effect on the colour of the water, producing a light brown to tea colour and the area is affected by tidal movement.

The soils found at Fisherman's Bay are typically coastal soils. High sand content at the foreshore, sandy-silty soils at the mangrove swamp and a more suitable soil found behind the township for farming.





SITE ANALYSIS

7. NATURAL SYSTEMS



The contours generally around the town are spaced largely apart showing that the land is reasonably flat. It is not until you move to the south side of the town that the contour lines get closer and are less than 100m apart. Being a coastal town the land particularly at the foreshore is very low lying area and is highly effected by tidal movement, particularly at the crown land and to the east at the mangrove swamp. The township ranges from 2-3 metres above sea level. The highest point at Fisherman's Bay is found in the middle of the farm land behind the dwellings with an 8.8 metre rise.





SITE ANALYSIS

8. CLIMATE

8.1 Climate

8.2 Water Courses

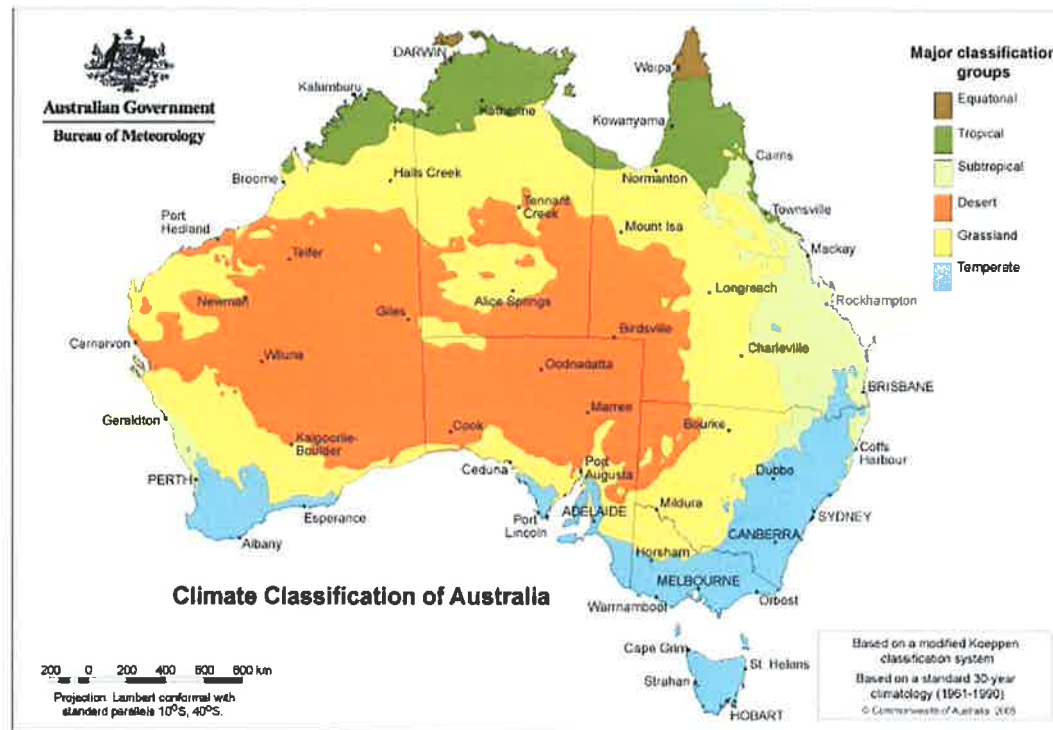
8.3 Inundation/King Tides





SITE ANALYSIS

8. CLIMATE



8.1.1 General Climate Type

By Naomi Lam

Fisherman's Bay lies within part of Australia with a temperate climate. This means that Fisherman's Bay experiences hot and dry summers and cold winters.

8.1.2 Climate Data Source

As a small town, Fisherman's Bay does not have its own climate data. Instead, we have used climate data recorded in Pt. Pirie from the Bureau of Meteorology (www.bom.gov.au), which is the most accurate data for Fisherman's Bay. Although Pt. Pirie data has been used for this report, there are some climate differences that will be pointed out in this chapter.

Key Points

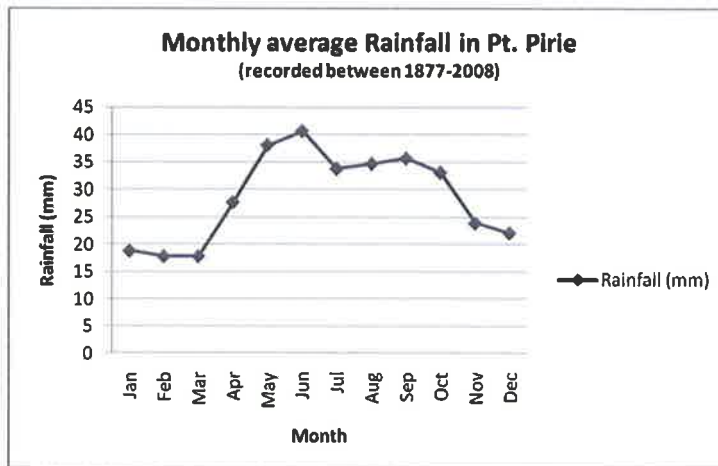
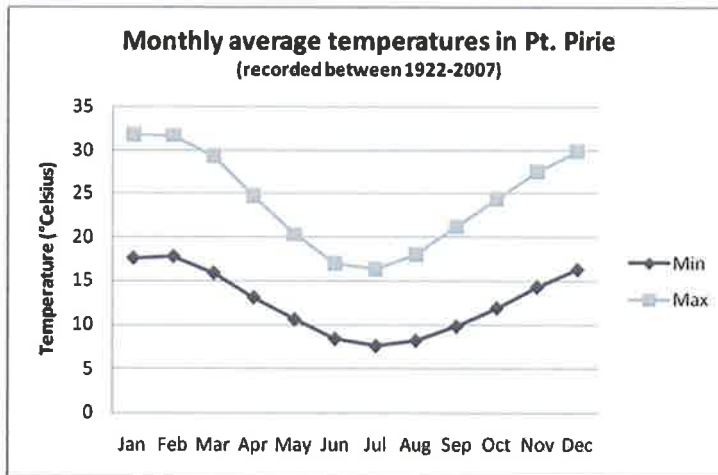
- Temperate Climate.
- Data from Pt. Pirie- most accurate information obtainable.





SITE ANALYSIS

8. CLIMATE



8.1.3 Temperature

By Naomi Lam

Fisherman's Bay temperature is fairly similar to Pt. Pirie temperature. The residents of Fisherman's Bay use the Pt. Pirie weather forecast for a guide of what the temperature will be like in their town. Temperature ranges from about 32° Celsius in summer to about 7° Celsius in winter. At night, the temperature drops by about 10° on average.

8.1.4 Rainfall

Despite being a seaside town, rainfall in Fisherman's Bay is generally the same as any other town in the mid north region, with an average rainfall of 344mm a year, a little less than Snowtown. Although Fisherman's Bay is coastal, it is still affected by the drought.

Key Points

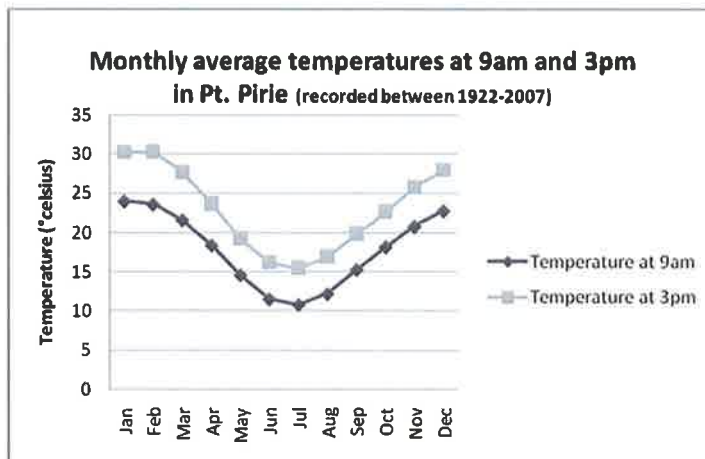
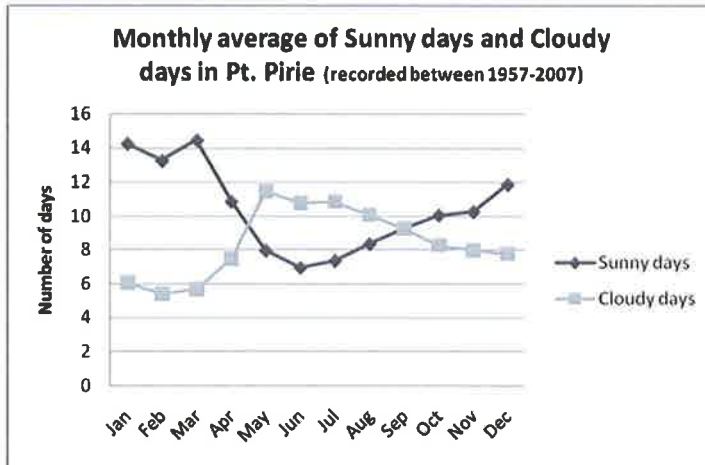
- Pt. Pirie Temperature.
- Summer: max 32° Celsius.
- Winter min 7° Celsius.
- 344mm average annual rain.
- Still affected by drought.





