



Social

14

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14 Social

14.1 Introduction

A Social Impact Assessment has been prepared for the project in accordance with The Coordinator-General's *Social Impact Assessment Guideline (2013)*, noting that the location of the island and previous resort operation mean that defining a community of interest is different from other typical mainland projects. Accordingly, the focus of this Social Impact Assessment is on construction impacts (workers and mainland community) and operational impacts of the resort in the feeder area of Airlie Beach and its surrounds. The project's unique attributes that have shaped the preparation of the Social Impact Assessment are:

- The project is located on an island with no immediate permanent 'community' of impact apart from three caretakers;
- The proposal represents a redevelopment of an existing resort that successfully operated prior to 2012 and as such secondary communities (such as Airlie Beach) have been previously exposed to resort operation activities with no significant negative impacts observed; and
- The site is also positioned in the Whitsundays alongside a number of other island resorts, therefore operational impacts become difficult to distinguish from other resorts and tourism activities undertaken in the region.

Consultation with key stakeholders (including Government agencies, peak industry groups, community organisations and business groups) has taken place since the commencement of the project to refine project elements to avoid and minimise impacts on matters of national environmental significance. In March 2016 a Newsletter was issued to 144 stakeholders seeking views and comments on the proposed project. The proponent also commissioned and released a project website to provide information and the opportunity to provide comments on the project (<http://lindeman.net.au>). The proponent has also met with State and Local Members of Parliament, State/Commonwealth Government agencies and presented the project to Local Marine Advisory Committee in Airlie Beach and Mackay (refer to **section 14.5**). The proponent is seeking wider community feedback during the EIS public notification phase to gather additional input on the social impact assessment of this project.

This section of the EIS is supported by further information included in **Appendix L - Social Impact Assessment** prepared by Cardno.

Addendum: This EIS was initially prepared assuming that the safe harbour was to be part of the Lindeman Great Barrier Reef Resort Project. With the commencement of the Great Barrier Reef Marine Park Authority's (GBRMPA) Dredging Coral Reef Habitat Policy (2016), further impacts on Great Barrier Reef coral reef habitats from yet more bleaching, and the recent impacts from Tropical Cyclone Debbie, the proponent no longer seeks assessment and approval to construct a safe harbour at Lindeman Island. Instead the proponent seeks assessment and approval for upgrades to the existing jetty and additional moorings in sheltered locations around the island to enable the resort's marine craft to obtain safe shelter under a range of wind and wave conditions. Accordingly, remaining references to, and images of, a safe harbour on various figures and maps in the EIS are no longer current.

14.2 Proposed Construction

The Lindeman Island Great Barrier Reef Resort will be constructed in stages, with Stage 1 involving construction civil works, construction camp (staff accommodation) and infrastructure (power, water, sewerage, roads) (refer to **Map 4-1 - Construction staging and quarry location**). It is expected that Stage 1 construction will take approximately 18 months. Completion of the Lindeman Island Resort and subsequent stages are expected to take up to 3 years. The construction and operation of the proposed resort will have significant impact on Regional GDP with a final development cost of approximately \$583 million generating total employment during construction of 1,750 person years (full time equivalent - FTE) in the Mackay Region and total employment during operations of 800 (gross) and 560 (net) (FTE) persons in the Mackay Region (where gross assumes that all visitors would not have otherwise stayed elsewhere in the Region and net assumes that 30% of visitors would have stayed elsewhere in the Region), including employment on the island averaging 300 FTE. It is estimated that the day to day running of the Resort will comprise 0.5% (gross) or 0.4% (net) of the projected 2023 labour market for the Mackay Region (which includes Mackay, Whitsunday and Isaac local government areas).

14.3 Projected workforce

It is anticipated that approximately 300 full-time equivalent (FTE) employees will be required once the resort is fully operational. Most operational staff will work standard shift hours and will be sourced from the Whitsunday Region. It is proposed that the approximately 300 staff will be accommodated in the new village precinct to be provided on the island with staff movements to the mainland to occur mainly by ferries. As discussed elsewhere, Whitsunday tourist facilities have traditionally been largely staffed by the itinerant backpacker market that visits the state's tourism hotspots during peak tourist periods. During the recent GFC-induced downturn in tourism, lower levels of backpackers have been attracted to the Whitsundays (and other tourist destinations) due to the lower levels of work opportunities. The operation of this proposed Resort is likely to stimulate this backpacker segment of the tourism market. The following table provides information on the anticipated workforce during construction and operation.

Table 14-1. Projected Workforce Detail.

| Component | Requirement |
|---------------------------|--|
| Construction | |
| Yearly Workforce | Up to 300 at peak construction |
| Local / DIDO % and Roster | 70% 5 days on, 2 days off |
| FIFO % and Roster | 30% 3 weeks on, 1 week off |
| Shift Change | Staggered rosters = Island working 7 days per week |
| Accommodation | 80% stay on-site |
| Commute | 20% commute each day (Anticipated from Airlie, Proserpine, Mackay, down to Rockhampton in South and North to Townsville) |
| Operation | |
| Yearly Workforce | 300 peak operational periods |
| Local / DIDO % and Roster | 100% 5 days on, 2 days off |
| FIFO % and Roster | Nil |
| Shift Change | Daily Changeover of approximately 43 people per day |
| Accommodation | All stay on-site during on-roster |

| Component | Requirement |
|---|---|
| Local Split % from greater region (e.g. Mackay, Townsville) & mode of commute | 50% locals from greater region Anticipated 10% drive self, 90% charter bus |
| Local split % from Airlie Beach, Cannonvale and Proserpine & mode of commute | 50% from immediate local area Anticipated 30% drive self, 70% dropped off |

All of the on-site construction workforce is expected to be accommodated on the island in a temporary worker's camp until the staff accommodation buildings are constructed in the Village Precinct. The workload will be managed by using the local and regional workforce. The local construction workforce is proposed to be transported to and from the island between work period breaks by ferry from Shute Harbour and is expected to be drawn from Airlie Beach, Jubilee Pocket, Cannonvale and Proserpine, as well as Mackay. Local workers would commute from their home to Shute Harbour for fast ferry across to the island. The locals, comprising an estimated 70% of the workforce, would have a shortened time on the island, being 5 days on and 2 days off (weekends). The regional (from Townsville, Rockhampton, Brisbane, and elsewhere as required) and/or FIFO construction workforce would fly into Proserpine or Hamilton Island airport from a range of centres. It is anticipated some companies may elect to arrange their own chartered flights, or come to a commercial agreement. From Proserpine airport there would be buses to Shute Harbour, where they would then fast ferry across to the island. The percentage of regional and/or FIFO workers would likely be 30% of total workers. A FIFO roster system similar to the resource sector would work best for these types of workers (3 weeks on, 1 week off). It is anticipated that local companies may charter a bus depending on the number of workers they have, to help avoid parking problems at Shute Harbour. Locals that are closer to Shute Harbour (Cannonvale, Proserpine, Jubilee Pocket, Mackay, and Bowen), would either drive themselves (with car parking needs being assessed as part of this EIS) or be dropped off at Shute Harbour each week.

14.3.1 Construction Staging

The construction period would involve a period of three years, with construction due to commence in June 2017 and be completed by December 2020 (refer to **Map 4-1**). Due to the size and magnitude of the overall project, construction work the proponent's strategy is to break the project into the following stages:

- > Stage 1 - Construction Camp, Civil Works, Demolition and Infrastructure;
- > Stage 2 - Jetty upgrade, retail and facilities, airstrip upgrade, village, sports centre and facilities, staff accommodation, golf course, beach resort and facilities;
- > Stage 3 - Spa resort and facilities;
- > Stage 4 - Eco resort and facilities; and
- > Stage 5 - Villa construction and ecotourism facilities (glamping).

The following schedule is proposed:

- > The "finishes crew" would work on Stage 1 while the "structure crew" works on Stage 2. Once the finishes are completed in Zone 1 this crew would move onto Zone 2 to complete these works;
- > Separate crews would work on the jetty upgrades and airport precincts as the required work skill and experience would differ to that for the hotel precincts;
- > An accommodation camp will be established on site in the vicinity of existing accommodation area for the anticipated construction crew;
- > Existing buildings will be demolished down to the foundations to enable the new structure for the Beach Resort to be constructed; and

- > Appropriate demolished material will be recycled to use as a road base and pathways on site for the new resort layouts.

The three resorts would open at the same time with the villas to be constructed subsequently as demand requires.

14.3.1.1 Construction Phase

During the three year construction period, employment on the island is expected to average 300 persons (FTE). The construction stage is expected to generate total employment of 1,750 (FTE) person years in the Mackay Region (averaging 490 FTE jobs over the three and a half year construction period). In Queensland, total employment generated is expected to total 2,660 FTE person years (averaging 740 FTE jobs over the three and a half year construction period). The expected annual employment generation represents 0.4% of the projected 2018 labour market for the Mackay Region and 5.1% of the current number of unemployed persons in these areas. Accordingly, unlike the situation experienced during the recent mining boom, the proposed construction project is not likely to place an undue strain on the Mackay Region's labour market and no significant impact upon wage levels in the Mackay Region is expected to result due to the significant spare capacity that exists within the Mackay Region's labour market.

14.3.1.2 Operations Phase

The proposed Lindeman Island redevelopment represents an expansion of an existing and large economic sector (tourism) in a part of Queensland where tourism is already a dominant sector. Its impacts are expected to represent a marginal change to the existing economy. During operations, employment on the island is expected to average 300 FTE persons. The operational stage is expected to generate total employment of 800 (FTE) persons in the Mackay Region in gross terms and 560 FTE persons in net terms. In Queensland, total employment generated is expected to total 1,050 FTE persons in gross terms and 680 FTE persons in net terms. The expected operational employment generation represents 0.5% of the projected 2023 labour market for the Mackay Region in gross terms and 0.4% in net terms. It also represents 8.3% of the current number of unemployed persons in these areas in gross terms and 5.8% in net terms.

14.4 Other Major Projects

Current information suggests that there are a small number of major/coordinated projects being undertaken in the greater region in the next decade. For example the Whitsunday local government area's current and planned major development projects were stated as valued at \$36 billion¹, with a 16,230 hectare State Development Area being a key driver, however a number of the named projects have been halted, delayed or completed. Nevertheless, ongoing and revised development plans, as well as ongoing small-scale construction and development, are estimated to have a negligible impact on labour availability for the Lindeman Island works. **Table 14-2** below shows the coordinated projects in the region listed on the Department of State Development's website and other projects understood to be underway.

¹ Living Whitsundays Liveability Prospectus retrieved from http://livingwhitsundays.com.au/Portals/0/Documents/Livability_Prospectus.pdf

Table 14-2. Major Projects in the Greater Region (Central and North Queensland).

| Project | Location/s | Description | Proponent / Involved Parties | Jobs | Timing | Status |
|---|--------------------------------------|---|--|------|---|---|
| Chinatown Development Airlie Beach | Airlie Beach | \$300m Chinatown development Tourism based mixed use landmark hotel, short term accommodation, 100 shops and restaurants, open air pedestrian mall | Whitsunday Chinatown Investment Pty Ltd WSG Whitsunday Surveys China Australia Entrepreneurs Assoc Inc | - | 3 years from contract signing. Substantial works have to be undertaken by March 2016 | Contract terminated Feb 2016 Seeking new investors |
| Abbot Point Coal Terminal Expansion Stage 3 | Port of Abbot Point 25km NW of Bowen | Duplication of the existing terminal infrastructure, which will double the Port of Abbot Point's capacity from 25 million tonnes per annum to 50 mtpa | Ports Corporation of Queensland Ltd | - | - | Recommended project proceed subject to conditions and recommendations |
| Port of Airlie Safe harbour | Airlie Beach/Shute Harbour | Integrated safe harbour development: boating, tourism, residential and commercial facilities - safe harbour - passenger ferry terminal - public boat ramp - retail and commercial space - apartment hotel - apartment residential complex - detached residences - parkland | Windward Airlie Beach Partnership | - | - | Recommended project proceed subject to conditions and recommendations |

| Project | Location/s | Description | Proponent / Involved Parties | Jobs | Timing | Status |
|-----------------------------------|--|--|----------------------------------|---|--------|---|
| Capricorn Integrated Resort | 45km north of Rockhampt on 9km NE of Yeppoon | \$600m 1500-hectare integrated resort community - 300-room, five-star resort, including a golf course - caravan and RV park - Wagyu cattle farm - residential community of 8000 dwellings and village centre - conservation precinct - airstrip – - refurbishment of the existing 331-room Mercure Capricorn Resort | Iwasaki Sangyo Co (Aust) Pty Ltd | 19,000 construction over 20yrs (8500 onsite) 2,160 operational | - | EIS being prepared by proponent |
| China Stone Coal Project | 300km West of Mackay | Large-scale, greenfield coal mine with a yield of up to 38 million tonnes per annum of thermal coal | MacMines Austasia Pty Ltd | 3900 construction 3400 operational | - | EIS active (additional information being prepared by proponent) |
| Townsville Port Expansion Project | Port of Townsville | Expansion of the Port of Townsville to accommodate forecast growth in trade at the port and address current capacity constraints | Port of Townsville Ltd | 139 construction 180 operational | - | EIS active (additional information being prepared by proponent) |

14.5 Community Engagement, Stakeholders and Impacted Communities of interest

The primary project area of Lindeman Island has no permanent residents apart from three caretakers based onsite. However the greater project area takes in the Whitsunday Islands, the Whitsunday Regional Council area (as Shute Harbour will be the point of departure for the transport of labour and materials to the island, and therefore the base for most of the mainland activities), and the Mackay Regional Council area (as the island falls under the Mackay Regional Council area, and it is likely to be a major source of labour and materials).

