# 3. Justification and Alternatives

# 3.1 Justification

# 3.1.1 Existing and Proposed Marina Capacity

The capacity of existing marinas in the Whitsunday area (Bowen to Mackay) was assessed in a Marina Demand Study commissioned by Whitsunday Region Interdepartmental Committee, Department of State Development and Department of Tourism, Racing and Fair Trading (2001). A summary is presented in **Table 3-1**. While there may be additional marina and marina expansion proposals in the region, the Marina Demand Study is considered to provide a definitive list of "real" proposals at the current time.

Marina	Current Development		Future Development Proposals	
	Berths/Moorings	Facilities	Berths	Facilities
Abel Point	235 berths Typically 100% occupancy	Water Fuel Electricity Fire Fighting Showers and Toilets	250 staged over 4 years, complete 2004	Sewage Pump Out Berth
Laguna Quays	112 berths 10 moorings 60 to 100% occupancy	Water Fuel Electricity Fire Fighting Showers and Toilets Laundromat Sewage pump out Bilge pump out Dry Storage Off-street car/trailer parking All-tide public boat ramp Bar and Café Full use of the Resort Facilities	70	Repair and maintenance facilities, boat lift
Mackay Marina	222 berths	Fuel Water Boat maintenance	Up to 400 possible, no expansion planned at present	
Bowen Harbour	142 moorings 33 private berths at Yacht Club waiting list for moorings and berths	Fuel Water Slipway Public toilets	100 berths	
Hamilton Island	80 medium berths 40 berths for staff 10 very large berths 90-100% occupancy	Water Fuel Electricity Fire Fighting Showers and Toilets Laundry Repair and maintenance services Basic food shops	Approved extension of 40 large berths Ultimate capacity could be 400 berths	
Hayman Island	25 berths overnight occupancy about 30%	Fuel Water Electricity SW Disposal	None	

# **Table 3-1 Existing and Proposed Marina and Mooring Capacity**

Marina	Current Development		Future Development Proposals	
	Berths/Moorings	Facilities	Berths	Facilities
Keswick Island			Up to 60 over 2 years	For existing landowners on the island only
Shute Harbour	406 designated mooring points, 208 occupied	Fuel water	None	
Abell Point	142 moorings, 44 vacant	Access to Airlie Beach and Abel Point Marina facilities	Need to replace 60 moorings to be lost due to marina expansion	
Airlie Beach/Mandalay	288 moorings, 225 vacant	Access to Airlie Beach and Abel Point Marina facilities	None	

Limited moorings are available for visiting boats at Club Med Lindeman Island, Hook Island, South Molle Island, Daydream Island and Long Island. These are generally not available for overnight stays.

# 3.1.2 Identified Demand

# Marina Demand

Available mainland marina berths in the area are estimated by the Marina Demand Study to be in the order of 550 berths. It is clear from **Table 3-1** that occupancy rates are quite high at mainland marinas in the area. Lower occupancy rates at some island marinas relate largely to high costs for overnight stays.

Surveys of boat owners undertaken for the Marina Demand Analysis (Brown and Root 2001) in the Bowen/Mackay/Whitsunday Region, analysis of existing and proposed marina berths and trends in demand for marina berths to assess likely future marina demand. It was predicted that boat numbers in the area could increase by over 500 by 2015.

The study identified a shortage of marina berths in the Whitsunday area and recommended that a new marina facility be provided at Airlie Beach (Boathaven Bay) or Shute Harbour (see also **Section 3.3.1**).

Whitsunday Sailing Club has received 880 expressions of interest for marina berths in the Port of Airlie alone. Many of these are boat owners whose boats are currently on moorings off Airlie Beach. In addition, the deeper harbour and larger berths will provide capacity for large, deep keeled international cruising yachts that are not currently catered for in the region. Hence, the overall increase in the number of new boats in the region is likely to be less than the number of berths made available as boats currently on moorings will take up at least some of the new berths.

The development will offer marina berths for sale and/or lease at rates that are commercially competitive and in line with other Queensland marinas. This will open up options for the boating community in the region which currently has few choices in relation to marina facilities.

Demand for moorings appears to be significantly lower with a number of vacant moorings in the vicinity of Airlie Beach and Shute Harbour. It is surmised that moorings do not provide the security and accessibility to shore and facilities that many

boat owners seek. This is supported by the large number of applications for marina berths from people with boats on moorings in the Airlie Beach area.