SITE ANALYSIS

8. CLIMATE



8.1.5 Sunny vs. Cloudy Days

By Naomi Lam

The number of cloudy days compared to sunshine days is fairly typical- more sunny days in summer and less in winter, and more cloudy days in winter and less in summer. The number of days for each month is from a 30 day period, so in summer about half of those days are sunshine days.

8.1.6 Temperature 9am & 3pm

It is important to compare the temperature at different times of the day, as afternoons can become quite hot on what seems like a cool morning. Generally, in Fisherman's Bay, the temperature is about 5° Celsius warmer in the afternoon than in the morning.

Key Points

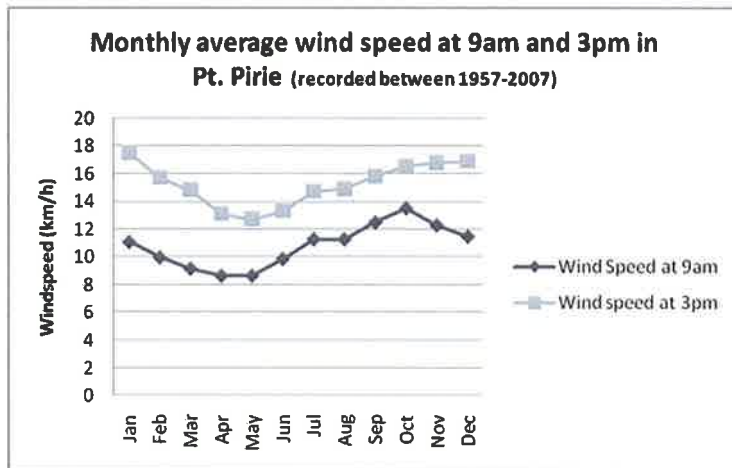
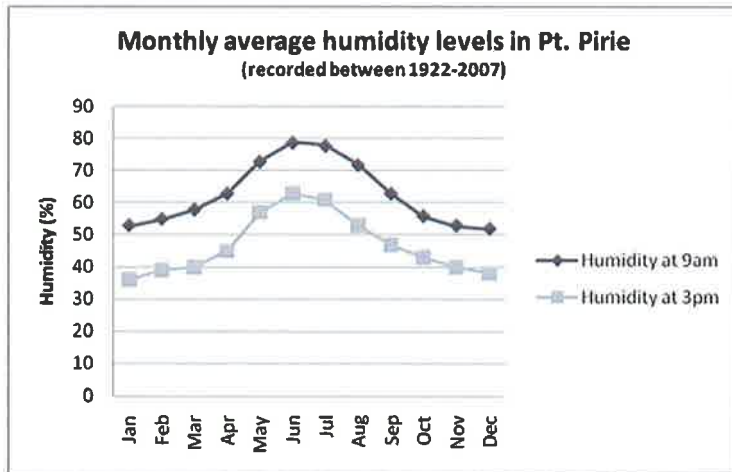
- More sunshine days in summer, less in winter.
- More cloudy days in winter, less in summer.
- Afternoons are warmer by about 5° Celsius in Fisherman's Bay.





SITE ANALYSIS

8. CLIMATE



8.1.7 Humidity 9am & 3pm

By Naomi Lam

Generally the humidity levels are higher in the morning than in the afternoon. We can expect that as a whole, the humidity levels would be a little less in Fisherman's Bay than in Pt. Pirie, as the area is more open and has fewer buildings.

8.1.8 Wind speed 9am & 3pm

The wind speeds in Fisherman's Bay can vary at times, sometimes reaching up to 35-40 knots, which could be a problem as much of the housing are in a state of repair. On average, afternoon winds are stronger than morning winds, and tend to come in from the south east. Wind also travels in from the north.

Key Points

- Humidity higher in morning.
- Not as humid as graph would indicate in Fisherman's Bay because the town is not as built up as Pt. Pirie.
- Wind speeds can reach up to 40 knots in Fisherman's Bay.
- Wind is stronger in the afternoon.
- Strong wind travels in from South East.





SITE ANALYSIS

8. CLIMATE



8.2.1 Water Courses

By Thomas Haylock & Nathan Noack

Fisherman's Bay is low lying, being only metres above sea level. The township land area is chiefly flat. Fisherman's Bay is a high risk flooding area during King Tides and during torrential rainfall. There are storm water outlets and several pollutant traps throughout the town.

There are no creeks, rivers or lakes within or near the township. However, Fisherman's Bay does possess two separate mangrove estuaries on either side of the township. These mangroves assist in reducing inundation throughout the whole town.

There are several detention basins throughout the town. However, these catchment areas do not allow re-use of water through irrigation or human use. This is due to the size of each basin compared to the number of housing. The best example of this is at the intersection of Snapper Road and Silver Perch road where there is a detention basin which acts as a catchment area.





SITE ANALYSIS

8. CLIMATE



8.3.1 Inundation/King Tides

By Thomas Haylock & Nathan Noack

Water and in particular tides, is a huge issue at Fisherman's Bay. Inundation – when sea levels incur on developed areas not otherwise affected by usual tidal movements – is causing a number of problems for residents and is a headache for the local government. This inundation is largely caused by king tides which occur over 2 times a year. At times these king tides occur together with two tide movements in the space of a day. Surprisingly, considering global warming and sea levels rising, these king tides are actually lower nowadays and have gradually decreased over the last 30 years.

8.3.2 Damage Caused by King Tides

Damage caused by these king tides includes problems such as salinity, erosion, flooding, property damage, rusting and litter/pollution.

The main cause of these king tides is not only the moon but possibly even to a greater degree, the wind.



SITE ANALYSIS

8. CLIMATE

8.3.3 Possible Solutions

By Thomas Haylock & Nathan Noack

A number of things can be done about king tides and the problems they create. Firstly, a sea wall can be created virtually surrounding the town which will possibly stop the inundation and all the damage.

At this stage, any redevelopments in danger areas have to be built at a height of 3.2m off the ground to prevent damage.

Another solution that will reduce damages may be the upgrading of drainage throughout Fisherman's Bay. Gutters on roads, waterways and larger catchment areas will go a long way in reducing the effects of this inundation.

Normal tide heights:

The normal tide heights for Fisherman's Bay are approximately around 0.3m at low tide to 2.9m at high tide.





QUESTIONNAIRE





QUESTIONNAIRE Report

Introduction

The students of 3rd Year Design Studies at the University of Adelaide conducted a survey of 42 of the residents of and visitors to the township of Fisherman's Bay in South Australia over the 18th, 19th and 20th of March 2008. There are approximately 50 permanent residents living in Fisherman's Bay to date and 22 of them were surveyed. The remaining 20 surveys came from visitors to the town; coming for various different places throughout South Australia. The focus of the survey is to highlight significant issues/problems both permanent residents and visitors have with the town; whether it be environmental, eg. a lack of fish or an abundance of insects, the facilities or the services in the town, eg. the roads, public toilets, sewerage, water etc. and the free-holding situation, and improvements that could be made. The survey also focuses on characteristics of the town that residents and visitors like/enjoy about the town, for example the peacefulness of the coast and the friendly, safe atmosphere about the town. This information will be used by the students of the University of Adelaide to aid them in designing or re-designing an aspect of the town which will improve the lifestyle of the permanent residents and visitors as well as helping to attract further tourists to the town.





QUESTIONNAIRE

Methodology

Methodology

During our stay at Fisherman's Bay as a group we collected around forty questionnaires. After reviewing all of the answers to all the questions within the surveys we decided that the easiest way to evaluate all the information was to look at the answers from all the interviewees as a whole and then also to compare similarities and differences between the answers from the visitors and residents separately.

On each page there are three different graphs; one showing all data collected and the outcomes, while the other two show the separate findings from the visitors and residents. Within our summaries on these pages we have evaluated the data and explained the conclusions which we have come to.