Construction and operation of the project would potentially impact and/or interest (not limited to):

- > Queensland and Federal government departments as relevant to both regulation, licensing, and approvals, and those responsible for human services such as housing, health, and employment;
- > Local Government relevant departments;
- > Chambers of Commerce (Whitsunday and Mackay)

- > Whitsunday Island tourist enterprises (other resorts and tourist destinations)
- > Local transport providers (water, air, and sea) and related industries (e.g. Airports)
- > Local suppliers of materials and services
- > Health providers including GPs and hospitals
- > Emergency services (Fire, Ambulance)
- > Police
- > Local Council members (Whitsunday Regional Council and Mackay Regional Council)
- > Tourism marketing bodies such as Tourism Queensland
- > State and Federal MPs
- > Local environmental groups
- > Infrastructure providers including electricity and telecommunications

Without a primary impacted 'community', nor any way to distinguish impacts to secondary communities, the project team determined that broad community consultation would not add value to the process. The key focus, determined following a scoping process, was a focus on the construction impacts to the mainland (with regards to labour and supply and transport of goods), operational impacts and benefits, and cumulative impacts of the operational resort in the feeder area of Airlie Beach and its surrounds. This was determined to be most productively and efficiently managed through engagement focused on key stakeholders and mainland social infrastructure and service providers. The overall expressed level of interest in the proposed resort, even with significant media coverage, has remained minimal throughout the EIS process, outside of the key environmental issues addressed elsewhere. Wider public/community engagement will occur during the EIS public notification phase, when more detailed information about the various impacts and mitigation strategies is available. It will be at this point that interested parties will be able to review the EIS and provide feedback as required.

14.5.1 Stakeholder Mapping and Consultation

Since the commencement of the project a range of consultation techniques have been adopted to inform key stakeholders of the proposal to redevelop the existing resort at Lindeman Island and to identify concerns or grounds for support. The findings of this process have been used to inform studies and to refine the Masterplan layout.

A comprehensive stakeholder mapping exercise has been undertaken to identify stakeholders, their levels of interest and influence, if they are directly or indirectly affected by the project, and if they are an advisory agency for the coordinated project. The outcome of this has been documented in a stakeholder and contact register which is found in **Appendix L**. An initial set of stakeholders and agencies was identified at the beginning of the EIS process, and as additional stakeholders were identified, referred, or made themselves known to the project team, they have been added to the list. All contact with any stakeholders regarding the project has been logged in the stakeholder register by project team members (refer to **Appendix L**).

Stakeholder Engagement Meetings

Meetings with key stakeholders (e.g. Commonwealth, State, Local Government and elected representatives) have been held throughout the preparation of the EIS to discuss and resolve key design issues, including:

- Monthly meetings with The Office of the Coordinator General to discuss key project issues;
- Meeting with the Minister for the Environment (Hon Steven Miles) and Minister for Tourism (Hon Kate Jones);
- Local Marine Advisory Group (supported by the Great Barrier Reef Marine Park Authority) in Airlie Beach and Mackay;
- Marine Technical Advisory Group Meetings (meeting with State Government and Great Barrier Reef Marine Park Authority) to discuss location and design of the formerly proposed safe harbour (no longer current);
- Terrestrial Technical Advisory Group Meetings (meetings with State Government) to discuss vegetation and tenure related issues;
- Transport Technical Advisory Group Meeting (meeting with the State Government to discuss potential impacts on State Controlled Road Network).

The proponent's Director (Paul Nyholt) has also met with representatives of:

- Queensland Tourism;
- Cruise Whitsundays;
- Directors of Hayman Island, Daydream Island, Hamilton Island, Whisper Bay and Laguna Quays Resorts;
- GSL Aviation Director,
- Heli Biz and Heli Taxi Owner;
- Air Whitsundays General Manager;
- Whitsunday Regional Council Chief Executive Officer;
- Local Government Member (Jason Costigan);
- Max Bear of Mars Charters;
- Fodico Marine Group; and
- Whitsundays Marketing and Development.

14.5.2 Newsletter

A Stakeholder Information Newsletter was released on 4 March 2016 to over 140 stakeholders included in the register to inform the community and key Government agencies about the project and provide opportunities to provide input (refer to **Appendix L** for the Newsletter and Stakeholder Contact Register). The Newsletter provided an overview of the EIS process and key aspects of the Masterplan, proposed schedule, workforce requirements and anticipated project benefits.

A total of 10 submissions were received on the Newsletter by predominantly Government agencies (9) and also a tourism operator (1). Key issues raised in the submissions include:

- Disaster management;
- Emergency response;
- Opportunities for local businesses and workforce;
- Health and wellbeing;
- Gap Creek Dam water and sewage treatment;
- Protection of the Great Barrier Reef Marine Park.

These issues have been addressed in the preparation of the EIS.

14.5.3 Website

A project website has been prepared providing information regarding the proposed redevelopment of Lindeman Island (<http://lindeman.net.au>). The web site also allows for informal feedback to be collected throughout the process through the “comment” tab, regardless of whether a formal consultation process is underway (this feedback would likely be associated with reviewing online information). To date the following seven responses supporting the project have been received, with none submitted providing opposition to the project:

- 2 emails from previous employees supporting the development and seeking employment opportunities (28/11/16 and 26/11/16);
- 1 email from a previous employee supporting the resort (11/10/16);
- 1 email from a charter cat operator supporting the redevelopment (27/08/16);
- 1 email from a previous tourist to the Island who supports the project and states “*The island is incredibly beautiful, and with the correct environmental protections in place, I believe that it should be opened to the public once again*” (14/06/16);
- 2 emails providing support in relation to the project and tourism (24/03/16) and (15/12/16).

14.5.4 Public Notification and Community Meetings

Following the release of the Draft EIS for public comment for a period of 30 business days a total of two community meetings will be held, one in Airlie Beach and Mackay respectively during the formal public consultation period under the SDPWO Act, EPBC Act and GBRMP Act. It is suggested that a quarter page Public Notice be placed in the Whitsunday Times and Daily Mercury in the week prior to the Public Meetings. The advertisement will inform the local community of the proposed development and invite them to attend the Community Meeting. An Information Package will be issued and posters will be on display at the respective venues informing the community of the proposed development.

The Project Team will be in attendance to present the key aspects of the proposal and answer questions and to address concerns. Attendees will be given the opportunity to complete a Feedback Form at the Community Meetings. The community will be able to nominate on the Feedback Form whether they would like to receive a list of issues raised by the community at the meeting.

14.5.5 Results

Submissions provided to date as part of the consultation process have resulted in refinements to the Master Plan layout as demonstrated by the following:

- Removal of the safe harbour as part of the overall resort redevelopment; and
- Refinements to the location of the tourist villas, eco resort and glamping facilities to minimise impacts on vegetation in particular the coastal vine thickets and grassland communities.

14.6 Social Baseline

The Lindeman Island Social Impact Assessment is one that differs from most, in that the location of the proposed development, the resort, in this case, is an island with no other residents or businesses. Therefore, the SIA's baseline assessment (and much of its subsequent impact assessment) must focus on the areas which may be affected by the resort development's construction and operation. This has been determined to be the Mackay and Whitsunday Regional Council areas (or the local government areas) as these are the immediately adjacent mainland areas which will likely be the source of the development's workforce, as well as the provider of much of its social infrastructure and services.

14.6.1 Community History

Lindeman Island is a part of the greater Whitsunday group of islands off the stretch of mainland coast between Airlie Beach and Mackay. The Ngaro, a maritime Aboriginal people, inhabited the Whitsunday Islands (it is speculated that this included Lindeman, due to its reliable water supply, but this is unconfirmed to date, and many accounts claim that Lindeman was only visited rather than settled) for thousands of years prior to the arrival of Europeans, with rock art and other Aboriginal artefacts from the group of islands carbon dated to between 2,000 and 9,000 years old. Lindeman Island, known to its original inhabitants as *Yara-kimba*, was first named in the late 1860s by the Captain of the Royal Navy vessel HMS Virago after his sub-lieutenant, George Sidney Lindeman, while undertaking surveys of the Great Barrier Reef. Throughout the late 1800s and through the early 1900s the island was used for extensive grazing activity which may have had significant impacts on local flora and fauna. By the 1920s, the beginnings of tourism had emerged on the island, with eight small cabins built. By the late twentieth century, Lindeman Island had blossomed into a tourism hub on the Whitsundays, hosting the only Club Med in Australia from 1992.

Club Med traditionally offers package resort holidays that include meals, drinks and activities. Each resort under the Club Med brand offers different experiences for different target markets; Club Med Lindeman Island was primarily targeted at families. Following a number of cyclones in the area, including Cyclones Ului in 2010, and Yasi in 2011, the resort was significantly damaged and Club Med closed its doors in January 2012 and was purchased by White Horse Australia Lindeman Pty Ltd later that year. Since its closure, Lindeman Island has had no permanent residents but remains an occasional tourist destination for day trip visitors and campers through its National Park and camping facilities. Lindeman Island forms a part of the Mackay Regional Council, and so has some linkages with the town of Mackay, almost 80km to its south, however Airlie Beach (a part of the Whitsunday Regional Council) is significantly closer, and an easier access point, only 40km from the island.

On the mainland, Mackay and Airlie Beach regions are two very different towns, 150km apart. Mackay has a history going back to the mid Nineteenth century, with the sugar industry at the core of its growth. Mackay developed into a strong regional centre, also servicing the agricultural sector and coal mining activity in the nearby Bowen basin. At its peak, the coal industry had a significant socio-economic impact on Mackay (particularly between 2008 and 2012). Workers and businesses with high incomes increased demand on property (and other resources) leading to inflated property prices and related living expenses, which in turn had a range of impacts on the community at large. Since 2013, however, property prices have returned to normal levels, and Mackay's businesses and residents are adapting to conditions post-mining-boom.

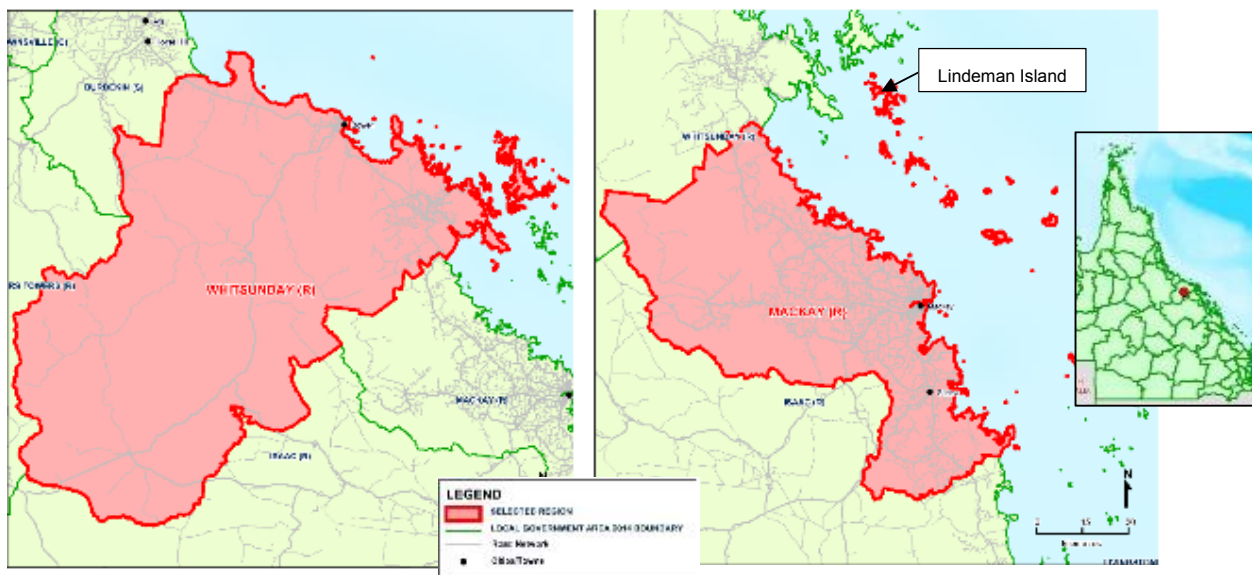
Airlie Beach, in contrast, is a 'resort' town, known by locals and international visitors as a holiday destination, and the gateway to the Whitsunday Islands. Popular with backpackers and other travellers, the main industry in Airlie Beach is hospitality, however nearby Proserpine and Cannonvale also serve as administrative centres for the permanent population, and as service centres for the agriculturalists and pastoralists in the greater area. Long term residents of Airlie Beach are understood to be accepting of the tourism-oriented development and the constant stream of visitors, backpackers, and new residents, whereas nearby Proserpine residents distinguish themselves from coastal residents.

JCU's study into community and social impacts of tourism in Airlie Beach-Whitsundays and in nearby Bowen provides some additional secondary data on community cohesion and participation at the time of their 2014 survey. For example, 80% of survey participants in Airlie Beach-Whitsundays desired an increase in overall visitors, with 48% expressing a desire for increases in over 50%, and 32% desiring a 25-49% increase (Konovalov, Murphy & Moscardo 2014:43). Additionally, respondents expressed an interest in seeing tourism develop in new and different directions (25% among Airlie Beach-Whitsundays respondents), such as inviting a greater variety of visitors and the development of eco-tourism, although there was some disagreement on the preferred direction (Konovalov, Murphy & Moscardo 2014:46).

14.6.2 Population Profile

As there is no permanent population on the island itself, any impacts will be primarily experienced by the areas in the immediate vicinity of the Whitsundays on the mainland including Airlie Beach, Cannonvale, Proserpine, and Mackay (noting that Lindeman Island is within Mackay Regional Council). It is also anticipated that staff and suppliers will be drawn where possible from this greater area to minimise cost and risk, and maximise local benefits. As such, much of the following population profile has been built using the data available for the local government areas of the Whitsundays and Mackay which cover a larger catchment area around Lindeman Island (referred to in this report as 'the greater project area').

Figure 14-1. Map showing Mackay and Whitsunday Regional Councils in relation to Lindeman Island.



Notes:

- © Queensland Government. Map Produced by Queensland Government Statistician's Office, Queensland Treasury and Trade. Data sourced from Queensland Government, Department of Natural Resources and Mines; Queensland Government State Digital Road Network (SDRN).

14.6.2.1 Age and Gender

The population as estimated at 30 June 2014 for the combined local government areas of Mackay and Whitsunday is 157,594 people (148,376 at time of Census). The combined Mackay and Whitsunday local government area population age profile is compared to the Queensland profile below.