# Demand for Land-Based Facilities

The Whitsunday Tourism Strategy notes that the Shute Harbour Ferry Terminal is in "urgent need of upgrading to a level consistent with its present and future use". In fact, space for such an upgrade is limited at Shute Harbour. The proposed ferry terminal at Port of Airlie would provide much needed augmentation of the facilities at Shute Harbour as well as reducing travel time for passengers. In fact, many passengers may be able to access the Port of Airlie ferry terminal on foot.

Across the region, there is a lack of boat repair facilities. Abel Point Marina has a small workshop but is reportedly quite expensive and at times cannot service the demand. A small boat repair facility is operated in cleared area at the mouth of Campbells Creek which provides a cheaper alternative for boat repairs but does not provide a controlled environment for these activities and may result in release of hydrocarbons, antifouling paint and other contaminants to the marine environment as well as resulting in clearing of mangroves for access. This facility is also only accessible at high tide.

The boat repair facility at the proposed Port of Airlie will provide a controlled environment for boat repairs and refuelling activities as well as much needed sewage pump out facilities to support the proposed ban on discharge of sewage from vessels within 1 km of land.

The proposed commercial precinct, tourist accommodation and residential apartments will be developed over a five year period. A number of inquiries have been received in relation to residential and commercial opportunities in the Port of Airlie development. Currently, about 150 new residential units are sold in the Airlie Beach real estate market each year. Commercial development will need to keep pace in the region as well as providing further opportunities for growth. A major limitation for growth in the area is availability of land, as expansion of Airlie Beach inland is constrained by topography and the Conway National Park, thus the Port of Airlie will help in meeting demand without requiring inappropriate development inland. This is discussed further in **Section 16.3**.

The marina design provides additional capacity for boats in cyclonic conditions, with temporary refuge for up to 150 additional vessels. This will reduce damage to boats on moorings in the Airlie Beach area.

The proposal also offers the opportunity for development of a Marine Training Academy, a unique education facility in Queensland which will provide a range of formal and informal training programs catering to professional and recreational sailors. Currently, the only non-Defence facility offering professional maritime training in Australia is in Launceston, Tasmania and Fremantle, Western Australia.

# **Demand for Residential Units**

From discussions with local real estate agents and Whitsunday Shire Council Planners, the occupancy of accommodation units in Airlie Beach include permanent residential, permanent lease and holiday lease.

Around 150 apartment units have been sold in Airlie Beach each year over the last 3 years, with approximately 40% of sales to locals, the remainder to people outside the immediate area. About 65% of these are purchased for holiday letting and the remainder, about 50 units per year, for permanent residential use. Of those purchased for holiday letting, a proportion are bought by persons intending to retire to the area and seeking some return on property in the interim. (Pers. com. Christie Leet, PRD Whitsundays).

The number of new residential units built and sold in the Airlie Beach area is about 80 per year while the number of houses is in the order of 100 per year. However, it is noted that the highest demand is for high quality waterfront units such as are offered by Port of Airlie and that these units are currently in short supply. (Michael Ball, Whitsunday Shire Council Pers com.).

The proposed 100 to 120 residential units, 16 villas and 7 detached waterfront houses at the Port of Airlie would be introduced onto the market over a five year period and should be readily absorbed into the housing market in Airlie Beach. These properties will meet the demand for high quality waterfront residential, in the heart of Airlie Beach. A number of inquiries have already been received by the proponent in relation to these properties.

It is recognised that there is significant land available in the Cannon Valley for residential development, however this would not offer the same high quality, waterfront residential units that are most in demand in the area. It is also recognised that there are proposals to develop units on the steeper slopes to the south of Airlie Beach as well as housing at Mandalay Point. Again, these types of accommodation units are not expected to meet the demand for high quality waterfront housing.

# Demand for Ferry and Passenger Terminal

The Proponent has received letters of support from two of the region's largest commercial tour operators, Fantasea and Prosail. Both organisations have expressed their intention to support Port of Airlie and relocate their operations from Shute Harbour to Port of Airlie on the basis of the extended range of facilities on offer at Port of Airlie and increased control over the operation and management of commercial passenger boat facilities. These letters are included in **Appendix S**.