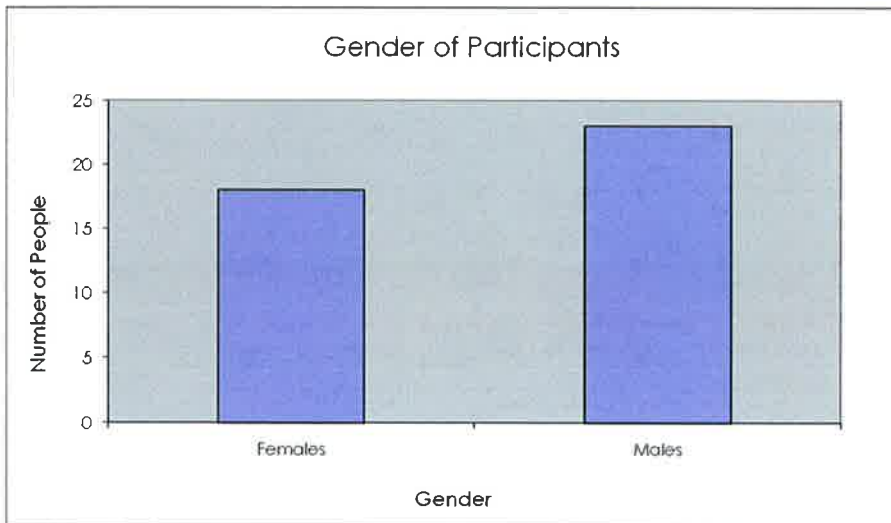
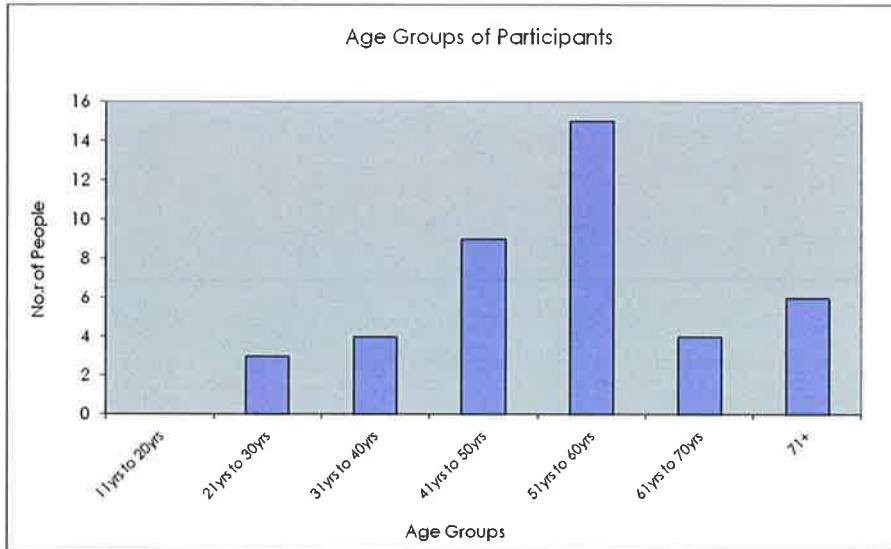
The reasons we have presented our information in this manner is because it is simple to understand and illustrates how we have come to our conclusions.





Questionnaire

Age and Gender of Participants



Summary

By retaining this information, we can analyse what sort of people Fisherman's Bay attracts.

The people in Fisherman's Bay mostly belong to the 51 to 60 years. Most of the people in Fisherman's Bay are retired and have chosen to settle down in Fisherman's Bay. This means that the results to some of the questions, such as favourite characteristics and issues of the town are to be more orientated towards what people of that age think are important. For example, older people are more likely to enjoy a lifestyle that is peaceful and quiet, whereas younger people around the 20-30 age groups are more likely to enjoy the beach and water sports.

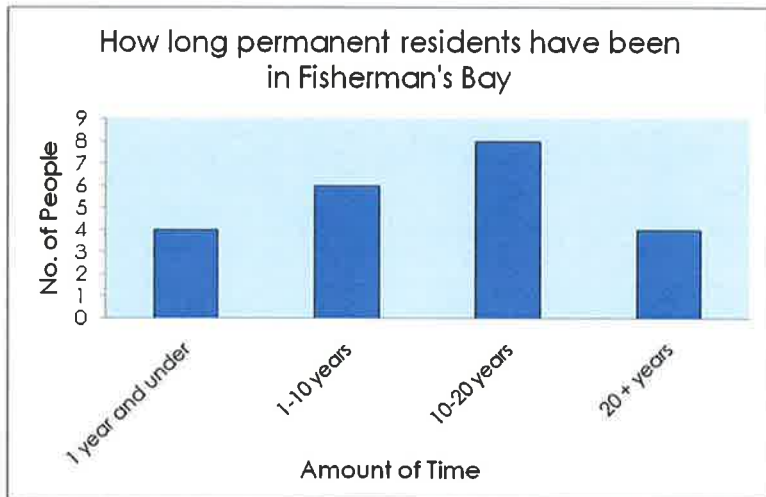
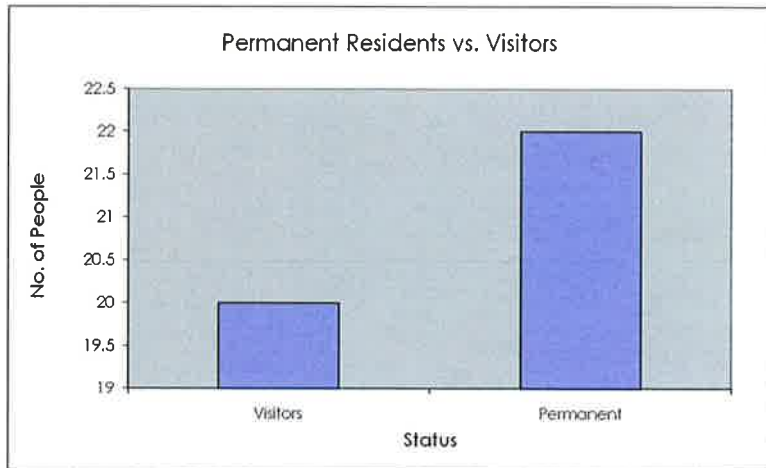
The gender of participants is nearly equal. There were 18 Females surveyed and 23 Males surveyed. This means that the results of the survey won't be male or female orientated, but fairly equal.





Questionnaire

Permanent Residents vs. Visitors



Summary

By separating the visitors from the permanent residents, we can analyse what the visitors think about Fisherman's Bay as opposed to the permanent residents, and what sort of issues they think are important. There are only two more permanent residents than visitors, so we have a fairly good idea about what things both sides think are important in Fisherman's Bay.

We also recorded that out of the 20 visitors, half of them own a shack. As shack owners, their views on issues such as the free-hold and council rates will be different to those who simply go to Fisherman's Bay for a holiday.

The amount of time that permanent residents have been living in Fisherman's Bay also affects the results of the survey. For example, residents who have been living in the town for more than 20 years will have different views in the ways which the town has changed over a long period of time, whereas residents who have only been there for a year or so will see the town differently and may have a different set of issues. The majority of residents have been living in Fisherman's Bay for 10-20 years.





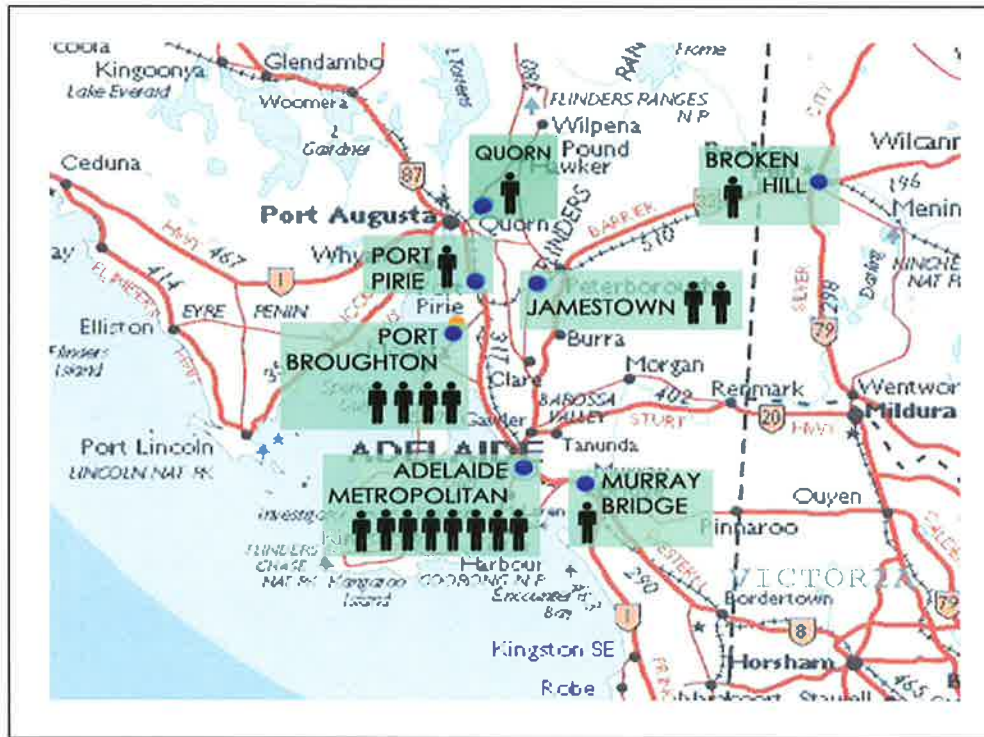
Questionnaire

Question 2

What is the Postcode of where you live?