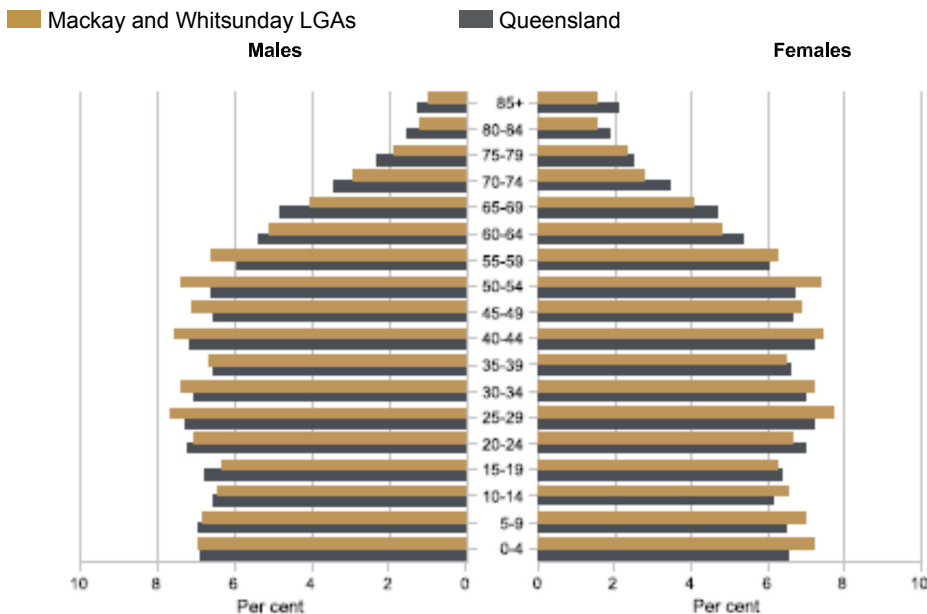
Table 14-3. Estimated resident population by LGA, Mackay-Whitsunday LGAs region and Queensland

| Custom region / LGA / State | As at 30 June | | | | Average annual growth rate | |
|-------------------------------|---------------|-----------|-----------|-----------|----------------------------|------------|
| | 2001 | 2006 | 2011 | 2014p | 2001–2014p | 2011–2014p |
| | — number — | | | | — % — | |
| Mackay-Whitsunday LGAs region | 116,733 | 133,822 | 148,376 | 157,594 | 2.3 | 2.0 |
| Mackay (R) | 89,337 | 103,567 | 115,960 | 123,383 | 2.5 | 2.1 |
| Whitsunday (R) | 27,396 | 30,255 | 32,416 | 34,211 | 1.7 | 1.8 |
| Queensland | 3,571,469 | 4,007,992 | 4,476,778 | 4,722,447 | 2.2 | 1.8 |

Notes:

Source: ABS 3218.0, *Regional Population Growth, Australia, 2013-14*
 p - Projected

Figure 14-2. Estimated resident population by age and sex, Mackay-Whitsunday LGAs region and Queensland, 30 June 2014 (projected)

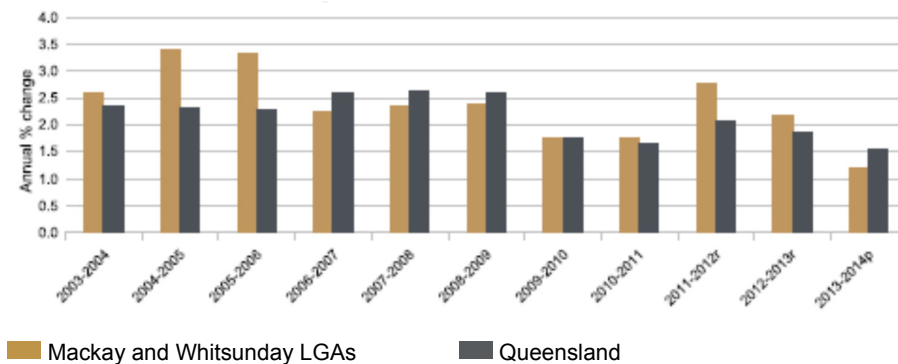


Notes:

Source: ABS 3235.0, *Population by Age and Sex, Regions of Australia, 2014* cited in QGSO Queensland Regional Profile for Mackay and Whitsunday LGAs (Resident Profile) projected

The greater project area has a predictably similar profile to the general Queensland population, however at a detailed level, it has a higher proportion of working age males and females (ages 25-59) and a lower proportion of people over the age of 60 than Queensland in general. The combined Mackay-Whitsunday LGA population growth rate appears to have been higher than the Queensland state average most recently in the years 2009 through to 2013, however the period 2013-2014, the most recent year for which estimates are available, shows a significant slowing of (projected) population growth compared to the Queensland rate (which has also slowed in recent years).

Figure 14-3. Estimated resident population growth, Mackay-Whitsunday LGAs region compared to Queensland.



14.6.2.2 Diversity

As at the time of the 2011 census, the Mackay and Whitsunday areas have a smaller proportion of people born overseas (17,681 people, or 12.3% of the total population) than the Queensland population (20.5%). Of Mackay's population of 13,243 (11.7%) people were born overseas, whereas 14.1% of the Whitsundays population, or 4,438 people, were born overseas. The highest proportion of non-Australian countries of birth are English speaking countries including the UK (3%), New Zealand (2.9%), and South Africa (1%). The next highest sources of people in the broader project area born outside of Australia include 0.9% from the Philippines, 0.4% in Germany, and 0.3% each from India and the Netherlands. This profile is likely to have changed to some degree since the 2011 census from which this data has been ascertained.

14.6.2.3 Languages other than English

The greater project area appears to have a lower proportion of people who speak a language other than English at home, a lower proportion of those who speak English not well or not at all, and a higher level of people who speak only English.

Table 14-4. Proficiency in spoken English of overseas-born persons by LGA, Mackay-Whitsunday LGAs region and Queensland, Census 2011

| Region | Speaks English only | | Speaks other language at home and speaks English | | | | | | Persons born overseas(b) |
|------------------------|---------------------|------|--|------|------------------------|-----|----------|------|--------------------------|
| | | | Very well or well | | Not well or not at all | | Total(a) | | |
| | number | % | number | % | number | % | number | % | number |
| Mackay-Whitsunday LGAs | 12,361 | 69.9 | 4,655 | 26.3 | 553 | 3.1 | 5,267 | 29.8 | 17,686 |
| Mackay (R) | 9,096 | 68.7 | 3,753 | 28.3 | 324 | 2.4 | 4,109 | 31.0 | 13,247 |
| Whitsunday (R) | 3,265 | 73.6 | 902 | 20.3 | 229 | 5.2 | 1,158 | 26.1 | 4,439 |
| Queensland | 565,544 | 63.6 | 269,847 | 30.4 | 45,927 | 5.2 | 319,949 | 36.0 | 888,635 |

Notes:

(a) Includes proficiency in English not stated.

(b) Excludes persons who did not state their country of birth.

Source: ABS, *Census of Population and Housing, 2011, Basic Community Profile - B11 and B13 (usual residence)* cited QGSA 2015a

14.6.2.4 Disability

The proportion of people in the Mackay & Whitsunday LGAs with a profound or severe disability ("defined as needing help or assistance in one or more of the three core activity areas of self-care, mobility and communication because of a long term health condition (six months or more), a disability (lasting six months or more), or old age" (QGSO 2015a)) is 3.7%, slightly lower than the Queensland proportion 4.4%.

14.6.3 Housing and accommodation

The greater project area, Mackay area in particular, has undergone major shifts in the housing market over the last five to ten years. As housing and accommodation are an important element of society, providing the general context for any large project, they are explored here. However it should be noted that most workers will be accommodated on the island (during both construction and operation), and therefore this topic has less significance than it would for a project where workers might need to relocate. For more detailed analysis, refer to the housing section in the economic assessment, where it has been explored more comprehensively.

14.6.3.1 Housing

83% of the dwellings in the greater project area are separate houses. The Whitsunday local government area has a lower proportion of separate houses than Mackay and Queensland, and a higher proportion of apartments. The transient nature of a proportion of the population around Airlie Beach and the Whitsundays would be more appropriately accommodated in apartments than in standalone houses which require some level of maintenance; however it is important to note that the Airlie Beach-Whitsunday SA2 (the suburb, with the population comprising a third of the LGA's population but a very small geographic area) has a significantly different profile to the rest of the Whitsunday Local Government Area. For instance, while 14.3% of the Whitsunday LGA's housing stock are apartments, that proportion doubles to 27.9% in the Airlie Beach-Whitsunday SA2 (which includes Long, Hamilton, Whitsunday, Hook, and Hayman Islands).

Table 14-5. Occupied private dwellings^(a) by dwelling structure and LGA, Mackay-Whitsunday LGAs region and Queensland, 2011

| Region | Separate house | | Semi-detached ^(b) | | Apartment ^(c) | | Caravan | ^(d) | Other ^(e) | | Total ^(f) |
|-------------------------------|------------------|-------------|------------------------------|------------|--------------------------|-------------|---------------|----------------|----------------------|------------|----------------------|
| | number | % | number | % | number | % | number | % | number | % | number |
| Mackay-Whitsunday LGAs | 41,013 | 83.0 | 2,514 | 5.1 | 4,524 | 9.2 | 1,065 | 2.2 | 224 | 0.5 | 49,411 |
| Mackay (R) | 32,841 | 85.2 | 1,913 | 5.0 | 2,968 | 7.7 | 637 | 1.7 | 156 | 0.4 | 38,561 |
| Whitsunday (R) | 8,172 | 75.3 | 601 | 5.5 | 1,556 | 14.3 | 428 | 3.9 | 68 | 0.6 | 10,850 |
| Queensland | 1,215,303 | 78.5 | 129,430 | 8.4 | 181,716 | 11.7 | 16,191 | 1.0 | 3,384 | 0.2 | 1,547,303 |

14.6.3.2 Housing Tenure

At the time of the census, 29.7% of the combined Mackay-Whitsunday population owned their home outright, 35.7% were in the process of purchasing (mortgaged) and 31% were renting. The proportions are similar to the Queensland population.

Table 14-6. Occupied private dwellings^(a) by tenure type and LGA, Mackay-Whitsunday LGAs region and Queensland, 2011

| Region | Fully owned | | Being purchased ^(b) | | Rented ^(c) | | Other ^(d) | | Total ^(e) |
|-------------------------------|----------------|-------------|--------------------------------|-------------|-----------------------|-------------|----------------------|------------|----------------------|
| | number | % | number | % | number | % | number | % | number |
| Mackay-Whitsunday LGAs | 14,673 | 29.7 | 17,655 | 35.7 | 15,319 | 31.0 | 437 | 0.9 | 49,408 |
| Mackay LGA | 11,471 | 29.7 | 14,374 | 37.3 | 11,362 | 29.5 | 371 | 1.0 | 38,560 |
| Whitsunday LGA | 3,202 | 29.5 | 3,281 | 30.2 | 3,957 | 36.5 | 66 | 0.6 | 10,848 |
| Queensland | 448,617 | 29.0 | 533,868 | 34.5 | 513,415 | 33.2 | 14,304 | 0.9 | 1,547,303 |

It is useful again to note the significant difference proportions of the Airlie Beach-Whitsunday SA2, where only 18.5% of people own their home outright, 31.5% hold a mortgage, and 46.8% rent, which is a significant difference to the greater Whitsunday LGA profile.

14.6.3.3 Housing cost

Table 14-7. Median sale and Rent Prices in Mackay and Whitsunday LGAs

| Region | Median Sale Price ^(a) | | Median Rent ^(b) | |
|--|----------------------------------|-----------|----------------------------|--------|
| | House | Unit | House* | Unit** |
| Mackay region Mackay (4740) | \$394,000 | \$305,000 | \$300 | \$230 |
| Whitsundays Whitsundays / Airlie Beach (4802) | \$400,000 | \$265,000 | \$370 | \$275 |

Notes:

(a) Source: RP Data Copyright 2015 based on RP Data 'regions' for the last 12 months.

(b) Source: Residential Tenancies Authority (RTA) based on postcodes 4802 (Whitsundays) and 4740 (Mackay) for the period April to June 2015 for *3 bedroom houses and **2 bedroom units.

The median rent in postcode 4740 has decreased significantly over the same period in the last two years. In 2014 April to June quarter, the median rent was \$352, and a year earlier the median rent was \$440. Similarly the median rent for units in Mackay proper has decreased significantly in the last few years; in April to June 2014 the median rent paid for a 2 bedroom unit was \$280, and in 2013 it was \$350 (RTA 2015).

The median rent has also decreased in Airlie Beach (4802 postcode), however at a less significant rate. The 3 bedroom house median rent in April to June 2014 was \$400, and in the same period 2013 was \$420. 2 bedroom units showed a similar reduction in median rent, dropping from \$290 during the same period a year ago and \$330 two years ago (RTA 2015).

14.6.3.4 Migration

At the time of the census, 18.1% of people in the combined Mackay (17.6%) and Whitsunday (19.9%) LGAs lived in a different address a year ago, compared to 17.9% in Queensland². The proportions are similar to each other for those who lived at a different address five years ago, with 43.8% of people of the combined Mackay (43.9%) and Whitsunday (43.7%) LGAs compared to 45% of the Queensland population.

However the area of Airlie Beach is an important anomaly in the greater local government area, and important to note. In contrast to the above figures, 27.8% (2,894 people) of the Airlie Beach-Whitsunday SA2 lived at a different address a year prior to the census, and 55.2% (5,434 people) lived in a different address five years prior. This illustrates the transience of this particular locality within the greater project area.

14.6.4 Family and Household Composition

Household composition in the Mackay and Whitsunday LGAs is relatively similar to the Queensland profile, with a slightly higher proportion of one family households. 73.3% of the combined LGAs population was a one family household.

² Source: ABS, Census of Population and Housing, 2011, Basic Community Profile - B39 (usual residence

Table 14-8. Household composition, LGA, Mackay-Whitsunday LGAs region and Queensland ABS 2011

| Region | One family household | Multiple family household | Group household | Lone person household | Total households |
|-----------------------|----------------------|---------------------------|-----------------|-----------------------|------------------|
| Mackay-Whitsunday LGA | 36,198 (73.3%) | 830 (1.7%) | 1,925 (3.9%) | 10,457 (21.2%) | 49,410 |
| Mackay LGA | 28,714 (74.5%) | 715 (1.9%) | 1,377 (3.6%) | 7,755 (20.1%) | 38,561 |
| Whitsunday LGA | 7,484 (69.0%) | 115 (1.1%) | 548 (5.1%) | 2,702 (24.9%) | 10,849 |
| Queensland | 1,094,467 (70.4%) | 26,361 (1.7%) | 72,966 (4.7%) | 353,510 (22.8%) | 1,547,304 |

In the 2011 census, the **family household** profile (those comprising the 'one family household' section of the above table) of the Mackay-Whitsunday area was relatively similar to that of greater Queensland, although the Whitsunday LGA did demonstrate a higher proportion of couples with no children than either Mackay or Queensland (likely attributable to the 49.5% of families, or 1,131 persons, in the Airlie-Whitsundays SA2 that were couples with no children).