Both of these commercial tour operators are planning increases in their operations in the next 5-10 years. It should be noted that permits are required for new commercial passenger operations in the GBRMP and that these will be issued in accordance with the Whitsundays Plan of Management.

# 3.1.3 Compatibility with Airlie Beach

Airlie Beach, Jubilee Pocket, Cannonvale and Shute Harbour have undergone significant development in the past 20 years. From being a regional tourist destination catering to family holidays and some higher end tourists, there has been a significant influx of backpackers, drawn to accommodation and facilities that are provided at significantly lower cost than most of the island resorts in the Whitsundays. This has lead to a proliferation of budget accommodation and other support facilities in the area. More recently, there has been significant development of good quality residential units attracting investors and permanent residents to the area. Most of

these have sold prior to completion and more medium and high end tourist accommodation developments is required.

The Port of Airlie development will consolidate the changing profile of tourism in the Airlie Beach area, attracting permanent residents, family holiday makers, middle and high end tourists and also providing an international level tourist facility for overseas visitors. It will not drive out the existing backpacker market, but enhance the spectrum of tourist opportunities offered in the Airlie Beach and Whitsunday area.

An analysis of the compatibility of the proposal with the Whitsunday Tourism Strategy has been provided in **Section 4.3.3**.

# 3.2 Financial Feasibility

A financial feasibility statement has been prepared and submitted confidentially to Department of State Development due to the commercially sensitive nature of this information.

While the proponent may seek approvals for a "Stage 2" development in future, the current proposal is intended to be a stand alone development and to be financially viable in its own right.

The estimated construction cost for the land reclamation, marina basin, access channel and infrastructure is \$25 million. Estimated construction costs for all other facilities and buildings is in the order of \$100 million.

# 3.3 Alternatives

# 3.3.1 Alternative Sites

# Marina Demand Study

A review of marina availability and demand in the Whitsunday region was undertaken as part of the Marina Demand Analysis on behalf of the Whitsunday Region Interdepartmental Committee (Departments of State Development and Tourism, Racing and Fair Trading). The study assessed the coastal areas from Bowen to Mackay.

A preliminary screen of potential sites eliminated all those which might impact on declared Fish Habitat Areas, Dugong Protection Areas, National Parks and seagrass areas of regional significance. The preliminary screen also considered GBRMP zoning issues. Aerial photography of the region demonstrates that the coastline between Bowen and Mackay is largely pristine, with Cannonvale/Airlie Beach/Jubilee Pocket/Shute Harbour being the only significantly disturbed area along this stretch of coastline.

From this screen, 7 sites were identified as follows:

- Gloucester Island/Dingo Beach
- □ Earlando/Clarks Cove
- □ Woodwark South
- □ Port of Airlie
- □ Shute Harbour

- □ Mackay North
- □ Keswick Island

These sites were assessed using a multi criteria analysis technique. The following assessment criteria were considered:

#### □ Location

- Ease of access to favoured destinations
- Ease of access to marina
- Proximity to onshore infrastructure and facilities
- Natural protection from cyclonic conditions
- □ Engineering
  - Suitable foundation conditions
  - Availability of rock and fill
  - Suitability of on-shore area for marina facilities
  - Dredge spoil disposal
- **D** Environment
  - Impact on terrestrial ecosystems
  - Impact on marine ecosystems
  - Proximity to high value natural areas
- □ Planning
  - Compatibility with Council Strategic Plan
  - Impact on foreshore amenity

Final results of the analysis are presented in Table 3-2.