KEY:

- = Home-town of visitors
- 🏠 = Fisherman's Bay
- 👤 = Number of visitors from town



Summary

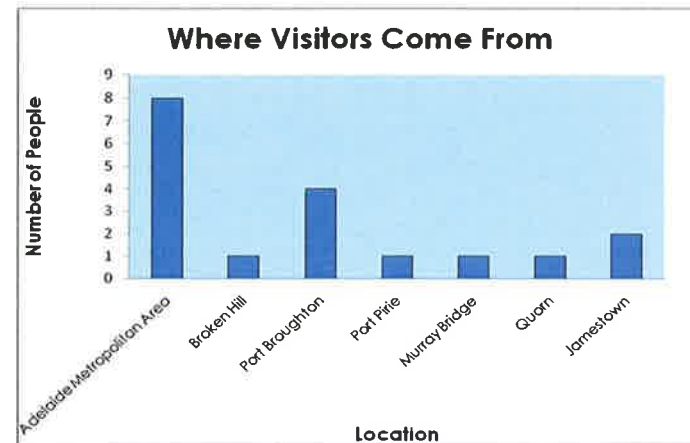
Question 2 allows us to analyse where the majority of visitors are coming from.

Eighteen out of twenty visitors gave us their postcodes, and the other two made no comment.

Out of those eighteen surveyed, all but one came from South Australia.

Most of the Visitors came from within the Adelaide Metropolitan Area, and a few were from Port Broughton. The rest came from regional towns in the Northern rural area.

From this information we can conclude that Fisherman's Bay is not a well know town in other states and is mainly visited by people who live in towns with a close proximity.



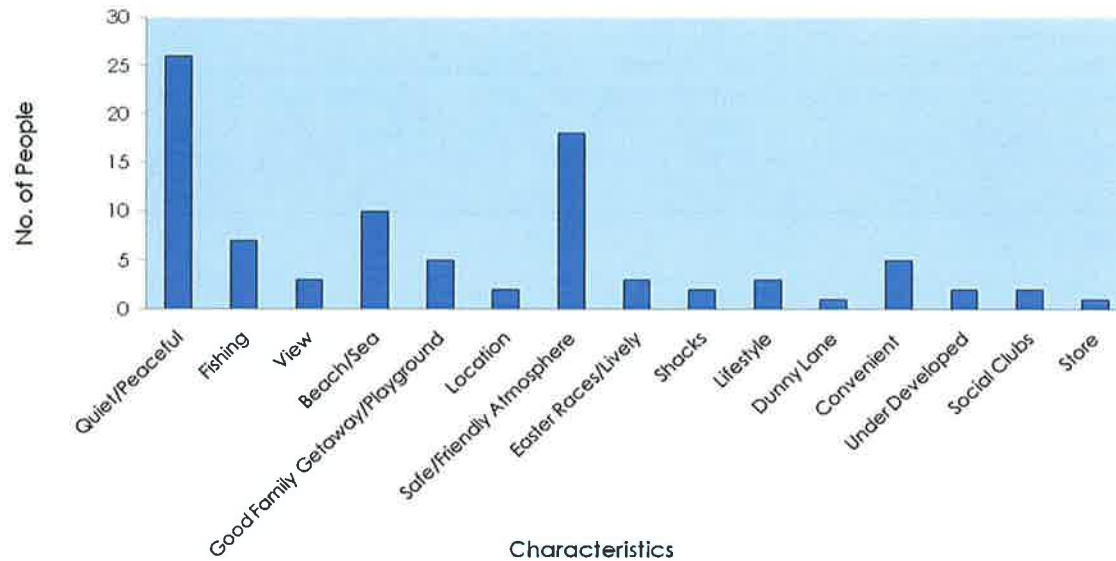


QUESTIONNAIRE

Question 4:

What do you like about Fisherman's Bay?

What people like about Fisherman's Bay



Summary

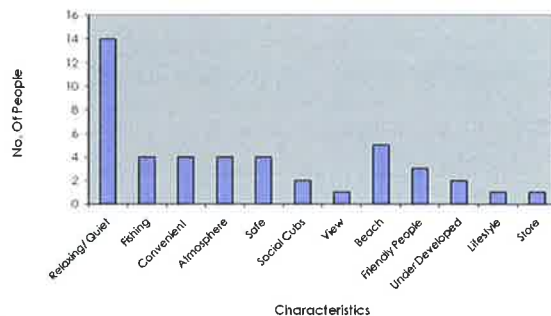
We found that both visitors and permanent residents favoured mainly the same sort of characteristics in Fisherman's Bay. The characteristic most popular with the two groups was that the town is quiet and peaceful. Another quality people liked about the town was that it was safe and had a friendly atmosphere. However, we also found that the visitors liked some things about the town which permanent residents weren't too keen on, such as 'Dunny Lane'.

From the information we have gathered, it seems that visitors like to come to Fisherman's Bay for a quiet and relaxing holiday and deem the town to be a safe location for their children.

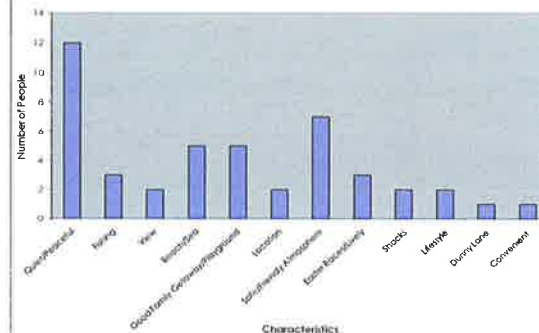
The permanent residents also like Fisherman's Bay as a quiet haven, but see the town as a retirement location. Most of the permanent residents are retirees.

If the town is to be developed and the land sold to the richer and younger generation, a problem facing the town in terms of characteristics is that it might lose the qualities that visitors and permanent residents like so much about it. If development goes ahead, it is very likely that the shacks along the foreshore will be removed and replaced with two-storey mansions. These will block the view and possibly access to the beach.

Characteristics permanent residents like about Fisherman's Bay



Characteristics Visitors like about Fisherman's Bay

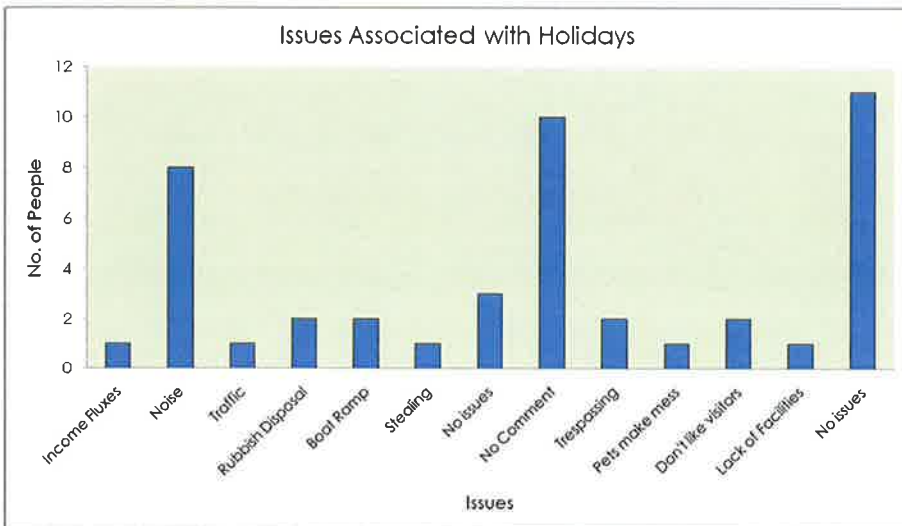
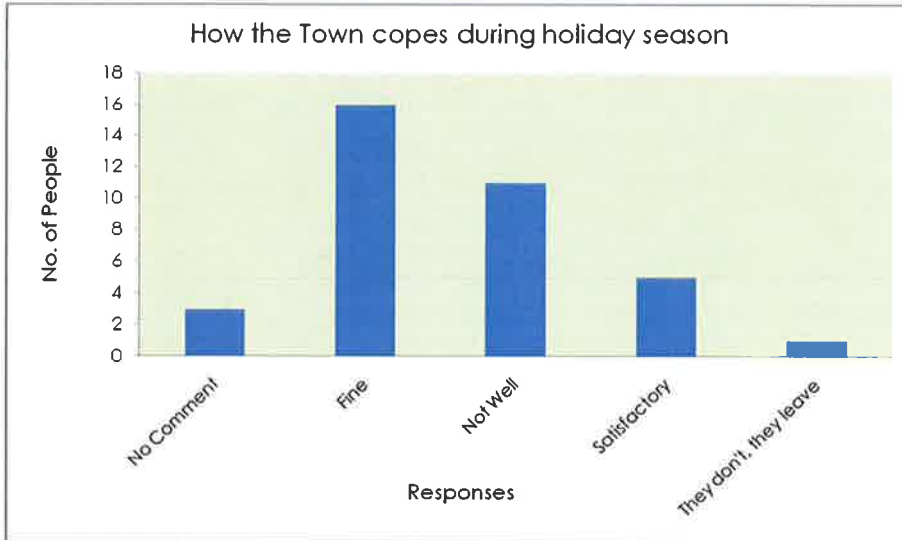




QUESTIONNAIRE

Question Five

How does town cope with holiday season?