Table 14-9. Family Household Composition Mackay-Whitsunday LGAs region and Queensland, ABS Census 2011

| Region | Couple with no children | Couple with children | One parent family | Total Families |
|-----------------------|-------------------------|----------------------|-------------------|----------------|
| Mackay-Whitsunday LGA | 15,365 (40.6%) | 16,978 (44.8%) | 5,049 (13.3%) | 37,889 |
| Mackay LGA | 11,783 (39.1%) | 13,986 (46.4%) | 3,990 (13.2%) | 30,169 |
| Whitsunday LGA | 3,582 (46.4%) | 2,992 (38.8%) | 1,059 (13.7%) | 7,720 |
| Queensland | 453,102 (39.5%) | 491,200 (42.8%) | 184,547 (16.1%) | 1,148,179 |

14.6.5 Crime, Law and Order

Table 14-10 below illustrates shows the recorded crime rates for the Mackay and Whitsunday LGAs, and Queensland. In order to compare the crime rates, it is most useful to compare the rate per 100,000 people. While the numbers of crimes initially appear low, the rates (as a proportion of the population) provide a comparator. Mackay's rate of crimes against the person are slightly lower than the Queensland rate, while the Whitsunday rate is slightly higher than both. It would be reasonable to draw a correlation to the more significant populations of transient workers and tourists in the Whitsundays, compared to Mackay and Brisbane. Mackay has the lowest rate of crimes against property compared to the Whitsundays and Queensland generally, and all regions have been experiencing a significant decrease in the rate of these offences, having peaked in 2012/13 in Mackay and Whitsunday. One could infer that this could be related to the peak of the mining boom in the region, and an influx of new wealth into the region, but there could be other significant factors to consider. The Whitsunday LGA has a significantly higher rate of 'other' offences (which include drug, prostitution, liquor (excluding drunkenness), gaming, racing and betting, domestic violence, traffic, and good order offences) than Mackay or Queensland generally. This would also be strongly correlated to the generally larger proportion of single and childless 25-44 year olds, particularly in the Airlie Beach-Whitsundays SA2, comprising 37.4% of the population (compared to 29% in the combined LGAs) and the tourist visitors and transient/backpacker populations in the tourism-focused area. These 'other' offences have all been increasing since 2012/13 across all three regions, which could potentially reflect the downturn in the economy (especially mining), as well as overarching improvements in policing and detection methods. The relationship to the island resorts is that occasionally people staying on the islands will spend a night or two in Airlie Beach on either side of their trip, however with the potential airstrip on Lindeman, and Hamilton Island airport which is much more accessible to other areas in Australia, it is likely that this will be a less frequent phenomenon with visitors to Lindeman.

Table 14-10. 2010 – 2015 Crime Rates Mackay-Whitsunday LGAs region and Queensland, Queensland Government Statistician's Office/ASGS 2011

| Region | Mackay LGA | | | | |
|--|----------------|---------|---------|---------|---------|
| Year | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
| Offences Against the Person - Total (Number) | 633 | 665 | 595 | 634 | 639 |
| Offences Against Property - Total (Number) | 4,152 | 4,738 | 5,475 | 4,801 | 4,583 |
| Other Offences (Number) | 3,831 | 4,184 | 3,982 | 4,812 | 5,448 |
| Total Offences (Number) | 8,616 | 9,587 | 10,052 | 10,247 | 10,670 |
| Offences Against the Person - Total (Rate/100,000) | 546 | 558 | 489 | 514 | 511 |
| Offences Against Property - Total (Rate/100,000) | 3,581 | 3,976 | 4,496 | 3,891 | 3,667 |
| Other Offences (Rate/100,000) | 3,304 | 3,511 | 3,270 | 3,900 | 4,359 |
| Total Offences (Rate/100,000) | 7,430 | 8,045 | 8,254 | 8,305 | 8,537 |
| Region | Whitsunday LGA | | | | |
| Year | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
| Offences Against the Person - Total (Number) | 257 | 274 | 293 | 266 | 237 |
| Offences Against Property - Total (Number) | 1,178 | 1,385 | 1,662 | 1,442 | 1,410 |
| Other Offences (Number) | 1,793 | 2,023 | 1,712 | 2,175 | 2,551 |
| Total Offences (Number) | 3,228 | 3,682 | 3,667 | 3,883 | 4,198 |
| Offences Against the Person - Total (Rate/100,000) | 793 | 822 | 862 | 778 | 688 |
| Offences Against Property - Total (Rate/100,000) | 3,634 | 4,155 | 4,891 | 4,215 | 4,094 |
| Other Offences (Rate/100,000) | 5,531 | 6,069 | 5,038 | 6,358 | 7,407 |
| Total Offences (Rate/100,000) | 9,958 | 11,046 | 10,791 | 11,350 | 12,189 |
| Region | Queensland | | | | |
| Series | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
| Offences Against the Person - Total (Number) | 29,860 | 30,416 | 30,210 | 28,531 | 28,143 |
| Offences Against Property - Total (Number) | 215,531 | 226,543 | 229,007 | 206,586 | 198,418 |
| Other Offences (Number) | 156,922 | 167,963 | 178,884 | 202,079 | 218,871 |
| Total Offences (Number) | 402,313 | 424,922 | 438,101 | 437,196 | 445,432 |
| Offences Against the Person - Total (Rate/100,000) | 667 | 666 | 649 | 604 | 587 |
| Offences Against Property - Total (Rate/100,000) | 4,814 | 4,959 | 4,923 | 4,375 | 4,140 |
| Other Offences (Rate/100,000) | 3,505 | 3,677 | 3,845 | 4,279 | 4,567 |
| Total Offences (Rate/100,000) | 8,987 | 9,302 | 9,418 | 9,258 | 9,293 |

Notes:

The reference date for reported offences is the date an offence is reported to or detected by police. Data are based on the location in which the offence occurred. Rates are calculated using the Estimated Resident Population (ERP) as at 30 June of the reported financial year. The ERP for 30 June 2015 have been linearly extrapolated using the change between 30 June 2013 and 30 June 2014.

Offences against the person includes the following offence sub-divisions: homicide (murder) other homicide assault sexual offences robbery and other offences against the person.

Offences against property includes the following offence sub-divisions: unlawful entry with intent arson other property damage unlawful use of motor vehicle other theft (excluding unlawful entry) fraud and handling stolen goods.

Other offences includes the following offence sub-divisions: drug offences prostitution offences liquor (excluding drunkenness) gaming, racing and betting offences breach of domestic violence protection orders trespassing and vagrancy weapons act offences good order offences stock related offences traffic and related offences and miscellaneous offences

Konovalov, Murphy & Moscardo (2014) found that 83% of the respondents to their survey in Airlie Beach believed that their community was either “safe” or “very safe”, with 13% stating “neither safe nor unsafe”, and only 4% believed it was at all unsafe. Bowen respondents had a slightly different view of their town, with 69% believing the town was “safe” or “very safe”, 18% uncertain and stating it was “neither safe nor unsafe”, 12% stating it was “unsafe”, and only 1% rating it “very unsafe”. (Konovalov, Murphy & Moscardo 2014:25).

14.6.6 Education and Training

State School enrolments in the Mackay and Whitsunday LGAs are listed in Table 14-11, having been relatively stable for the last five years.

Table 14-11. Full time Enrolments February 2015, Qld Department of Education and Training

| Primary and High Schools Fulltime Enrolments | Year | | | | |
|---|--------|--------|--------|--------|--------|
| | 2011 | 2012 | 2013 | 2014 | 2015 |
| Mackay and Whitsundays Local Government Areas | | | | | |
| Grand Total | 17,304 | 17,649 | 17,978 | 17,922 | 18,040 |

At the time of the census, Mackay and Whitsundays levels of education were similar to each other, but both lower than the Queensland average. As shown in **Table 14-12**, approximately 7.5% of people in the combined Mackay and Whitsundays area either did not go to school or only completed year 8 or below, compared to 6.6% of the Queensland population. Approximately 35% of those in Mackay and Whitsundays LGAs ceased education at a year 9 or 10 equivalent (slightly higher than the Queensland percentage of 29.4%). Only 46.2% completed a year 11 or 12 equivalent, at a rate almost ten percentage points lower than the Queensland population.

Table 14-12. Highest level of schooling completed by LGA, Mackay-Whitsunday LGAs region and Queensland, 2011 (ABS 2011)

| Region | Did not go to school, or Year 8 or below | | Year 9 or 10 or equivalent | | Year 11 or 12 or equivalent | | Total(a) |
|-------------------------------|--|------------|----------------------------|-------------|-----------------------------|-------------|------------------|
| | number | % | number | % | number | % | number |
| Mackay-Whitsunday LGAs | 8,230 | 7.5 | 39,230 | 35.6 | 50,868 | 46.2 | 110,220 |
| Mackay (R) | 6,468 | 7.6 | 30,674 | 35.9 | 39,777 | 46.6 | 85,354 |
| Whitsunday (R) | 1,762 | 7.1 | 8,556 | 34.4 | 11,091 | 44.6 | 24,866 |
| Queensland | 219,102 | 6.6 | 977,116 | 29.4 | 1,836,995 | 55.3 | 3,320,761 |

Source: ABS, Census of Population and Housing, 2011, Basic Community Profile - B16 (usual residence)

Notes: (a) Includes highest year of schooling not stated, accounting for approximately 10% of the respondents.

Table 14-13 shows that at the time of the census, Mackay and Whitsunday residents held non-school qualifications in a similar proportion to that of Queensland, however the qualifications held were less likely to be Bachelor degrees or higher, and more likely to be certificates, diplomas, or advanced diplomas. 68.2% males aged 25-44 years and 56.1% females aged 25-44 years within the Mackay and Whitsunday LGAs held a non-school qualification.

Table 14-13. Non-school qualifications by level of education by LGA, Mackay-Whitsunday LGAs region and Queensland, 2011

| Region | Level of education | | | | | | Persons with a qualification(c) | | Total persons |
|------------------------|------------------------------|------|-----------------------------|-----|----------------|------|---------------------------------|------|---------------|
| | Bachelor degree or higher(a) | | Advanced diploma or diploma | | Certificate(b) | | | | |
| | number | % | number | % | number | % | number | % | number |
| Mackay-Whitsunday LGAs | 10,252 | 9.0 | 6,439 | 5.6 | 28,105 | 24.6 | 59,410 | 51.9 | 114,377 |
| Mackay (R) | 8,277 | 9.3 | 4,859 | 5.5 | 22,138 | 24.9 | 45,751 | 51.5 | 88,839 |
| Whitsunday (R) | 1,975 | 7.7 | 1,580 | 6.2 | 5,967 | 23.4 | 13,659 | 53.5 | 25,538 |
| Queensland | 548,894 | 15.9 | 260,778 | 7.5 | 686,993 | 19.9 | 1,875,323 | 54.2 | 3,456,875 |

Source: ABS, Census of Population and Housing, 2011, Basic Community Profile - B37 and B40 (usual residence)

Notes:

- (a) Includes bachelor degree, graduate diploma, graduate certificate and postgraduate degree.
- (b) Includes Certificate, I, II, III and IV and Certificates not further defined responses.
- (c) Includes inadequately described and not stated level of education responses.

At the time of the census, a higher proportion of people in the Mackay and Whitsunday LGAs held non-school qualifications in the following fields than the proportion of those in Queensland:

- > Engineering and related Technologies (25.8% of all people with non-school qualifications)
- > Architecture and Building (7.2% of all people with non-school qualifications)
- > Food, Hospitality and Personal Services (6.1% of all people with non-school qualifications).

Table 14-14. Non-school qualifications by field of study, Mackay-Whitsunday LGAs region and Queensland, 2011.

| Field of study | Mackay-Whitsunday LGAs region | | Mackay LGA | | Whitsunday LGA | | Queensland | |
|--|-------------------------------|------------|---------------|------------|----------------|------------|------------------|------------|
| | number | % | number | % | number | % | number | % |
| Natural and Physical Sciences | 782 | 1.3 | 607 | 1.3 | 175 | 1.3 | 42,973 | 2.3 |
| Information Technology | 553 | 0.9 | 439 | 1 | 114 | 0.8 | 41,051 | 2.2 |
| Engineering and Related Technologies | 15,353 | 25.8 | 12,524 | 27.4 | 2,829 | 20.7 | 314,629 | 16.8 |
| Architecture and Building | 4,282 | 7.2 | 3,231 | 7.1 | 1,051 | 7.7 | 123,878 | 6.6 |
| Agriculture, Environmental and Related Studies | 1,135 | 1.9 | 813 | 1.8 | 322 | 2.4 | 38,166 | 2 |
| Health | 4,268 | 7.2 | 3,454 | 7.5 | 814 | 6 | 173,991 | 9.3 |
| Education | 3,947 | 6.6 | 3,194 | 7 | 753 | 5.5 | 139,977 | 7.5 |
| Management and Commerce | 7,233 | 12.2 | 5,653 | 12.4 | 1,580 | 11.6 | 310,801 | 16.6 |
| Society and Culture | 3,592 | 6 | 2,698 | 5.9 | 894 | 6.5 | 180,557 | 9.6 |
| Creative Arts | 876 | 1.5 | 649 | 1.4 | 227 | 1.7 | 53,377 | 2.8 |
| Food, Hospitality and Personal Services | 3,647 | 6.1 | 2,597 | 5.7 | 1,050 | 7.7 | 105,082 | 5.6 |
| Mixed Field Programmes | 66 | 0.1 | 48 | 0.1 | 18 | 0.1 | 2,830 | 0.2 |
| Total(a) | 59,412 | 100 | 45,753 | 100 | 13,659 | 100 | 1,875,323 | 100 |

Source: ABS, Census of Population and Housing, 2011, Basic Community Profile - B41 (usual residence)

Notes (a) Includes inadequately described and not stated responses.

14.6.7 Employment

Table 14-15 illustrates the labour force status of the Mackay SA4 (covering the Mackay and Whitsunday local government areas, as well as the Isaac local government area). The changing fortunes of the area, highly dependent on the resources sector, are reflected in the employment figures and the unemployment rate, which has been steadily increasing since its most recent low in 2011-12. For the project, however, this presents an opportunity, potentially presenting access to a greater pool of available local labour.