# ■ Table 3-2 Alternative Marina Sites (Brown and Root 2001)

Ranking	Site	Comments	
1	Port of Airlie	<ul> <li>Good location and access</li> <li>Low environmental impact, although some loss of mangroves and seagrasses</li> <li>Good proximity to services and passengers</li> <li>Moderate-good protection from cyclones</li> <li>Extensive dredging/disposal of dredge spoil</li> </ul>	
		High demand for marina facilities in this area	
2	Shute Harbour	<ul> <li>Good location and access</li> <li>Low environmental impact, although some loss of mangroves and also close proximity to extensive seagrass beds</li> <li>Moderate proximity to services and passengers</li> <li>Good protection from cyclones</li> <li>Extensive dredging/disposal of dredge spoil</li> <li>High demand for marina facilities in this area</li> <li>Lack of land for land based development and carparking</li> <li>Higher engineering costs associated with water deoths creating significant marina development costs</li> </ul>	
3	Mackay North	<ul> <li>Minimal environmental impact</li> <li>Poor access to favoured destinations</li> <li>Lower demand for marina facilities in this area</li> </ul>	
4	Woodwark South	<ul> <li>Poor access</li> <li>Lack of facilities</li> <li>Good engineering properties</li> <li>Moderate-high impact on naturalness of surrounding environment</li> </ul>	
5	Earlando/ Clarks Cove	<ul> <li>Poor access</li> <li>Lack of facilities</li> <li>Good engineering properties</li> <li>Moderate-high impact on naturalness of surrounding environment</li> </ul>	

SUPPLEMENTARY EIS

Ranking	Site	Comments
6	Gloucester Island/Dingo Beach	Poor access
		Lack of facilities
		Good engineering properties
		Moderate-high impact on naturalness of surrounding
		environment distance from main area of demand
7	Keswick Island	Poor access
		Lack of facilities
		Good engineering properties
		Moderate-high impact on naturalness of surrounding
		environment

On the basis of the assessment presented in the report, the Marina Demand Analysis recommended that the development of a new facility at either Airlie Beach (Port of Airlie) or Shute Harbour be promoted. The Marina Demand Analysis suggested that support from the public sector may include involvement in provision of marina infrastructure and facilitation of the approvals process.

The Marina Demand Analysis noted, that in surveys of boat owners in the region, there is a preference for the Airlie Beach site over the Shute Harbour site. This is likely to relate to proximity to the township of Airlie Beach, indicating a preference for access to these sorts of facilities.

Construction of a marina at Shute Harbour is likely to have similar environmental impacts as the proposed site in Boathaven Bay, but without the commercial and social benefits of being able to provide integration with the existing township of Airlie Beach. It would also be very difficult to provide adequate carparking at this location without considerable engineering effort and any commercial opportunities associated with the marina would be lost due to the lack of land for such development. A marina at Shute Harbour is unlikely to be commercially viable without the associated commercial development (see also **Section 3.3.5**).

# Other Sites

The potential to expand marina capacity at Abel Point Marina was taken into consideration by the Marina Demand Analysis. Notwithstanding this expansion, the recommendation for an additional marina at Airlie Beach (Boathaven Bay) or Shute Harbour was made as the proposed expansion of Abel Point Marina is not likely to provide sufficient berths to meet demand.

A site at Shingly Beach which was identified in community submissions on the 1998 IAS (Burchill 1998) is already incorporated into the Abel Point Marina expansion and it would not be feasible to incorporate an additional marina at this location. In any case, the site does not offer any particular advantages or diminished environmental impact compared to Port of Airlie and does not provide the opportunity to extend the commercial, retail and tourist precinct of Airlie Beach.

Expansion of Laguna Quays has also been raised as an alternative. It is noted however that:

- □ There are significant seagrass areas in the immediate vicinity of Laguna Quays (DPI 1999)
- □ Laguna Quays is in a remote location and does not compare with Airlie Beach in terms of proximity to existing services and facilities for visitors.

It should be noted that construction of a marina at an alternative site, or expansion of an existing marina is likely to have similar or greater construction and operation impacts than the proposed Port of Airlie.

# 3.3.2 Alternative Layouts

#### 1998 Concept

The concept of constructing a marina and land based facility in Boathaven Bay has been under consideration since 1985 when the Queensland Government invited proposals for the development of a marina in Boathaven Bay. In 1988, an EIA was presented for approval for the Sailport Development, consisting of:

- □ A large retail and commercial centre
- **D** Terminal and transportation facilities
- □ A 300 room hotel
- □ 540 resort condominiums
- a 900 berth marina with 20 commercial and 20 private wharves
- **boat** maintenance and refuelling facilities
- accommodation for government services
- □ a four lane public boat ramp
- an 18 hole golf course extending into the mangroves adjacent to Campbells Creek
- □ a sports oval.

While environmental approvals were granted for this project, it was never constructed.

The 1998 IAS presented a development in Boathaven Bay at a much larger scale (see **Figure 1-2**). This development was reworked on the basis of comments made in that EIA, particularly in relation to the scale of the development compared to existing development in Airlie Beach.