Summary

After analysing the information within the graphs we can come to the conclusion that many people interviewed felt that the town of Fisherman's Bay copes well with the influx of visitors during the holiday period. However, there were a few people mainly the residents who felt that the town does not cope as well as it could. This is interesting as the majority if visitors who were interviewed felt that Fisherman's Bay coped well with the influx of people.

The majority of visitors had either no comment or did not think there were any issues associated with the influx of visitors during the holiday period. While many of the residents felt that the main issues associated with the holiday period were the noise made by the visitors and the general disruptiveness of having more people within the town. Overall both the visitors and residents either had no comments or did not feel that there were any issues arising during the holiday period in Fisherman's Bay.



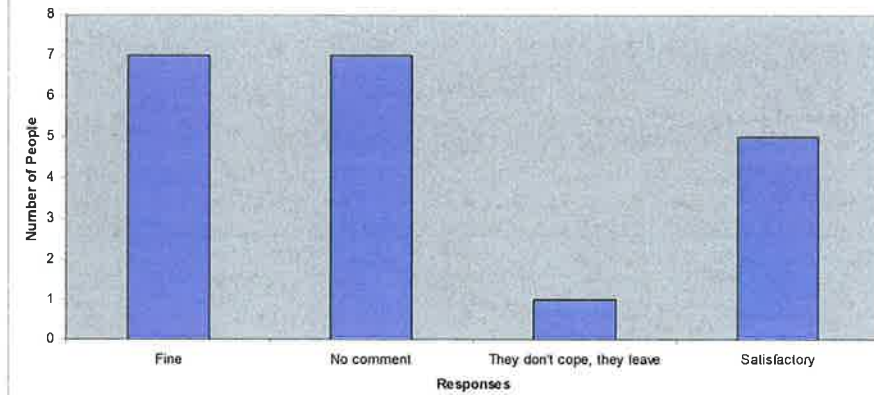


QUESTIONNAIRE

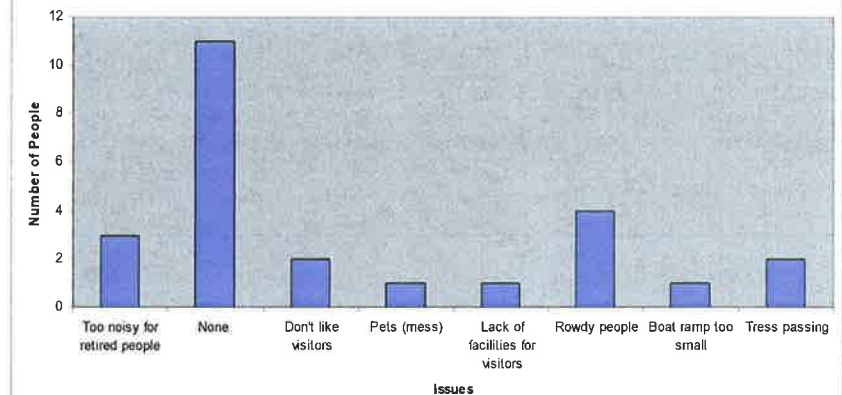
Question Five

How does the town cope with the holiday season?

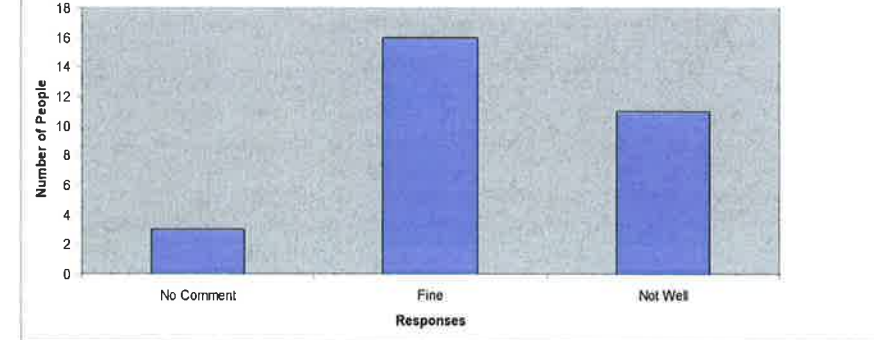
How the permanent residence think the town copes during holiday periods.



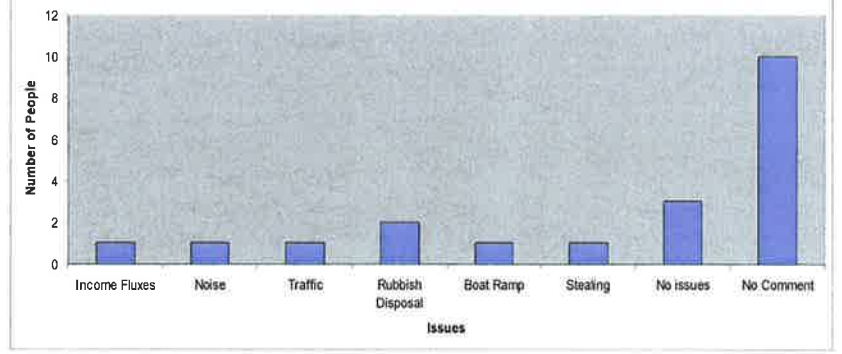
The issues permanent residence find arise during the holiday period.



How Visitors believe Fisherman's Bay copes during Holiday Periods



Issues Associated with the Holiday Period

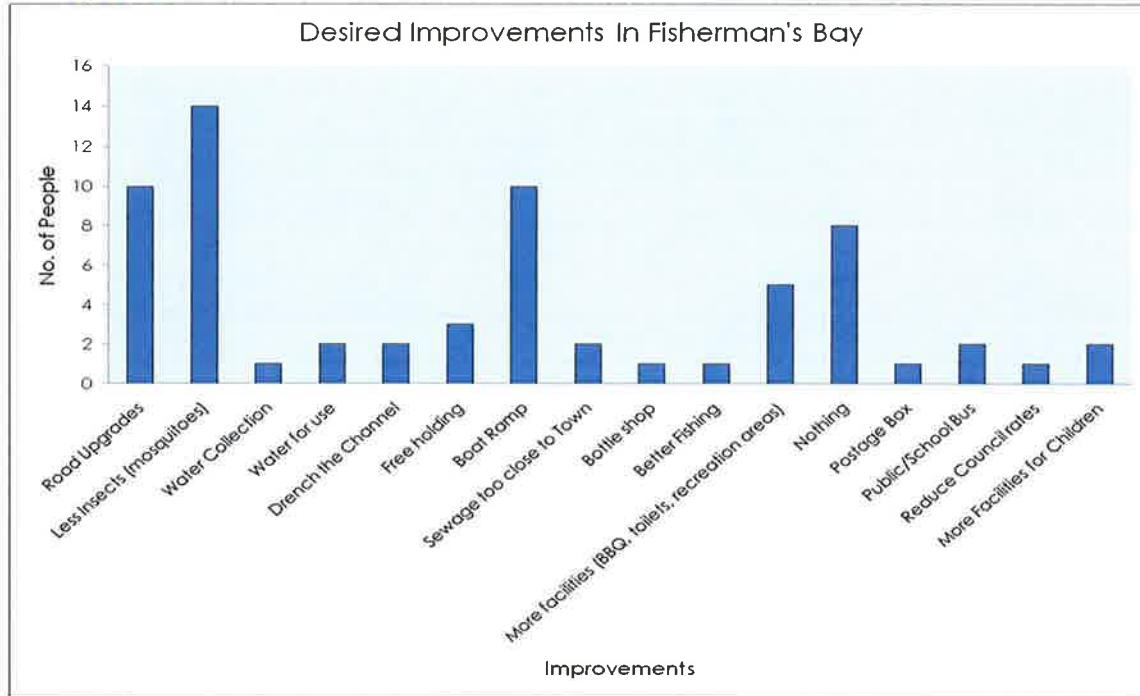




QUESTIONNAIRE

Question Six

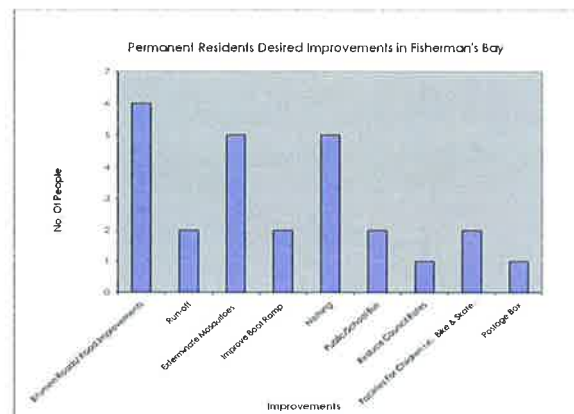
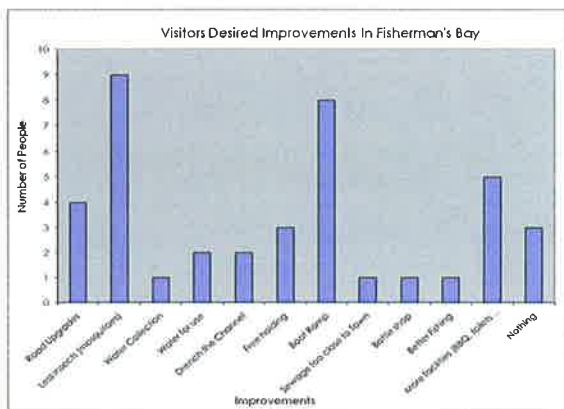
What can be improved to make lifestyle more enjoyable?