Table 14-15. Labour Force Status Mackay SA4 region.

| Labour force status | Financial Year | | | | | | |
|-------------------------------|----------------|---------|---------|---------|---------|---------|---------|
| | 2008–09 | 2009–10 | 2010–11 | 2011–12 | 2012–13 | 2013–14 | 2014–15 |
| Employed persons | 95,800 | 92,700 | 91,100 | 94,400 | 100,800 | 102,000 | 96,300 |
| Unemployed persons | 2,900 | 4,000 | 3,300 | 3,200 | 4,100 | 4,400 | 7,700 |
| Labour force | 98,700 | 96,700 | 94,400 | 97,600 | 104,800 | 106,400 | 103,900 |
| Not in the labour force | 30,600 | 35,400 | 40,000 | 39,300 | 34,700 | 35,500 | 40,200 |
| Civilian population aged 15 + | 129,300 | 132,200 | 134,400 | 136,900 | 139,500 | 141,900 | 144,100 |
| Unemployment rate (%) | 2.9 | 4.2 | 3.5 | 3.3 | 3.9 | 4.2 | 7.4 |
| Participation rate (%) | 76.3 | 73.2 | 70.2 | 71.3 | 75.1 | 75 | 72.1 |

Source: ABS 6291.0.55.001

Notes:

- (a) Based on persons aged 15 years and over.
- (b) Yearly averages of monthly data.
- (c) Data have been rounded to the nearest 100 persons. Percentages are based on pre-rounded figures.
- (d) The Australian Bureau of Statistics introduced new Labour Force Regions based on SA4s in January 2014 and backcast data to October 1998. As such a longer time series is not available.

As shown by **Table 14-16**, at the time of the 2011 Census, workers from each of the local government areas were most likely to be found in the following industries:

- > 11.1% of people employed in Mackay LGA worked in the mining industry, 10.3% in the construction industry, and 10.1% in retail.
- > 14.8% of people employed within the Whitsunday LGA worked in the accommodation and food services industry, 10.3% worked in the retail industry, and 10.2% in construction.

Across the combined LGAs there is a relatively diverse workforce across many different industries, with relatively similar proportions of the population engaged in them. Only two sectors have a significantly lower proportion of employment, which may suggest a smaller local labour pool from which to draw for the project if needed:

- > Information media and telecommunications (459 employed in industry)
- > Professional, scientific and technical services (3,185 employed in industry)
- > Arts and recreation (417 employed in industry).

In 2016, however, the economic and industry profile of the region would be significantly different to that of 2011, and these figures may not be a reliable indicator of the current situation. While this is a sufficient indicative/preliminary snapshot of the local labour force at this stage of the project, further enquiry into the local skills profile to maximise local content would benefit the project planning.

Table 14-16. Employment by industry, Mackay and Whitsundays LGAs and Queensland, 2011.

| Industry | Mackay-Whitsunday LGAs region | | Mackay LGA | | Whitsunday LGA | | Queensland | |
|---|-------------------------------|------------|---------------|------------|----------------|------------|------------------|------------|
| | number | % | number | % | number | % | number | % |
| Agriculture, forestry and fishing | 3,114 | 4.3 | 1,832 | 3.2 | 1,282 | 8.3 | 55,416 | 2.7 |
| Mining | 7,479 | 10.3 | 6,373 | 11.1 | 1,106 | 7.2 | 52,955 | 2.6 |
| Manufacturing | 6,336 | 8.7 | 5,425 | 9.5 | 911 | 5.9 | 171,669 | 8.4 |
| Electricity, gas, water and waste services | 646 | 0.9 | 501 | 0.9 | 145 | 0.9 | 24,828 | 1.2 |
| Construction | 7,480 | 10.3 | 5,909 | 10.3 | 1,571 | 10.2 | 183,780 | 9 |
| Wholesale trade | 2,919 | 4 | 2,559 | 4.5 | 360 | 2.3 | 74,288 | 3.6 |
| Retail trade | 7,406 | 10.2 | 5,810 | 10.1 | 1,596 | 10.3 | 217,610 | 10.7 |
| Accommodation and food services | 5,670 | 7.8 | 3,388 | 5.9 | 2,282 | 14.8 | 141,855 | 7 |
| Transport, postal and warehousing | 5,034 | 6.9 | 3,880 | 6.8 | 1,154 | 7.5 | 107,072 | 5.3 |
| Information media and telecommunications | 459 | 0.6 | 364 | 0.6 | 95 | 0.6 | 25,358 | 1.2 |
| Financial and insurance services | 963 | 1.3 | 790 | 1.4 | 173 | 1.1 | 54,153 | 2.7 |
| Rental, hiring and real estate services | 1,330 | 1.8 | 1,036 | 1.8 | 294 | 1.9 | 37,007 | 1.8 |
| Professional, scientific and technical services | 3,185 | 4.4 | 2,691 | 4.7 | 494 | 3.2 | 132,754 | 6.5 |
| Administrative and support services | 1,989 | 2.7 | 1,422 | 2.5 | 567 | 3.7 | 65,015 | 3.2 |
| Public administration and safety | 2,850 | 3.9 | 2,309 | 4 | 541 | 3.5 | 136,818 | 6.7 |
| Education and training | 4,043 | 5.6 | 3,315 | 5.8 | 728 | 4.7 | 160,921 | 7.9 |
| Health care and social assistance | 6,016 | 8.3 | 4,979 | 8.7 | 1,037 | 6.7 | 242,559 | 11.9 |
| Arts and recreation services | 417 | 0.6 | 283 | 0.5 | 134 | 0.9 | 28,444 | 1.4 |
| Other services | 3,603 | 4.9 | 3,059 | 5.3 | 544 | 3.5 | 78,713 | 3.9 |
| Total(a) | 72,810 | 100 | 57,342 | 100 | 15,468 | 100 | 2,039,275 | 100 |

Source: ABS, *Census of Population and Housing, 2011, Basic Community Profile - B43 (usual residence)*

Notes: (a) Includes inadequately described and not stated responses.

As a part of JCU's study on community and social impacts of tourism, 72% of respondents in Airlie Beach believed that there were "not enough" opportunities for decent work, or that opportunities were "severely lacking"; an extremely high 94% of respondents believed the same in Bowen (Konovalov, Murphy & Moscardo 2014:24).

14.6.8 Social Disadvantage

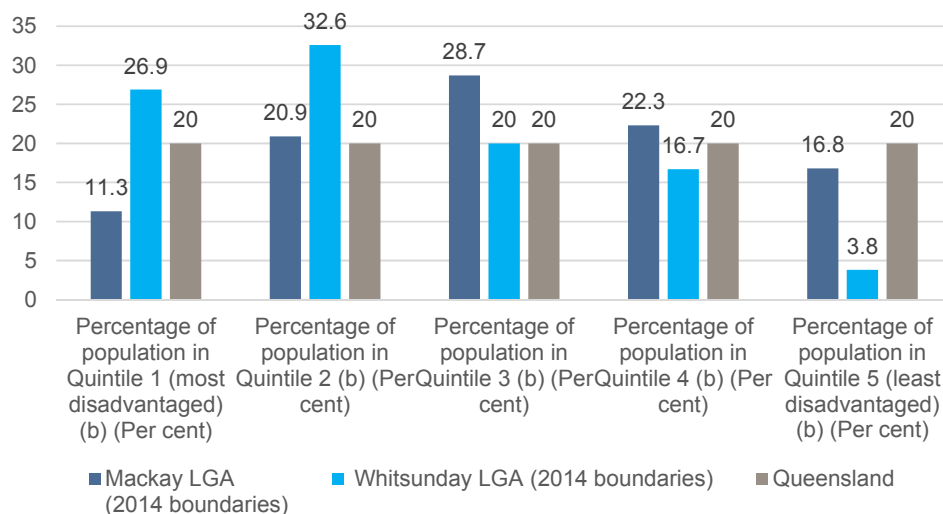
The Socio-Economic Indexes for Areas (SEIFA) is a product produced by the ABS ranking areas in Australia according to relative socio-economic advantage and disadvantage. This study uses the *index of relative socio-economic disadvantage* (IRSD), showing the percentage of the population in each quintile (20% blocks). The index score uses data from the census to summarise socio-economic indicators of advantage and disadvantage, using data from questions in the census on education, occupation, employment, income, families, and housing. Indicators of both advantage and disadvantage are included in this index.

Figure 14-4 below illustrates the significant difference in levels of disadvantage in Mackay and Whitsunday compared to the Queensland standard. In 2011, Mackay had a lower proportion (32.2%) of its population in the two lowest (most disadvantaged) quintiles compared to Queensland, while the Whitsunday population had a significantly higher proportion (59.5%) of its population in the two lowest quintiles. This means that approximately 50% more of the Whitsunday population was in the lowest two quintiles compared to the state overall.

Mackay's proportion of least disadvantaged was not dissimilar to the state average, while Whitsunday had only 20.5% of its population in the top two quintiles (the least disadvantaged). As these figures are almost five years old, and substantial economic, and resulting social, changes have occurred in the region since data collection, they may not be reliable indicators or reflective of the current situation in Mackay and Whitsunday LGAs. They do, however, illustrate a significant difference between the two regions with regards to social disadvantage, with the Whitsunday LGA experiencing much higher rates of disadvantage than the Mackay LGA. There may be a number of contributing factors, including:

- Mackay LGA has a much larger and diverse economic sector, especially with resources activity and related professional industries supporting the mining activity in the Bowen and Galilee basins. Its top industries of employment are coal mining and construction services which typically have a higher rate of remuneration, whereas Whitsunday LGA's predominant industries of employment are agriculture and hospitality/tourism (including accommodation and food services), which typically have lower rates of remuneration.
- The Whitsunday LGA covers a much greater area of land that is predominantly agricultural with a low population density and corresponding low levels of services and infrastructure.
- Mackay LGA has a much larger urban area with a larger range of housing and education and easier access to a larger range of services within Mackay city.

Figure 14-4. Socio Economic Index for Areas (SEIFA) comparing Mackay, Whitsunday, and Queensland.



Notes:

- (a) Statistical Areas Level 1 (SA1) with no SEIFA score have been excluded from the calculations. Consequently the usual residence of a region listed with the SEIFA quantile percentages for an individual region may be different to the usual residence of the entire region.
- (b) SEIFA quantiles are calculated using a population weighted quantile calculation. This method divides the data into even groups, where each group has the same population. All quantiles have been calculated based on rankings within Queensland only.

14.7 Social infrastructure

As a currently not operational private resort island, Lindeman itself does not have any key social infrastructure, and much of these needs will have to be met by the services on the mainland. The communities of Mackay city and Airlie Beach/Cannonvale (as well as some of the nearby islands) have strong social infrastructure upon which visitors and employees of the resort will ultimately rely on for a broad range of needs. Some social infrastructure may be developed on the island to meet the needs of employees in particular.

14.7.1 Community safety

A key element of social infrastructure is that which enhances community safety. The Mackay and Whitsunday local government areas have what could be essentially seen as regional service centres in Mackay, Airlie Beach, and Proserpine, with facilities located in other regional areas as determined by the State government. A snapshot of key social infrastructure (emergency services, schools, and hospitals) in the two LGAs is presented in **Table 14-17**.

Table 14-17. Emergency services, schools and hospitals by LGA, Mackay-Whitsunday LGAs region and Queensland, 30 June 2013, QGSO

| Custom region / LGA / State | Police stations ^(a) | Ambulance stations | Fire ^(b) | Hospitals ^(c) |
|-------------------------------|--------------------------------|--------------------|---------------------|--------------------------|
| | — number — | | | |
| Mackay-Whitsunday LGAs region | 14 | 11 | 8 | 8 |
| Mackay (R) | 10 | 6 | 4 | 5 |
| Whitsunday (R) | 4 | 5 | 4 | 3 |
| Queensland | 336 | 260 | 242 | 273 |

Source: Queensland Government Statistician's Office , Regional Profile 2015a

Notes:

- (a) Does not include Police Beats.
 (b) Does not include Rural Fire Brigade.
 (c) Includes both private and public hospitals. Excludes public dental and psychiatric facilities.

14.7.1.1 Emergency Services – Fire and Ambulance

There are no public emergency services on-site at Lindeman Island. Both Airlie Beach and Mackay have the range of fire and ambulance services however these are not easily transferable to the islands. Any private resorts require comprehensive self-contained emergency management planning and appropriate facilities. Hamilton Island also its own fire station, an aviation rescue firefighting (ARFF) station at the Airport with full water rescue service capabilities, and a private ambulance station staffed by contracted Qld Ambulance staff. In the case of a medical emergency, 000 would be called and the Queensland Coordination Centre would determine immediate needs and arrange support, including medical evacuation if and as required. Fire emergencies would be managed by onsite systems, plans, and resources, with QFES potentially providing remote support if and where possible.

14.7.1.2 Medical Evacuation Services

In addition to the ambulance-based service, additional medical evacuation ('medevac') services may be provided by the RACQ CQ Rescue helicopter based in Mike Jones Street, Mackay. This services patients in life-threatening situations in the region (anywhere in the region on the mainland, on the Whitsunday islands, or on vessels at sea) by providing immediate onsite assistance and airlifting to the Mackay Airport where patients are then transported by road ambulance to Mackay Hospital, if and when required. Voluntary Marine Safety also provide medical evacuations by sea if air retrieval is not available or not required.

14.7.1.3 Police and water/marine safety

The newly built Whitsunday Police Station is located on Altmann Avenue, Cannonvale, and is in close proximity to the safe harbour for access to the islands if and when required. The Whitsunday Water Police have the responsibility of conducting water policing duties throughout the area including in the Mackay District. They operate a 48 foot launch and a 16 foot inflatable centre console vessel. Among other responsibilities, Water Police Officers co-ordinate search and rescue missions for the District. The Volunteer Marine Rescue Association of Queensland (VMRAQ) provide teams located throughout Queensland providing marine search and rescue services to the boating public on a volunteer basis. Volunteer Marine Rescue (VMR) Whitsunday operates from Gloucester Island / Passage – North west to Cape Conway / Shaw Island in the south (out from Midge Point and Repulse Bay). The area south is covered by VMR Midge Point and VMR Mackay). VMR Whitsunday has a manned radio base most weekends and public holidays. Weather forecasts are broadcast

by commercial stations at 08.00 and 16.00 every day. Due to the large number of vessels VMR is unable to offer any form of vessel tracking.