The current proposal was developed with these comments in mind and is much more compatible with the Airlie Beach township. A key consideration in the concept was the importance of integrating the retail and commercial areas of the development into the existing town facilities as an extension of the main street and to provide the impetus to develop the Coconut Grove/Airlie Esplanade precinct as a primarily pedestrian area. Provision of transport interchange facilities accessed from Shute Harbour Road is intended to fit with the existing road network.

A number of different channel and breakwater orientations and harbour configurations were considered when developing the current proposal. Hydrodynamic modelling was undertaken to select the optimum orientation, with the breakwater perpendicular to the north-south access and the channel oriented to the north.

A 10 storey apartment block as considered for the most seaward point of the site as landmark feature of the development (see **Section 2.3**). Considerable negative comment was received from the community and some agencies on this aspect of the development. In response to this, a revised 6 storey building (five floors plus roof garden accommodation) is proposed at this site.

# 3.3.3 Alternative Site Access

Several alternative site access points were considered as follows:

- □ Access from Coconut Grove only to the entire site
- □ Access from site directly to the Coconut Grove-Shute Harbour Road intersection
- □ Access to the site from Shute Harbour Road approximately 300m from the Coconut Grove-Shute Harbour Road intersection with a smaller ancillary access from Coconut Grove.

While traffic analysis showed that all three options were feasible, there are a number of disadvantages with the first two.

Access via Coconut Grove only would significantly increase traffic volumes on Coconut Grove, including heavy vehicles and buses past inappropriate land uses including the Airlie Beach Hotel and this volume and composition of traffic is considered inappropriate for this area. The traffic would also create conflict with the main pedestrian/cycle/disabled access to the site and within the site. Whitsunday Shire Council has indicated that it does not prefer this option and that it conflicts with future plans for community activities in this area. Any benefits from removing the current long distance bus traffic from Coconut Grove would be lost and in fact adverse effects exacerbated.

In terms of internal traffic flows, access via Coconut Grove only would necessitate boats/trailers and buses to pass through areas of the site that are intended as pedestrian and open space precincts. Traffic flows through the site would be inefficient and inconsistent with the overall concept for a harbour focussed community village style development. It would also have aesthetic impacts on the site.

Access from site directly to the Coconut Grove-Shute Harbour Road intersection would avoid adverse impacts on Coconut Grove and activities in this area. However, it would still impact on pedestrian/cycle/disabled movements within the site and, to a lesser degree, be inconsistent with the nature of the development. From a traffic safety point of view, it would be difficult to create an intersection that operates efficiently and meets appropriate safety standards in terms of visibility and approach angles and the intersection is likely to be confusing to drivers.

A key concept of the Port of Airlie is providing a pedestrian mall as an extension of the main street of Airlie Beach to encourage visitors to utilise the commercial precinct and enhance their experiences. This would be adversely affected by this option. Again, Council has indicated that it does not prefer this option.

On this basis, the access of Shute Harbour Road with ancillary access at Coconut Grove is the preferred option. This option has the following advantages:

- □ Maximises efficiency of internal traffic and reduces road lengths within the site
- □ Minimises conflicts between traffic and pedestrians/cyclists/disabled accessing the site and within the site
- **D** Preserves the pedestrian and open space precincts within the site
- □ Is preferred by Whitsunday Shire Council (See Appendix L-2).

A more detailed analysis of this access concept is provided in **Section 13.7** and this shows that this option can be designed and operated such that there will be no significant adverse effects on traffic flows or safety along Shute Harbour Road. Distances of approximately 300m are available between the site access and intersections with Hermitage Drive and Coconut Grove and this greatly exceeds the forecast queue lengths.

# 3.3.4 Alternative Spoil Disposal Options

The feasibility and environmental impacts associated with on-shore and deep sea disposal of dredge spoil were identified in addition to the spoil disposal method outlined in **Section 2.7.1.5**. This option involves disposal of the dredged material from the entrance channel and its disposal into a bunded spoil disposal area along the Shute Harbour Road boundary of the project. This area will be used for future development after the dredged material has been allowed to settle and consolidate.