Summary

After analysing the information collected from the surveys it is easy to conclude that many of the people interviewed agree that getting rid of the mosquitoes, road upgrades, an improved boat ramp and more facilities would improve the town of Fisherman's Bay. The reason why many people felt an upgraded boat ramp would improve the town was because it lacks the capacity to handle a large amount of people wanting to use it. The various facilities which people felt would help improve Fisherman's Bay were more seating, BBQ's and recreational areas mainly along the foreshore.

When separately looking at the permanent resident's results the graph shows that the main enhancement which they feel would improve the town were road improvements and exterminating mosquitoes. Many also felt that the town does not need improvements. While the visitors to the town also agree that less mosquitoes would improve the town, but that an upgraded boat ramp would also help. Another improvement which they felt would better the town was more facilities.



By analysing this information we can come to the conclusion that getting rid of mosquitoes and various upgrades throughout the town, such as road upgrades and more facilities would help improve the town.





QUESTIONNAIRE

Question Seven

What are three main issues in the town?

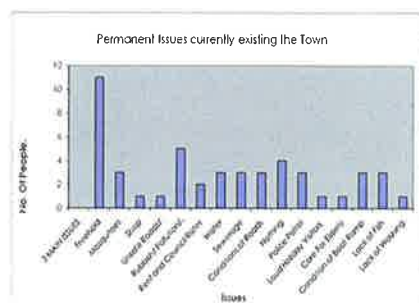
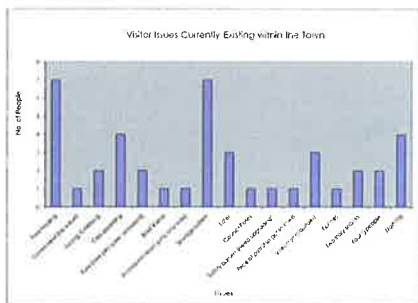
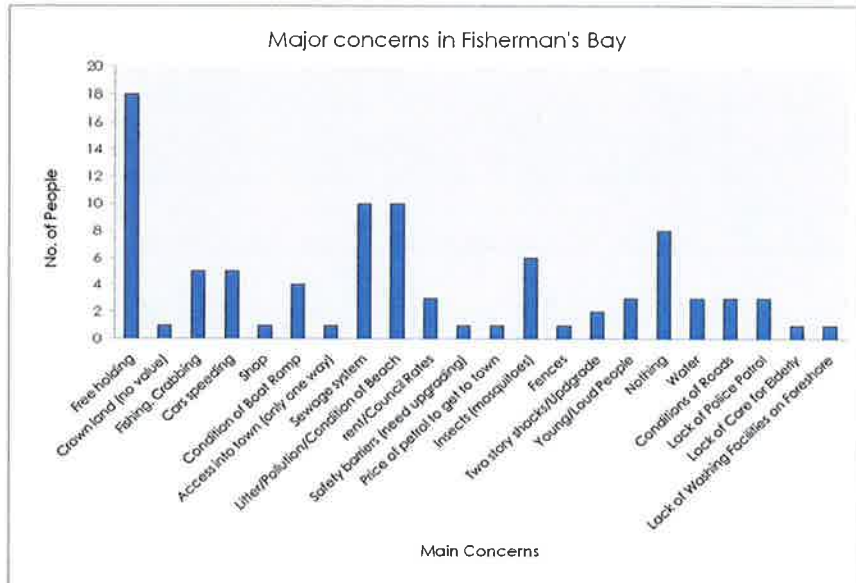
Summary

Both the visitors and permanent residents were asked to identify three main issues that currently exist within the township. There was a variety of answers from the permanent residents however the three most common answers were; free holding, rubbish/pollution/condition of the beach and nothing.

The free holding is obviously a huge issue within the permanent residents as some will be unable to afford to buy their land off the company and therefore will be forced to remove their dwelling and move out of the town. However it is also an issue for the residents who can afford to buy the land as the sale of property to younger, more wealthy people coming into the town could mean two storey houses blocking the views of established residents as well as disruption of the peace due to construction. Rubbish and pollution also affect the permanent residents. Water pollution decreases the number of fish in the area, which affects the economy of the town, putting fisherman out of work and turning holidaying fisherman away. Lastly, many permanent residents said that there were no main issues currently in the township; these were mainly the elderly and the newest residents.

The visitors to Fisherman's Bay who participated in the survey had similar answers to the permanent residents however the main three issues they identified were the free holding, the sewerage system and speeding cars. Again free holding affects visitors as soon they will have the chance to buy a piece of land, if not the piece of land they already lease. This also affects the visitors who stay in/rent the same shack every time they visit Fisherman's Bay, as the owner may be forced to remove it. The sewerage system is also an issue that is more obvious or more important to visitors as they aren't used to the lack of a good sewerage system. Lastly, speeding cars are an issue to visitors because the majority of visitors to the town are families with small children and the lack of fencing in the town means that children can easily wander out into the streets. This is a bigger issue for visitors than permanent residents as the town is busier when they are around, and many permanent residents don't have young children.

Conclusions that can be drawn from both the residents' and visitors' answers is that free holding is a big issue within Fisherman's Bay, which affects everyone who comes to or lives in the town. Pollution and rubbish are bigger concerns to the residents as they have killed off most of the fish. This means a decrease in the local fishing industry and the loss of some visitors. Sewerage and speeding cars is a large concern of visitors to the town, making them uncomfortable and anxious about safety and, although it wasn't as big a concern for the permanent residents, improving these issues will make the township more comfortable for both groups.

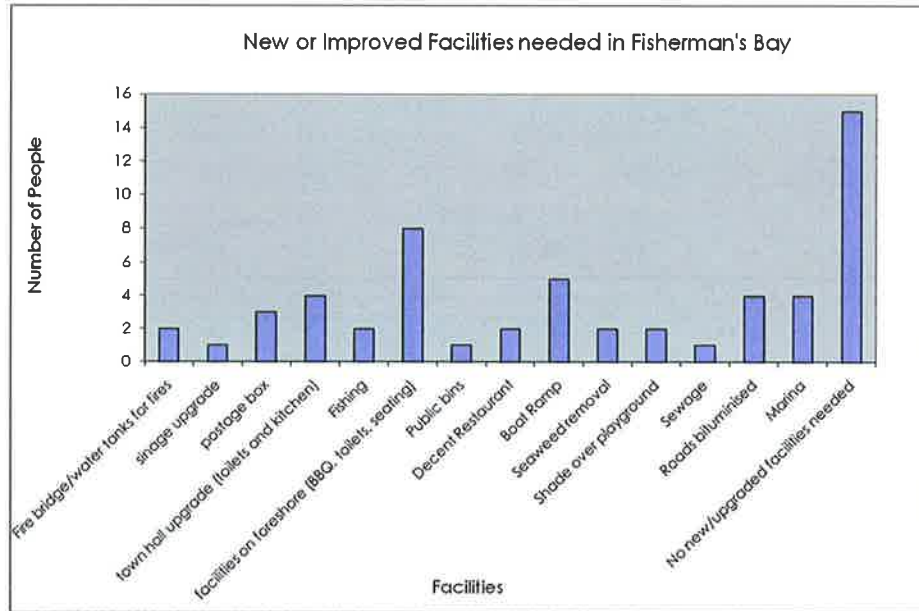




Questionnaire

Question 8

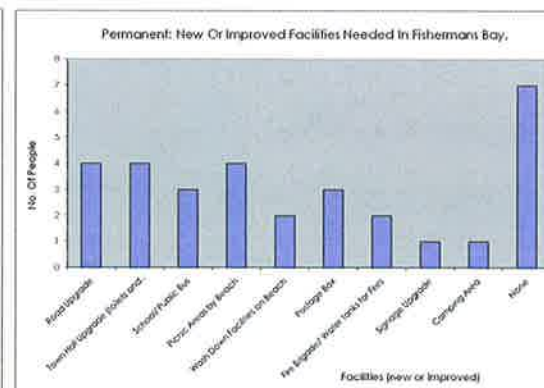
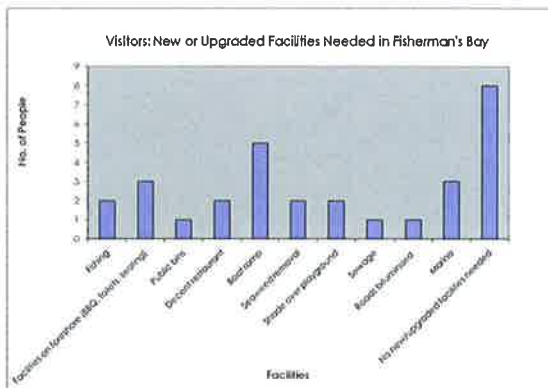
What facilities, new or upgraded, would you like to see in Fisherman's Bay?