14.7.2 Health

The major hospital in the Mackay Hospital and Health Service region is the Mackay Base Hospital located on Bridge Street in Mackay, which has recently undergone a major redevelopment. The hospital provides the full suite of hospital-based medical care. Proserpine Hospital, a smaller hospital operating within the same region closer to Airlie Beach, provides a smaller range of services but it also provides 24 hour emergency care. Bowen also hosts a small public hospital (less than 50 beds) that also has emergency services. There are a range of doctors, medical services and allied health professionals on the mainland, but there is also a doctor available on Hamilton Island, 15 minutes away by boat from Lindeman Island.

14.7.3 Education

There are no educational facilities on the island, however employees with children who choose to settle on the mainland and commute to the island for work (especially those that have moved for work from other regions) may require access on the mainland to child care and/or educational facilities.

14.7.3.1 Early Childhood and Child Care

The number of early childhood education and childcare facilities (including school aged care) is noted in the table below for each of the LGAs. When compared to the population of 0-14 year olds in their respective regions, Whitsunday has the highest ratio of child care service providers to its population (1 childcare centre for every 287 people aged 0-14 years of age) – noting that this is not indicative of places available and/or capacity as it does not take into account the relevant age-appropriate services to the population, but is simply a figure for comparison. Mackay's ratio at 1:359, is lower than the Queensland average ratio of 1:314.

Table 14-18. Early childhood education and care services by LGA, Mackay-Whitsunday LGAs region and Queensland, 28 February 2015, QGSO.

| Custom region / LGA / State | Family day care | Kindergartens | Long day care | School aged care | Limited hours care | Total(a) |
|--------------------------------------|-----------------|---------------|---------------|------------------|--------------------|--------------|
| | — number — | | | | | |
| Mackay-Whitsunday LGAs region | 4 | 26 | 35 | 23 | 2 | 94 |
| Mackay (R) | 2 | 21 | 27 | 18 | 1 | 72 |
| Whitsunday (R) | 2 | 5 | 8 | 5 | 1 | 22 |
| Queensland | 124 | 520 | 1,437 | 717 | 35 | 2,971 |

Source: Office for Early Childhood Education and Care, Department of Education and Training (from QGSO Regional Profile 2015a)

Note: (a) Total includes Other service types (for example Child and Family Support Hubs and Community Services).

Discussions with providers in child care centres and early childhood education facilities in Airlie Beach and surrounding areas including Cannonvale and Proserpine suggest that childcare facilities are not currently at capacity. Due to the area traditionally being home to transient workers in resources and hospitality, the facilities in the area are prepared for short term (construction) and on-off (operation) rosters. Additionally, it was noted that a slight increase in work-related outmigration had recently occurred, so additional places had become available. It is understood that the current situation in Mackay is similar.

14.7.3.2 Primary and Secondary Schools

There are no schools on the island, however the schools in the greater project area are noted in **Table 14-19**.

Table 14-19. Schools by LGA, Mackay-Whitsunday LGAs region and Queensland, Department of Education.

| Custom region / LGA / State | Non-State School | State High School | State School | Other (e.g. special schools etc.) | Schools(a) Total |
|--------------------------------------|------------------|-------------------|--------------|-----------------------------------|------------------|
| Mackay-Whitsunday LGAs region | 18 | 9 | 46 | 2 | 75 |
| Mackay (R) | 14 | 6 | 36 | 2 | 58 |
| Whitsunday (R) | 4 | 3 | 10 | 0 | 17 |

14.7.3.3 Higher Education

The Mackay and Whitsundays local government areas only host two universities:

- > Central Queensland University (CQU) Mackay Campus at Sydney Street offers a range of undergraduate and postgraduate courses across Arts, Business, Education, Engineering, Health, and Science.
- > James Cook University Mackay Education and Research Centre (MERC) at the Mackay Base Hospital offers only one degree, a Bachelor of Nursing Science.

There are two Queensland Tertiary and Further Education (TAFE) campuses within the region:

- > TAFE North, Cannonvale campus offering Certificate II and III in Community services, Business, Hospitality, Conservation, Horticulture, and other short courses such as First Aid, RSA, and RSG.
- > Mackay CQU (CQ TAFE merged with CQU) campus offering certificates II, III, and IV in a range of trades, beauty services, community services, automotive, hospitality, and leisure and health. Short courses such as First Aid, English, and RSA are also offered.

14.7.4 Transport

The region generally is highly accessible, with airports in Mackay and Proserpine, and supporting infrastructure already well developed in order to support the established tourism industry in the region. The Whitsunday Airport located just south of Proserpine is the main route for non-tourism and business domestic air travel to the Whitsunday region providing access to Proserpine, Airlie Beach, and the Whitsunday Islands. It is serviced by Jetstar and Virgin to and from Brisbane. Its small range of services – often utilised by miners, agriculturalists, and some tourists – are supported by a broader range of flights provided on Hamilton Island (the Great Barrier Reef Airport) which is serviced by Jetstar, Virgin and Qantas. Hamilton Island Airport is frequented predominantly by tourists, and has direct flights from a wider range of cities including Sydney, Melbourne and Cairns. At this point in time, it is the only commercial airport on the Whitsunday Islands, but also services private flights and scenic charters. The airport on Hamilton Island, which is approximately 15 kilometres from Lindeman Island, is easily accessible by boat. Lindeman, Hamilton, and Airlie Beach were regularly connected via a scheduled water-based route until Club Med Lindeman Island's closure in 2012. Mackay Transit Coaches provide bus services throughout Mackay, covering the city, northern beaches, the university and hospital, Mirani, Walkerston and Sarina. Whitsunday Transit run buses from Proserpine (including the Airport), through

to Cannonvale, Airlie Beach and Shute Harbour. Additionally the region is serviced by Mackay Whitsunday Taxis, touted as one of the largest taxi service areas in Queensland, covering the region from Sarina (south of Mackay), north to Airlie Beach.

14.7.5 Recreation and Leisure

The communities have a number of recreational facilities, besides the bars, restaurants and clubs of the area. The facilities listed below in **Table 14-20** are a small selection of facilities in the main centres of the Whitsunday and Mackay Regional Council areas, which would be supplemented by a range of other state, suburban, and local facilities, as well as a substantial number of both commercial and natural attractions and State and National Parks throughout the region.

Table 14-20. Leisure and Recreation Facilities in the Region.

| Type of Facility | Mackay RC | Whitsunday RC |
|-----------------------------------|--|--|
| Libraries | Five built libraries in Mackay City, Mt Pleasant, Walkerston, Sarina and Mirani, and a mobile library. | Four built libraries in Bowen, Cannonvale, Collinsville, and Proserpine |
| Pools and Water Parks | Bluewater Lagoon Memorial Swim Centre Mirani Swim Centre Pioneer Swim Centre Sarina Swim Centre Aqua Fun Park | Airlie Beach Lagoon Bowen Waterpark Bowen Swimming Pool Proserpine Swimming Pool Collinsville Swimming Pool |
| Sports Facilities | BB Print Stadium Mackay Regional Sports Precinct, CQU Multi Sports Stadium | PCYC Whitsunday Sports Park Bowen PCYC Whitsunday Moto Sports Club |
| Parks, Parklands, and Playgrounds | Queens Park Kemmis Skate Park Harrup Park Bucasia Skatepark McCready Creek Reserve Melaleuca Forest Seaside Parklands | Galbraith Park, Airlie Beach Mullers Lagoon Park Denison Park Edgecumbe Heights Recreation Reserve Cannonvale Beach Foreshore Reserve Bicentennial Park |
| Community and Youth Centres | Sarina Youth Centre Sarina Neighbourhood Centre | Whitsunday Neighbourhood Centre Proserpine Community Centre Bowen Neighbourhood Centre |
| Arts and Culture | Artspace Mackay Sartina Art Gallery Sarina Tourist Art & Craft Centre Yakapari Country Crafts | Whitsunday Arts and Cultural Centre Art Whitsunday Inc. |
| Clubs | Mackay Surf Lifesaving Mackay Athletics Club Mackay Bowling Club Apex Club of Mackay Mackay and District Buffalo Memorial Club | Whitsunday Marine Club Volunteer Marine Rescue Whitsunday Airlie Beach Whitsunday RSL Club Airlie Beach Aquatic Reef Club PCYC Bowen |

| Type of Facility | Mackay RC | Whitsunday RC |
|--------------------------------|---|---|
| Gardens | Orchid House Botanic Gardens | |
| Performing Arts | Mackay Entertainment and Convention Centre | Proserpine Entertainment Centre |
| Museums | Mackay Museum Pioneer Valley Museum, Mirani Sarina Historical Centre | |
| Adventure and other activities | GoWake Cable Park Forest Flying (Zip line at Finch Hatton Gorge) Iluka Park Sarina Sugar Shed Bluewater Trail | Recreational Activities on the Islands (Daydream, Hamilton etc.) Diving Parasailing |
| Boating | Teemburra Dam (plus 31 others) Mackay Yacht Club Mackay Rowing Club Great Northern Sports Club | Whitsunday Sailing Club |

The region also has a range of festivals and events such as the Whitsunday Reef Festival, the Airlie Beach Festival of Music, the Mackay Festival of Arts, the Mackay Airport Beach Horse Racing Festival, and the Wintermoon Festival throughout the year which all attract a range of visitors from through Australia and the world. The yachting Airlie Beach Race Week and Hamilton Island Race Week are premier events in the yachting world, and would be of particular relevance to the proposed resort and its facilities.

14.8 Indigenous communities

In the areas of Mackay, the Whitsundays, Airlie Beach, and Proserpine is a rich history of Aboriginal settlement, with a somewhat contested history. At the time of the census, both the Mackay and the Whitsunday Regional Council areas had a slightly higher proportion of Indigenous population than the Queensland average. 4.3% of the total combined region's population identified as Aboriginal or Torres Strait Islander; a total of 1,428 persons.

Table 14-21. Indigenous status in Mackay & Whitsundays LGAs and Queensland, 2011 Census.

| Region | Indigenous persons | | | | |
|--------------------------------------|--------------------|------------------------|---------------|----------------|------------|
| | Aboriginal | Torres Strait Islander | Both(a) | Total | |
| | — number — | | | number | % |
| Mackay-Whitsunday LGAs region | 3,975 | 1,428 | 842 | 6,245 | 4.3 |
| Mackay (R) | 2,907 | 1,303 | 702 | 4,912 | 4.4 |
| Whitsunday (R) | 1,068 | 125 | 140 | 1,333 | 4.2 |
| <i>Queensland</i> | <i>122,896</i> | <i>20,094</i> | <i>12,834</i> | <i>155,824</i> | <i>3.6</i> |

Source: QGSO Profile ABS, Census of Population and Housing, 2011, Indigenous Profile - I02 (usual residence)

Notes:

(a) Applicable to persons who are of 'both Aboriginal and Torres Strait Islander origin'.

There are a range of Aboriginal groups/language groups in the region, including, but not limited to:

- > on the islands, the Ngaro people, a 'maritime' people whose sea and country was in and around the Whitsundays, including an unconfirmed but relatively certain settlement on Lindeman Island itself
- > on the mainland, the Yuibera/Juipera/Yuwiburra, Wiri, Biria, Jangga, Barna, and Barada, with the Yuibera based in the area along the coast of what is now modern Mackay.

The Wiri people, through Wiri Community Ltd are recognised as the *Cultural Heritage body* for lot CHR2029 on Lindeman Island (along with other sites in the region around Mackay recognised as containing sites of cultural heritage significance). The Yibera People are recognised as the *Aboriginal party* for the CHR2029 lot on Lindeman Island, (along with other sites in the region around Mackay recognised as containing sites of cultural heritage significance).

14.9 Social Impact Assessment

As discussed throughout this section, the primary project area, Lindeman Island itself, has no permanent residents, and so the majority of impacts will be experienced in the key areas of employment, transport, and supplier activity around the two access points of Airlie Beach and Mackay. The anticipated impacts against the key areas of the baseline (the greater project area, comprising the local government areas of Mackay and Whitsunday) are discussed in the following section. The redevelopment of Lindeman Island would operationally have a negligible impact on the mainland base from where people will depart for the island, Airlie Beach. Unlike greenfield developments where a community would be facing a large change to its social fabric through the development of a resort of this scale, the Whitsundays, and their mainland base Airlie Beach, have long been involved in the tourism and associated industries. The area is well equipped and adapted to deal with community members moving in and out, for people moving through the area for their visits to the islands and workers going on and off shift, and therefore will have little difficulty in adapting to having an additional resort among the Whitsunday Islands (noting that there was already a resort on Lindeman Island until 2012).

A detailed social risk assessment, with mitigation strategies, has been undertaken and is presented in **Appendix L - Social Impact Assessment**. The impacts that have been assessed are summarily discussed in the following sections.

14.9.1 Community Safety

There are negligible impacts to community safety from the construction and operation of the Lindeman Island resort. The primary project area has no permanent residents, while resort visitors will be subject to operational constraints, responsible service of alcohol, and other policies to minimise harm on the island. Feeder areas in the greater project area such as Airlie Beach may experience a slight increase in people travelling through on their way to the Resort, however as the area is populated with a number of hospitality and tourism operations, the community is already well equipped, with regards to police and ambulance, to respond to and manage any community safety issues. It is however anticipated that through the development of the Resort's brand, transport to the resort may tend towards fly in through Hamilton Island airport and by boat, and those arriving via Proserpine or Airlie Beach may decrease over time.

14.9.2 Community Wellbeing

As has been seen throughout this report, there will be little community disruption by this project. Employees will largely be locals, with a minor proportion of FIFO staff (predominantly for specialists or unique skill sets). All staff, both locals and FIFO, during all construction and operation phases, will reside on-site on the Island for the length of their shifts. Due to the proposed use of charter bus services and parking options (to be

determined), there will be very little, if any, transient population influx or non-resident people staying in the larger project area when they are not working. This is in contrast to some FIFO and DIDO situations (such as in the resources sector and Mackay or other large towns in the region) where workers indulging in excessive alcohol and anti-social behaviours during their 'off' times, bring disruption to community wellbeing. There is certainly a possibility of workers exhibiting similar behaviours, however the magnitude is significantly smaller, supported by a diverse workforce (with 70% of the planned workforce to have home bases across the region such as Bowen, Mackay, Proserpine, and Airlie Beach) and staggered rosters. Therefore the negative impacts of the resort's small workforce to the greater project area's community wellbeing will be negligible. Similarly, due to the small magnitude of the workforce, and the intention to hire 70% existing local workers during construction (and close to 100% during operations), there is no evidence to suggest that the project will have any impact on living costs nor affect demand on housing or other resources. It is recognised that despite the small numbers, when combined with other local FIFO or island-based workers, a minor increase in cumulative impacts may be experienced. Through the mere engagement of staff on a FIFO basis, the project may contribute slightly to the cumulative impacts experienced by:

- The source communities;
- The workforce; and
- Workers' families that may experience greater stress in their absence.