Other alternatives for disposal of dredge material are limited. There are no viable onshore disposal areas in the vicinity of Airlie Beach for disposal of capital or maintenance dredging material. The capital dredging material could be used in the reclamation of the Stage 1 area, however this would cause unacceptable delays in development of the site which would result in the developer incurring unacceptable financing charges while waiting to be able to use the land.

Disposal at sea is not an option. The *Environment Protection (Sea Dumping) Act 1981* controls disposal of dredge spoil at sea. In addition, disposal would have to be undertaken outside the GBRMP. Transportation costs for long range disposal of the material would not be financially feasible.

The only spoil area will be the maintenance dredge spoil area that will be used every 10-15 years.

The other reclaimed areas will all be utilised for permanent development. All material excavated/dredged from the site will be used to create useful and valuable land in a location that will have a demand for future developable urban/commercial land.

The "future development area" will be reclaimed using the soft surface mud from the marina basin and also the dredged material from the entrance channel. This material will take a number of years to drain and consolidate, before becoming suitable for development. The excavated material will have a very high salt content and would not be suitable for filling on land, except in an area that is fully bunded with impermeable material to prevent leaching of the salt into the local water table. Disposal of the dredged material on land would effectively sterilise the land for a number of years. There are no suitable low lying lands suitable for filling with this material within an economic haul distance of the site. Haulage of the material from the site to a disposal area on land would also have unacceptable transportation impacts on the local community.

The reason for creation of the "future development area" is allow reclamation of the breakwater and marina foreshores, using the more suitable material below the soft surface mud. This underlying material will be excavated in the dry and placed and consolidated in the reclamation areas in a relatively short period. Development of the reclaimed land can then be undertaken within an acceptable and economically viable timeframe.

The construction method proposed will also have two further very significant advantages. Excavation of the large majority of the material, in the dry, behind cofferdams, will reduce impacts on the surrounding marine environment. Use of all the material from capital dredging and excavation works will also significantly reduce the need for imported material, reducing transportation impacts on local road network and on the local community and reducing the need to open or expand local quarries.

The material could be transported to inland locations, however this would generate a significant volume of traffic. In addition, the material will initially be quite wet and this would make the material more difficult to handle and transport, as well as creating difficulties with management of saline effluent from the material in an inland location.

Finally, the dredging method proposed for the access channel will generate very wet material (30% solids) which will need to be transported via a pipeline, thus precluding any distant disposal sites.

Advantages of the option of creating a dredge disposal area adjacent to the development and parallel to Shute Harbour Road include:

- □ Minimisation of transportation of spoil and contains all spoil within the development site, thus avoiding impacts associated with off-site transportation and disposal
- Minimisation of handling and transport costs
- □ Provision of useful and valuable land for future development.

# 3.3.5 Marina Only Option

Marina construction costs are very high in northern Queensland, due to:

- □ High tidal ranges
- **D** The need to withstand cyclone conditions
- □ Shallow estuarine environments requiring deep excavation
- □ Scarcity of good quality rock fill material
- Lack of opportunity for disposal of dredge spoil within the GBRMP
- □ The need for high levels of environmental management consistent with location within or adjacent to the GBRMP and GBRWHA.

Given these costs, marina developments is only viable if accompanied by land based facilities such as are proposed at Port of Airlie. This allows the marina facility to be constructed and operated at a reasonable cost to boat owners and also provides a range of facilities useful to boat owners. There is a natural connection between the marina activities and commercial facilities such as ship chandlers and visitor retail.

In the case of Airlie Beach, the key attraction to the area is its waterfront location and many activities are focussed on this feature. The popularity of the Vision Airlie Lagoon supports this. The Port of Airlie offers the opportunity to expand the length of sea front in Airlie Beach and provide high quality waterfront facilities that are compatible with the marine and aesthetic basis of tourism in the area. The combination of a marina, harbour, residential and commercial development will provide a vibrant coastal village character to the development that will also enhance the character of the main commercial centre of Airlie Beach.

A marina only development would not allow these opportunities to be realised.

# 3.3.6 Marina and Commercial Only Option

As discussed in **Section 3.3.5**, the current proposal is intended to:

- □ Provide land based development to enhance the commercial viability of the project and
- □ Provide a vibrant harbour based coastal village community

Omitting the residential component of the marina development would diminish both the commercial viability and also the potential economic benefits to the community. It would also detract from the overall character of the area as a coastal village.