Summary

The permanent residents and visitors were asked to list some new or updated facilities that they would like to see in the town. It seems the most common answer from both the permanent residents and the visitors was that no new or upgrade facilities were needed. The age of the participants could be an indication of why this was the most common result as the majority of the participants were elderly and there are quite content with the town as it is.

The most common result from the permanent residents, besides none, was the roads need upgrading, the town hall needs toilet and kitchen facilities and there needs to be picnic areas by the beach. The roads are an obvious issue for the residents as, being unsealed, they get very dusty in the dry seasons and being a coastal town there's always a strong evening wind which blows the dust about meaning more cleaning is needed. Toilets and a kitchen in the Town Hall would be a popular response as there are a couple of social groups which meet there on a weekly basis as well as being used of council and town meetings and functions. The fact that the residents identified that picnic areas are needed on the beach front shows that they are aware of the facilities needed to accommodate the copious amounts of tourists that visit the town in holiday periods.



The three most common answers from the visitors were all to do with the marina/foreshore. It was identified that the boat ramp needs upgrading and public facilities such as barbecues, toilets and seating also need to be upgraded. This highlights that the foreshore is the main area that visitors to the town use as they have identified this area as the place in most need of work. This also shows that the foreshore, if re-designed, could play a major part in attracting tourists to the town and therefore bring more money into Fisherman's Bay.

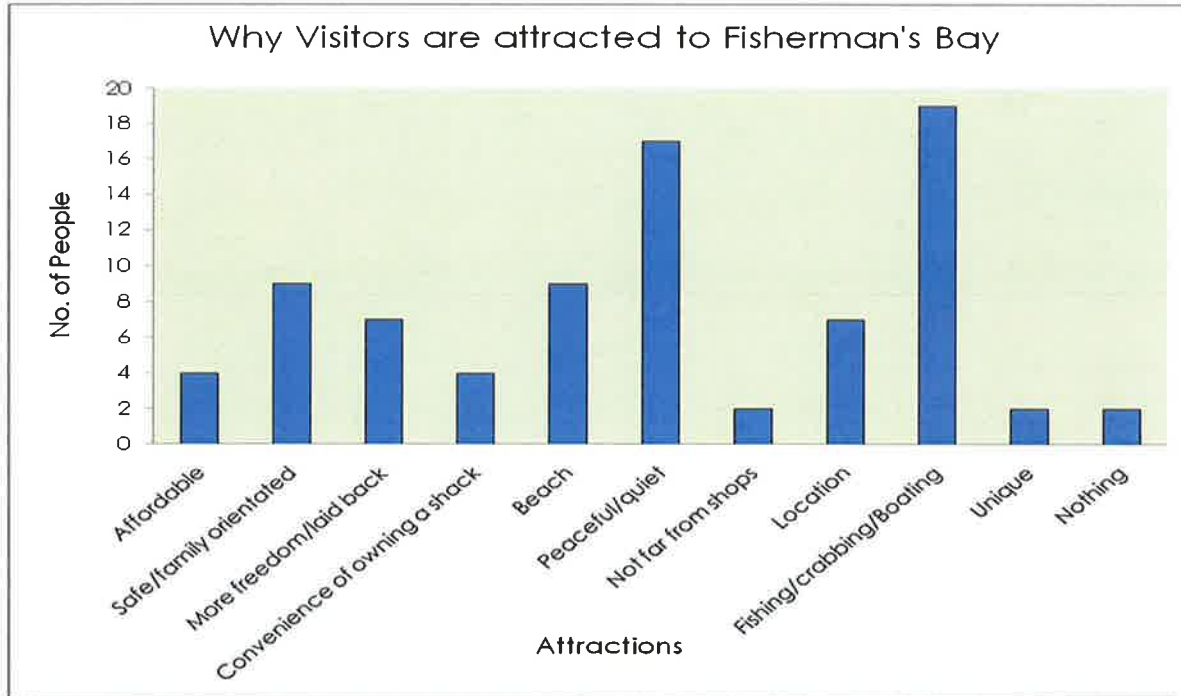




QUESTIONNAIRE

Question Nine

What do you think attracts visitors to Fisherman's Bay?

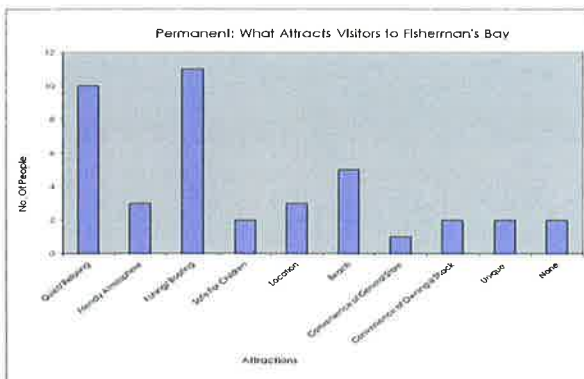


Summary

The visitors and permanent residents were asked to name what they believed attracted people to the Fisherman's Bay area. The majority of the permanent residence said the relaxing, quiet environment of the township along with the close proximity of the Beach were the main attractions. Fishing, convenience of living in a small town, atmosphere and safe environment were all popular reasons why people stay in the area.

With the majority of the permanent residents being retired and over 50 years of age, the quiet lifestyle is an important feature of the town along with the many recreational activities available.

Similarly, many visitors to Fisherman's Bay are attracted to the area because of the quiet relaxing environment. Recreational activities such as fishing and boating and the safe town also rated highly as reasons for staying in the town. Many of the visitors are young families on holiday with children therefore recreational activities to keep them entertained is important and also a safe environment for children gives families' piece of mind making their experience more relaxing.



By looking at the combined residents and visitors graph, it can be concluded that what attracts people to the town is the quiet, relaxing atmosphere and recreational possibilities which appeals particularly to young families and the aged population.