In this case, no destination community to experience impacts exists (unlike some mining FIFO operations, where staff are accommodated in nearby towns), as the FIFO/DIDO workers will be accommodated on site. However the mainland centres of Mackay, Proserpine, Bowen, and Airlie Beach would already experience the impacts from other projects to some degree, where workers are based with their families, often after relocating for work. Families that have a household member work a FIFO roster, may experience greater stress, greater social isolation, and other impacts on relationships, childhood development, and mental health (which can be exacerbated if the family has relocated away from typical support and social networks). The resort will be responsible for building a new community among staff on the island itself, and the proponent should consider what values it wishes to foster on the island, and what will be unacceptable behaviour. An intentional workplace culture grows from the first team on the ground, and is reinforced by management, policies, behaviours, attitudes and actions. Similarly, for the local nearby communities such as Airlie Beach, Proserpine, Bowen, and Mackay that will be feeder areas for the workforce and supply routes for the Resort, some thought should be given to corporate social responsibility. As discussed earlier, the resort will have negligible negative impact on the local areas, but could intentionally provide some positive impacts, in addition to the lift in employment to account for the slight recent decline in labour opportunities, to foster a positive, socially and environmentally responsible view of the resort on the mainland.

14.9.3 Health and wellbeing

There is no evidence to suggest that the resort, at its projected capacity and occupancy rates, would have any impact on hospital services in the region. The project may require the emergency (and some other) services during the course of construction, but this would be at a very small scale, not exceeding the capacity of a large regional centre's main hospital.

14.9.4 Health and emergency care

The priority of the proponent should be with ensuring that management plans and processes and procedures are developed to maximise health and safety on site during construction; similarly for the report operator for staff and visitor safety during operations. The isolation of the site will be a key factor in the assurance of health and safety and emergency response. Queensland Ambulance and Queensland Fire and Emergency Services (QFES) does not have the capacity to respond to any accidents on site from the mainland, but Queensland

Ambulance can meet people at shore to continue treatment and transport them to the closest hospital. While calling 000 will ensure some level of support, the proponent should be sure to undertake a risk assessment for each construction phase and operations to determine the projected requirements for:

- First Aid qualification requirements (ratio of qualified First Aid officers to staff – will be higher during construction);
- First Aid kits, equipment and supplies (including specialist equipment such as defibrillators); and
- Transport methods to shore, with options for Airlie Beach (for Proserpine Hospital) due to its immediate proximity, and Mackay, due to its larger operation with a greater range of specialists.

Further to emergency care, due consideration should be given to health management in general, as the isolated island, with close quarters of both staff and visitors, and a reliance on climate-control and air-conditioning systems, can potentially increase risk of contagious communicable diseases swiftly spreading. The proponent (and its contractors if appropriate) should continue to liaise with Queensland Health to ensure appropriate management systems are in place to minimise risk, and to ensure correct procedures be followed to contain and treat should there be any infectious disease outbreak.

14.9.5 Workforce Health

The existing workforce plan includes a FIFO rostered construction team on a 21 day on, 7 day off roster, and an operations staff roster of 5 days on, 2 days off, both with staggered changeovers. Mental health has been identified as a major issue among fly-in-fly-out workers. Numerous studies (beyond blue 2012; Education and Health Standing Committee 2015) have identified the numerous impacts of a FIFO/DIDO roster on source and local communities, and on the workers and their families. In the use of this rostering strategy for efficiency and enhanced productivity, the physical and mental health of the workforce should be a priority. During construction, this will predominantly be the contractor's responsibility, however an awareness of the unique challenges construction FIFO workers experience should drive the proponent to set expectations on contractors' commitment to minimising harm and maximising wellbeing amongst its workforce. This will benefit health and safety on site, productivity, and may lead to a higher standard of work. Some of the approaches and mitigation strategies that could be considered by the proponent and its contractors, in consultation with workers and unions, include:

- Consideration of alternative rosters such as 14 days on, 14 days off (with different pros and cons, e.g. lower income but higher rest time and resulting productivity during work hours), and possibility of workers choosing the rosters that are most appropriate for their situations (as appropriate and workable for the work plan)
- Easy and quick to access mental and physical health care on site during construction
- Access to 24 hour online and/or phone counselling, self-help mental health education resources, and other ongoing support services (financial, alcohol and other drugs, gambling, relationship counselling)
- The provision of recreational and leisure activities and facilities in which to hold them such as sports, games, books/library, barbeques, etc. to support healthy lifestyles and building relationships among staff outside of work hours
- The inclusion of mental health as a component of induction to site, and ongoing risk monitoring
- Policies that promote healthy and active lifestyles, including mental health, behaviour, alcohol, and other drugs policies.

Some of the above can also be considered by the resort operator when commencing operations for the staff who are proposed to be on site for five days, and home (it is estimated that close to 100% of staff will be from

the local area) for two. The FIFO impacts may still be felt by these workers, although perhaps not as acutely. Due to a high proportion of operations staff likely having interaction with visitors and customers, their wellbeing and happy demeanour will contribute to visitors' positive experiences at the resort.

14.9.6 Housing and Accommodation

The resort intends to house all workers on site during construction, with regional workers working the traditional 21 days on - 7 days off roster, and locals working 5 days on - 2 days off rosters. This, managed correctly with regards to workforce planning, transport, and health, should effectively prevent any impacts on housing and accommodation in the greater project area. Similarly, the near-100% local operational staff will be expected to work 5 days on - 2 days off, so it is expected that staff will be recruited from people who already live in driving distance from Shute Harbour. This would at a minimum include Airlie Beach, Proserpine, Bowen and Mackay (and the areas in between), if shuttle transport and/or secure car parking is arranged. As it stands, young people and hospitality and tourism workers are drawn to the Whitsundays due to the range of resorts and tourism operations in the region, to expand their experience in the sector, and the mainland communities, particularly around Airlie Beach and Cannonvale, have adapted to this trend.

There is a small possibility that a small influx is experienced immediately after the initial operational recruitment phase (depending on the hotel operator's approach), where people based elsewhere may apply for positions on the proviso that they relocate; however the operator should recruit locally wherever possible, in consideration of labour costs, required qualifications, and minimisation of impacts. As the CQU and TAFE North campuses offer a range of tourism, recreation, trades, and hospitality courses, and the Whitsundays have a large number of resorts and destinations where people would gain experience, it is expected that there should be a wholly sufficient labour pool in the region from which to recruit, minimising the need for out-of-area recruitments and subsequent relocations.

In addition, the nature of settlement in the area has a greater-than-average level of turnover, with many people relocating temporarily to the region and staying a few years for work in the tourism sector before returning to their home base. This existing pattern of turnover in the Airlie Beach/Whitsunday area in particular allows for movement in and out of the area without any significant disruption to the social cohesion of the community.

14.9.7 Social Infrastructure

There will be little to no impact experienced by social infrastructure from the construction or operation of the resort. Incidents that may occur to require social infrastructure or services will not be an unmanageable burden on the existing system. As discussed above, the Mackay and Proserpine hospitals, as well as Queensland Health, should be involved with the proponent and/or resort operator to determine the best course of action should there be an accident requiring immediate treatment during construction or operations. Mackay Hospital, however, is a large hospital with significant resources that have previously played a role in treatment of the resource sector workforce from the nearby Bowen and Surat basins when required. It is therefore well equipped for construction-related injuries and accidents. Schools and childcare centres are not currently under stress, and discussions with childcare providers have conveyed that there is currently growing room (and flexible availability) for new enrolments, due to a growing trend of people moving away from the area. Any workers with needs for childcare should not have any difficulty in accessing it in the coming 18 months, unless unforeseen circumstances see a turnaround in the resource sector or other influx-causing economic circumstances. Police and justice systems will continue to face the existing trends in behaviour in the mainland areas, whether workers or eventually tourists, but the numbers should not be significantly different from previous years when there was increased resource sector activity and Club Med was still operational; however

due to newer routes to Lindeman becoming more established (for example the Hamilton Island airport, or boating access) and the proposed new airstrip, it is increasingly likely that visitors to Lindeman, particularly those from interstate and overseas, will not need to visit the mainland during their time in the Whitsundays. As such, there will be little to no impact on the demand for police or courts.

14.9.8 Traffic and Transport

14.9.8.1 Charter buses

It is anticipated that a small increase in commuter transport will be experienced through the operation of charter buses to transport workers from nearby regional centres and the airports to the worksite on Lindeman Island via Shute Harbour. This will not be a significant change to the existing transport load in the region, and this is assessed in more detail in the Traffic and Transport assessment.

14.9.8.2 Safety with loads

The transport of equipment and materials from various regional centres to Airlie Beach will have a relatively significant impact on the community for the period during which construction occurs. While the majority of this is addressed in the Traffic and Transport report, the aspect of community safety should be considered here. The timing of the transport, particularly dangerous or non-standard loads, through the township and along narrow or dangerous roads should be carefully assessed, to mitigate the risk of accidents, particularly with residents' vehicles and pedestrians.

14.9.9 Vulnerable Groups

The potential impacts on vulnerable populations are the same as many projects, in that many vulnerable populations may not have access to the work and training opportunities that less disadvantaged people may have. In order to minimise these access issues, and maximise the benefits for the local area, the proponent and/or the resort operator should aim to develop, where possible, employment programs that might encourage the engagement of:

- Local skilled workers;
- Young trainees and apprentices;
- Mature age trainees and apprentices; and
- Aboriginal and Torres Strait Islanders.

Through working to maximise local employment where possible, while still ensuring all workers can apply for work regardless of where they live, some impacts can be minimised, and utilising the skills present in the local population and can maximise the proportion of the benefits to the local impacted area. Aboriginal and Torres Strait Islanders with a connection to the Whitsunday Islands and Lindeman in particular should be engaged to some degree to support the operation's protection of cultural heritage, and build the awareness of Aboriginal history in the region for visitors and guests. It is anticipated that the National Park and Great Barrier Reef Education Centre may have roles available within its operations, but a local ranger scheme in the National Park on the island could also be explored.

14.9.10 Local Business and Industry Content

With the growing tourism market due to the change in the Australian dollar, it is not anticipated that the competing businesses in the region should experience any significant challenges, as a new player in the growing sector will accommodate for growing demand; in addition, Lindeman Island Resort is differentiated from the a majority of existing resorts, and it is predicted that the resort will attract new consumers and those

that may have otherwise travelled overseas. Supply chains should be assessed for their capacity to meet demand for the resort. While local content should be a priority, capacity would be a requisite selection factor, in order to mitigate against any impacts experienced by other customers and the region.

14.9.11 Impacts on the Population Profile

With the proponent's intention to have a 70% local construction workforce, and an 80-100% local operations workforce, it is anticipated that any impacts to the population from workers will be limited. The smaller proportion of non-local workers that will come to work from outside of the region will be accommodated on site, and therefore will have little to no interaction with the local community. It is anticipated that the resort's construction and operation phases will have no distinguishable impact on the population profile except for potentially minor impacts during construction if a larger than anticipated non-local workforce is engaged.

14.10 Great Barrier Reef Region Strategic Assessment Report

The following table provides an overview of the impacts on Community Benefits of Lindeman Island by Great Barrier Reef Region Strategic Assessment Values.

Table 14-22. Impacts on Community Benefits of Lindeman Island by GBR Region Strategic Assessment Values.

| Benefit Type Values | Income and employment | Access to GBR resources | Understanding, appreciation and enjoyment | Aesthetics | Health Benefits | Personal connection |
|--------------------------------------|---|---|---|--|--|---|
| Islands, beaches and coastlines | ↑ Non-operation of the resort results in no income and employment generation. The island location of Lindeman Island attracts tourists, generating significant income and employment. | ↑ Non-operation of the resort location of Lindeman Island limits National Park visitors' safe and easy access to the Great Barrier Reef. Through operations on the island, the location of Lindeman Island and the presence of qualified staff allows visitors easy access to parts of the Great Barrier Reef that are otherwise difficult to access. | ↑ A lack of any tourism operations on the island limits any depth of understanding, with a range of risks exacerbated through behavior of non-regulated visitors (e.g. littering, non-sustainable fishing etc.) Through the operation of the resort, and the employment of qualified and knowledgeable staff (especially if the GBR Educational Centre is pursued), people's understanding, appreciation and enjoyment of the GBR can only be enhanced. | ↑ The development of the resort may minimise the accessibility of solitude and tranquility immediately around the resort, however this will still be significantly achievable in the National Park and surrounds, away from the resort. The resort will also provide new opportunities for socialising and personal comfort, while addressing the aesthetic shortcomings of the state of disrepair of existing built infrastructure. | ↑ The breadth of health benefits that can be obtained from the island by visitors will be enhanced by the island's operation, including a broader range of recreational activities, as well as diet inputs such as freshly caught local seafood. | ↑ There is a significant capacity for the forging of personal connections to the GBR on Lindeman Island by visitors, which would be expanded through increasing accessibility of the island to a range of people who may not otherwise visit. |
| Estuaries, deep water, bays, inlets, | ↑ Through the provision of an important | ↔ / ↓ The range of coral reefs are iconic | ↑ A lack of any tourism operations on the island limits | ↔ / ↓ The range of coral reefs are iconic | ↑ The reefs around Lindeman in | ↑ The reefs in particular provide a |