Finally, as discussed in **Section 3.1.2**, there is significant demand for high quality residential and tourist accommodation development in Airlie Beach due to a shortage in water front land. The proposed release of prime waterfront residential development is expected to contribute positively to the economic profile of Airlie Beach and this would be lost of this component was omitted from the concept.

# 3.3.7 Transport Routes

Transport of materials through Airlie Beach township can take place via the main street, Shute Harbour Road, or via the "loop road" that has been constructed to divert traffic from Shute Harbour Road around the commercial section of the town.

The loop road route was chosen as the preferred route through Airlie Beach to minimise disturbance and disruption through the commercial precinct of Airlie Beach. This is discussed in more detail in **Section 13**.

Alternative routes for transportation of materials from the Bruce Highway to Airlie Beach do not exist.

# 3.3.8 Other Similar Developments

A range of other marina and tourist developments have been proposed in the Whitsunday area. There are none known to the proponent that offer the combination of marina and land based development in a location as accessibly as Airlie Beach.

# 3.3.9 No Project Alternative

If the project does not proceed, the substantial social and economic benefits of the project would not be realised. These include:

- □ Up to 800 directly created jobs during construction and 450 during operation
- □ Indirect construction phase employment of 1800 people State wide with 1350 of these in the region and 1,100 in the Whitsunday Shire
- □ Indirect operation phase employment of 1,100 people State wide with 900 of these in the region and 800 in the Whitsunday Shire
- □ Contribution of \$230 million to the State economy during construction and \$125 million during operation
- □ Contribution of \$170 million to the regional economy during construction and \$100 million during operation
- □ Contribution of \$140 million to the Whitsunday Shire economy during construction and \$90 million during operation.

The marina presents an opportunity to provide a facility where impacts associated with sewage from commercial and live aboard vessels can be managed, as well as the impacts of boat repair and maintenance. Currently, boats discharge untreated sewage directly to the marine environment of the GBRMP and GBRWHA and boat maintenance is frequently undertaken on craft beached on intertidal areas where stripped paint and other contaminants are washed away by the next high tide. While the Port of Airlie marina would not completely prevent these activities from taking place, it will reduce the scale of these activities by providing an alternative for at least some boat owners.

The marina also provides the opportunity to remove some moorings from the Airlie beach area, which may allow seagrass to re-establish in these areas which are currently scoured by mooring chains as boats swing on their moorings. This may result in some improvements in seagrass habitat in subtidal areas. The no project alternative would preclude these benefits, however would also avoid direct disturbance of approximately 8 hectares of seagrass.

The no-project alternative does not satisfy the demand for marina berths, nor does it provide a solution to anticipated growth in water based tour activities. Discussions with commercial tour operators and ferry operators indicates that some operations are forecasting up to 100% growth in passenger traffic over the next 5 years (subject to permitting from GBRMPA). Such growth will require substantial expansion of facilities and transportation routes to the terminals.

If Shute Harbour is to continue to be the only mainland port facility between Mackay and Bowen, significant upgrade of the harbour and access roads are required. This may not be practical or viable due to the lack of land for land based facilities and the expense of reclaiming land in this area where the water is quite deep and tidal range large (see also **Section 3.3.1**). Abel Point Marina expansion will not offer any commercial ferry terminal facilities and there are no other existing or proposed marina developments in the Shute Harbour/Airlie Beach area. The no project option may therefore constrain development of the water-based tourism industry in an area that is continuing to grow in reputation as one of the worlds leading pleasure boating destinations. Alternatively, it may increase pressure for development of a marina at a more environmentally sensitive location (see also **Section 3.3.1**).

The no project option may also constrain economic growth in Airlie Beach due to a shortage of suitable land for further development.

The no project option will avoid immediate and direct impacts on mangrove, seagrass and mud flat habitat in Boathaven Bay. However, it must be noted that future development (including development currently approved or planned) in the catchment of Boathaven Bay will place increasing pressure on these habitats even if the Port of Airlie does not go ahead. Hence, the no project option will not ensure continued preservation of marine habitat in Boathaven Bay.

# 3.4 Proponent's Environmental Record

Neither the Proponent, nor its shareholders or directors have ever had any proceedings against them relating to any alleged infringement of Australian environmental law.