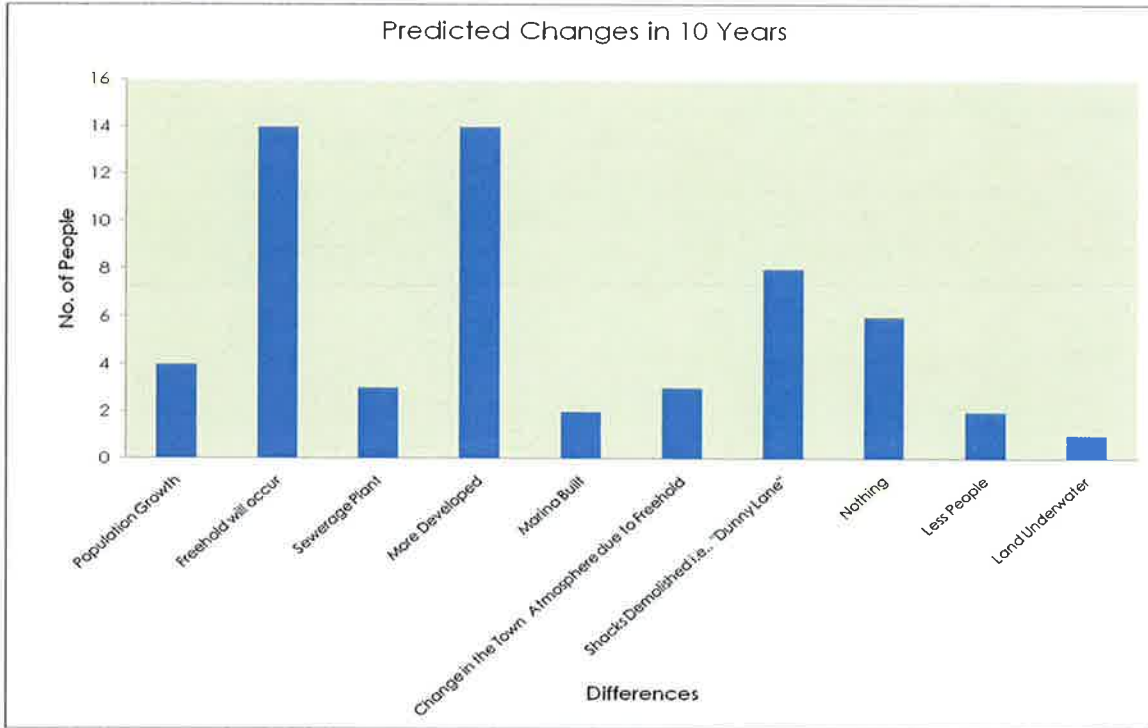




QUESTIONNAIRE

Question Ten

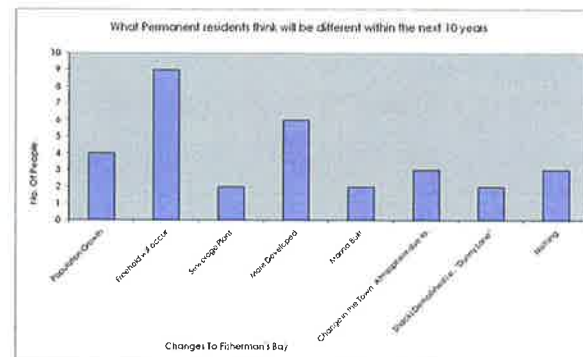
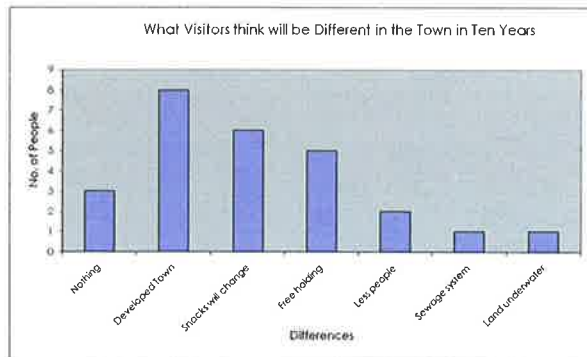
What do you think will be different in this town in ten years?



Summary

The following graphs demonstrate the major changes the permanent residents and visitors believe will occur in the next ten years. The permanent residents consider freehold of land, population growth followed by development to be major changes. Other changes that are thought to occur include a sewerage plant, marina, shacks demolished and a general change in the town atmosphere.

Major changes visitors believe will occur include more developments and a change in building structure of the common shacks in the area. The fact that Freehold of land will occur was also a change that many believe will happen in the next ten years. From the visitors graph, they focus on changes is more to do with accommodation which is of more interest to transient people because improved housing and facilities like a sewerage plant will add to the cost of holiday accommodation. The permanent residents also have similar worries but put more emphasis on the belief the dynamics of the town will change destroying their small, peaceful and familiar lifestyle.



By comparing the combined graphs, the fact that freehold will occur followed by more development are two major changes that are considered to be happening in the near future. This illustrates that many of the people surveyed believe the town is going to substantially change once freehold occurs.

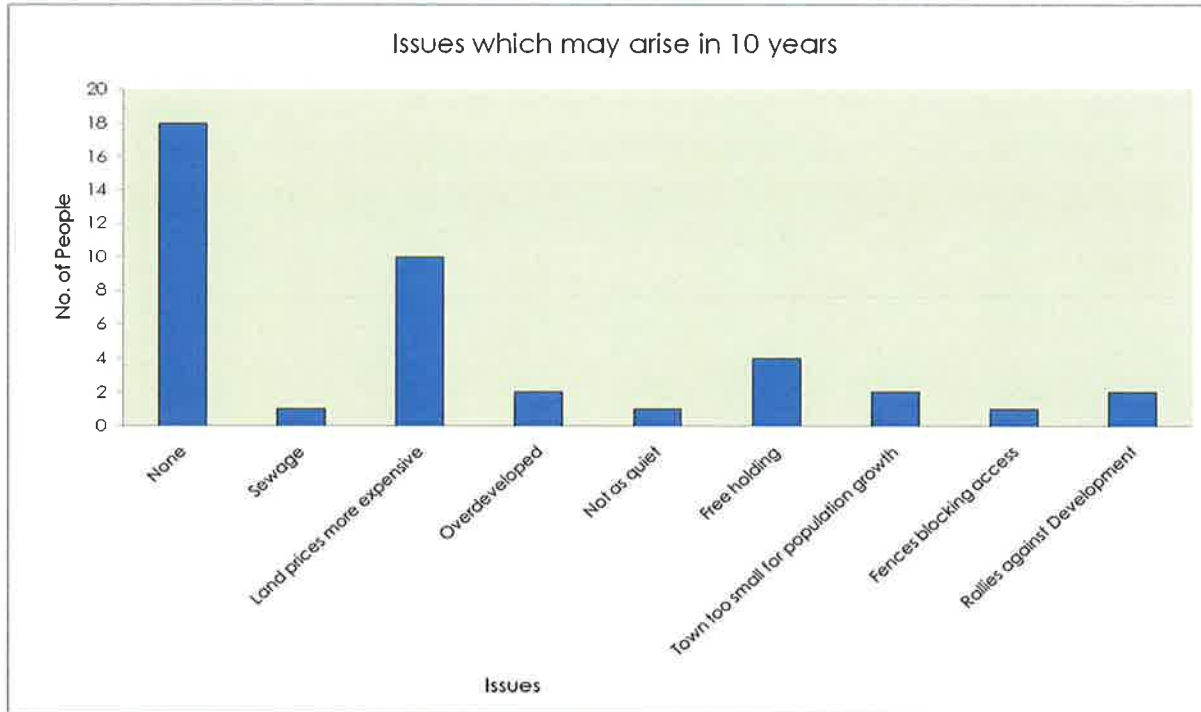




QUESTIONNAIRE

Question Ten

Are there any issues that you think will arise during that time?

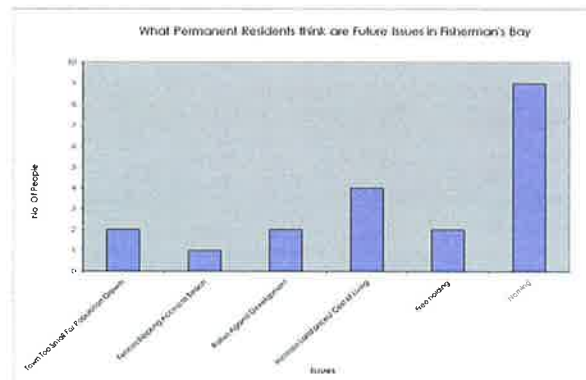
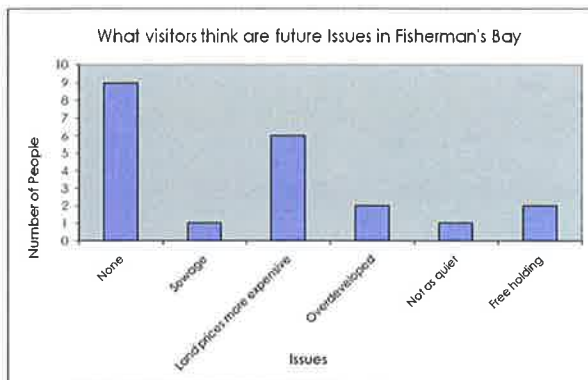


Summary

The main issues associated with the predicted changes to the town in the next ten years for both permanent residents and visitors were analysed. Majority of people thought that no issues would arise from the stated changes including freehold and increase in property prices which indicates their confusion about how the changes will affect the town. The chief concern for most people was the likely increase in the cost of living, including higher rent and cost of staying in holiday homes.

A small number of permanent residents worry about rallies against developers which will disturb the quiet lifestyle of the town. Being able to accommodate an increase in population was also an issue of the permanent residents who worry they may lose their homes to wealthy newcomers who will either buy or pay higher rent.

Visitors also feel that the town will become over-developed as the demands for coastal land increases after freehold occurs.





QUESTIONNAIRE Report

Conclusion

The significant issues and problems for both permanent residents and visitors in the town were highlighted through the survey. The change of land occupancy from lease to freehold is the biggest issue within Fisherman's Bay. This affects everyone who comes to or lives in the town by potentially increasing the cost of living there.

At this time pollution and rubbish is a concern to the residents because it is damaging the fishing industry in the town. Sewerage and speeding cars during the holiday period is also a worry, as most of the residents are elderly and there are no official sidewalks for them to walk on.

The abundance of mosquitoes is another annoyance affecting everyone staying in the town and has significant health implications and this needs to be addressed. Improvements to facilities are needed in Fisherman's Bay. These are road upgrades, an improved boat ramp and more picnic and barbeque areas. Upgrading these facilities will help the town cope with the influx of people during the holiday period and would also make life more enjoyable for the permanent residents.

Characteristics of the town that residents and visitors particularly enjoy include the peacefulness of the coast, friendly, secure atmosphere and the recreational activities such as boating and fishing. Visitors see Fisherman's Bay as the perfect holiday location, and permanent residents see it as a quiet living and retirement town. This could be a problem as further development of the small town could destroy the quiet and friendly atmosphere that people admire so much.

Freehold of land in the future has created the greatest concern amongst the local residence and visitors in Fisherman's Bay. They believe that it will be a major change to the town in the next 10 years. In some cases, many of the retired residents of Fisherman's Bay are concerned they may not be able to afford to purchase land after the Freehold takes place.





SITE ANALYSIS REFERENCES

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Chapter 5

Flovac Vacuum System, <http://www.flovac.com/>

Chapter 6

Images from Port Broughton Area School
<http://www.pbas.sa.edu.au/>