| Benefit Type Values | Income and employment | Access to GBR resources | Understanding, appreciation and enjoyment | Aesthetics | Health Benefits | Personal connection |
|---------------------|---|---|--|---|---|--|
| and coral reefs | <p>habitat to iconic species, and through their aesthetic beauty, coral reefs in particular encourage and support jobs in tourism on the reef.</p> <p>Through the operation of the resort, and the employment of qualified and knowledgeable staff (especially if the GBR Educational Centre is pursued), the connection between sustainable business and employment opportunities and protection of the GBR's deep water and coral reefs can only be enhanced.</p> | in themselves and the ease of access for visitors from Lindeman is highly valued by visitors who wish to see the GBR during their stay.. | any depth of understanding, with a range of risks exacerbated through behavior of non-regulated visitors (e.g. littering, non-sustainable fishing etc.) Through the operation of the resort, and the employment of qualified and knowledgeable staff (especially if the GBR Educational Centre is pursued), people's understanding, appreciation and enjoyment of the GBR's deep water and coral reefs can only be enhanced. | in themselves and their access and viewing by visitors (snorkeling/ diving) is highly valued. | particular provide a strong incentive to undertake activities such as snorkeling which have health benefits, and through responsible operations, these can be undertaken in a sustainable and responsible manner. | strong opportunity for personal experiences and connections with the Great Barrier Reef. |
| Wetlands | | <p>↑ ↔ ↓ The various mangroves and other wetlands play a crucial role in the health of iconic and other species. The existing dam contains wetland habitat values and the Queensland referrable wetland mapping identifies some general ecological significance wetlands along parts of the shoreline of Lindeman Island. These</p> | <p>↑ The wetlands and mangroves on the island provide a habitat to a range of species. Through the operation of the resort, and the employment of qualified and knowledgeable staff (especially if the GBR Educational Centre is pursued), people's understanding of the core role that the Island's wetlands play in protecting the island and sustaining a range of species can only be enhanced.</p> | | | |

| Benefit Type Values | Income and employment | Access to GBR resources | Understanding, appreciation and enjoyment | Aesthetics | Health Benefits | Personal connection |
|---------------------|---|--|---|---|-----------------|--|
| | | areas of shoreline potentially provide habitat and foraging areas for shorebirds. | | | | |
| Seagrass meadows | <p>↑ The seagrass meadows in the vicinity of the island provide a habitat to a range of species. Through the provision of a healthy habitat to iconic species, such as turtles and dugongs, it supports commercial tourism with people seeking to see these species through diving and boating.</p> | <p>↔ / ↓ The seagrass meadows in the vicinity of the island play a strong role in sustaining a range of iconic and other species, and they may be slightly at risk from barges and other transport to the island, particularly during construction. It is understood that the methods currently being considered will minimise or avoid damage to seagrass, however the ultimately chosen method may potentially have some negative impacts.</p> | <p>↑ The seagrass meadows in the vicinity of the island provide a habitat to a range of species. Through the operation of the resort, and the employment of qualified and knowledgeable staff (especially if the GBR Educational Centre is pursued), people's understanding of the core role that the GBR's seagrass meadows' play in sustaining a range of species can only be enhanced.</p> | | | |
| Species | <p>↑ Lindeman Island and its surrounds is home to over 90 species of birds, a range of reptiles, land and water birds, bats, fish, and other wildlife, both migratory and native. This is a major drawcard for visitors who wish to see these species in their natural habitats and so their</p> | | <p>↑ A lack of any tourism operations on the island limits any depth of understanding, with a range of risks exacerbated through behavior of non-regulated visitors (e.g. littering, non-sustainable fishing etc.) Through the operation of the resort, and the employment of qualified and knowledgeable staff (especially if the GBR Educational</p> | <p>↑ The range of species visible and appreciated aesthetically by visitors will only increase as visitor numbers resume following the redevelopment of the resort. The majority of the species reside in the National Park and outside of the development footprint, which was largely developed</p> | | <p>↔ / ↑ The range of species found in and around the Island can only contribute to the opportunities for personal connection to the Great Barrier Reef.</p> |

| Benefit Type Values | Income and employment | Access to GBR resources | Understanding, appreciation and enjoyment | Aesthetics | Health Benefits | Personal connection |
|---------------------|---|-------------------------|---|-------------|-----------------|--|
| | presence supports commercial tourism. | | Centre is pursued), people's understanding, appreciation and enjoyment of the GBR can only be enhanced. | previously. | | |
| Connectivity | <p>↑ The planned education centre should present a way of maintaining connection between people and land and sea, and Indigenous stories, while increasing income and employment opportunities for Indigenous people in the region.</p> | | | | | <p>↑ The maintenance of the connection between people to land and sea through stories, and the way Indigenous people moved seasonally, sustains a strong form of personal connection. Through the management of an education centre that covers this history, and through an Indigenous engagement and employment policy, the connectivity can be maintained for Indigenous people and traditional owners, and developed and enhanced for visitors</p> |
| Integrity | | | | | | <p>↔ / ↑ The shell midden on Lindeman Island is not in the development footprint, and the development could enhance access to connection with this cultural</p> |

| Benefit Type Values | Income and employment | Access to GBR resources | Understanding, appreciation and enjoyment | Aesthetics | Health Benefits | Personal connection |
|---------------------|--|--|---|------------|---|---------------------|
| | | | | | | heritage. |
| Spawning | <p>↔</p> <p>Maintaining healthy aquatic environments in the area around Lindeman Island for spawning processes to continue is required for the sustenance of fishing-related economic and tourism income and employment.</p> | | | | | |
| Water Quality | | <p>↔</p> <p>Maintained water quality in the area of Lindeman Island is crucial in supporting tourism and recreational activities that allow visitors to access the Great Barrier Reef through water-based activities</p> | | | <p>↔</p> <p>The maintenance of water quality in the area of Lindeman Island is crucial in supporting human health and maintaining interest in recreation activities. MUSIC modelling has indicated that water quality across all measures should improve as a consequence of the proposed development due to the installation of a range of stormwater treatment devices.</p> | |

14.11 Potential Impacts and Mitigation Measures

The following table provides an assessment of the social risk assessment.

Table 14-23. Risk assessment matrix – social.

| Potential Impact | Significance of Impact: Unmitigated | Mitigation Measure | | | Significance of Impact: Mitigated |
|---|-------------------------------------|--------------------|--|--|-----------------------------------|
| | | Design | Construction | Operation | |
| Influx of temporary / contract workers requiring accommodation (especially those with families) impacting rental market | Medium (9) | - | <ul style="list-style-type: none"> Maximise utilisation of local workers where possible Periodic rosters for all workers onsite Provision of on-site accommodation Chartered transport for DIDO/FIFO workers | - | Low (2) |
| Influx of temporary / contract / FIFO workers impacting local community / social cohesion through lack of engagement within local community (no personal investment in host community such as volunteering, local sports clubs, etc.) | Medium (6) | - | | <ul style="list-style-type: none"> Maximise utilisation of local workers where possible Provision of on-site accommodation and periodic rosters for all workers including locals Strategies for engagement of workers with community to be developed (e.g. football tournaments, volunteering days etc.) | Low (2) |
| Influx of temporary / contract / FIFO workers impacting local community through anti-social behaviours (alcohol, drugs, risky behaviour) | Medium (6) | - | <ul style="list-style-type: none"> Maximise utilisation of local workers Provision of on-site workers accommodation Use of "Good Behaviour Pact" with employees to be investigated | <ul style="list-style-type: none"> Maximise utilisation of local workers Provision of on-site accommodation Use of "Good Behaviour Pact" with employees to be investigated | Low (2) |
| Concerns about loss of access to recreational space, biodiversity and habitats through National Park tenure changes on the island | Medium (10) | - | | <ul style="list-style-type: none"> Undertake engagement with key stakeholders Engagement campaign about the final decision and promote National Park and Great Barrier Reef Education Centre; Maximise use of newly acquired areas and showcase care and use of areas; Investigate the introduction of a local Indigenous rangers program to enhance care and management | Medium (6) |
| Traffic impacts to Airlie Beach due to construction materials supply | Medium (8) | - | <ul style="list-style-type: none"> Plan and schedule with suppliers for majority of large, non-standard loads or known high volume (multi-truck) deliveries to occur during off-peak hours, and to avoid main streets of | - | Low (3) |

| Potential Impact | Significance of Impact: Unmitigated | Mitigation Measure | | | Significance of Impact: Mitigated |
|---|-------------------------------------|--------------------|--|--|-----------------------------------|
| | | Design | Construction | Operation | |
| | | | township on route to Shute Harbour. <ul style="list-style-type: none"> Implementation of a Traffic Management Plan | | |
| Safety risks to Airlie Beach pedestrians and commuters (especially with prevalence of alcohol and young tourists) due to large and potentially dangerous transport during transit of construction materials | Extreme (20) | | <ul style="list-style-type: none"> Safety Plans for transport companies including policies to limit the transport of large, non-standard loads and equipment to off-peak periods and to avoid main streets of township on way to Shute Harbour. Consider keeping to daylight hours for potentially dangerous loads, considering the high level of licensed venues, nightclubs, and pubs frequented by tourists unfamiliar with the area). | | Medium (6) |
| Worker accidents during construction that may be worsened or exacerbated by inadequate emergency transport procedures or limited onsite health procedures | High (12) | - | <ul style="list-style-type: none"> Ensure all contractors have sufficient First Aid qualifications. Determine the requirements for all potential health risks/outcomes and appropriate triage and transport procedures in conjunction with Mackay Hospital, Qld Ambulance, VMR, and medivac providers. Develop a Resort Onsite Health Management Plan in liaison with Qld Health, emergency services, and other stakeholders to determine most efficient and practical management and transport procedures. Determine the most efficient route for transporting sick or injured workers (Proserpine or Mackay) through research and liaison with emergency services. | - | Medium (6) |
| Visitor accidents or illnesses that may be worsened or exacerbated by inadequate emergency transport procedures or limited onsite health procedures | High (12) | - | | <ul style="list-style-type: none"> Require First Aid qualifications as a prerequisite for employment (provide training and refreshers for all staff). Consider the employment of a Nurse Practitioner once a threshold of average visitors is reached (or during peak periods). Determine the requirements for all potential health risks/outcomes and appropriate triage and transport procedures in | Medium (6) |

| Potential Impact | Significance of Impact: Unmitigated | Mitigation Measure | | | Significance of Impact: Mitigated |
|---|-------------------------------------|--------------------|--|---|-----------------------------------|
| | | Design | Construction | Operation | |
| | | | | conjunction with Mackay Hospital, Qld Ambulance, VMR, and medivac providers. <ul style="list-style-type: none"> Develop a Resort Onsite Health Management Plan in liaison with Qld Health, emergency services, and other stakeholders to determine most efficient and practical management and transport procedures. Determine the most efficient route for transporting sick or injured workers (Proserpine or Mackay) through research and liaison with emergency services. | |
| Workers experiencing isolation, boredom, social isolation, family disconnection, and potential mental health issues from working a FIFO (currently proposed 21/7) roster on an undeveloped island (and high turnover resulting from this) | Medium (9) | | <ul style="list-style-type: none"> Implement (and ensure all contractors have implemented) a contractor wellbeing plan for FIFO workers. Develop on site facilities and activities to provide rest and relaxation after work at site and to build a balanced work-life culture. Provide easy access to mental health practitioner/counsellor. Develop an alcohol and drugs policy that is enforced on site and a code of conduct for workers when they are on the mainland (greater project area). Consider different roster types e.g. 14d on - 14d off, as discussed in FIFO studies and with unions, and consider flexibility to choose rosters depending on personal situation (where practical). | - | Low (4) |

| Potential Impact | Significance of Impact: Unmitigated | Mitigation Measure | | | Significance of Impact: Mitigated |
|---|-------------------------------------|--------------------|---|---|-----------------------------------|
| | | Design | Construction | Operation | |
| Workers on 5 day on-island rosters experiencing social isolation or disconnection, boredom, family or relationship difficulties, and potential mental health issues from working long shifts on the island. | Medium (9) | | | <ul style="list-style-type: none"> Implement a well considered FIFO schedule (currently proposed 5 days on - 2 days off) for operations staff to maximise productivity and maximise rest and relaxation. Develop on site facilities and activities to provide rest and relaxation after work at site and to build a balanced work-life culture. Provide easy access to mental health practitioner/ counsellor. Develop an alcohol and drugs policy that is enforced on site and a code of conduct for workers when they are on the mainland (greater project area). Where practical provide flexibility to choose rosters depending on personal situation. | Low (4) |
| Communicable disease outbreak on island for people in close quarters could easily spread | Medium (9) | | <ul style="list-style-type: none"> Liaise with Qld Health to determine policies, resources, and protocols for high risk outbreaks - e.g. Measles, Chicken Pox, Influenza, Legionnaires; Ensure First Aid and health management techniques in place including reporting; Ensure a self-sufficient quarantine room is available as needed. | | Medium (6) |

14.12 Summary

The primary project area of Lindeman Island has no permanent residents apart from three caretakers however the greater project area takes in Whitsunday Regional Council and Mackay Regional Council. The Social Impact Analysis has found that there will be little community disruption associated with this project with employees largely being locals, with a minor proportion of FIFO staff (predominantly for specialists or unique skill sets). All staff, both locals and FIFO, during all construction and operation phases, will reside on-site on the island for the length of their shifts. Due to the proposed use of charter bus services and parking options, there will be very little, if any, transient population influx or non-resident people staying in the larger project area when they are not working. Due to the intention to hire 70% existing local workers during construction (and close to 100% during operations), there is no evidence to suggest that the project will have any impact on living costs nor affect demand on housing or other resources.

Since the commencement of the project a range of consultation techniques have been adopted to inform key stakeholders of the proposal to redevelop the existing resort at Lindeman Island and to identify concerns or grounds for support. A Stakeholder Information Newsletter was released to over 140 contacts in March 2016 and project website has also been launched to provide information regarding the project and opportunities to submit comments. Additionally the proponent team has also had meetings with key stakeholders to discuss and resolve detailed design issues. The findings of this process have been used to inform studies and to refine the Masterplan layout.

Strategically, the redevelopment brings investment and revitalisation of an existing asset on the Whitsundays, with a large part of the works being undertaken on already developed lands, with only a minor proportion of works occurring in greenfield sites. Capitalising on the current economic climate to provide visitors a greater choice in accommodation and experiences in the Whitsundays is a positive direction for the region, which is experiencing an economic adjustment period since the nearby mining boom has subsided. Socially the proposed development has negligible and minor negative impacts due to its location on a primarily uninhabited island, however there are a range of impacts to the greater region that should be addressed as outlined in the Environmental Management Plan (refer to **section 28**). Overall, the assessment has identified that the overall social benefits of this project outweigh any risks and negative impacts.