



DHA Rifle Range Social Impact Assessment

August 2017

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1. Introduction

1.1 Project overview

Defence Housing Australia (DHA) purchased the Rifle Range site in 2015 from the Department of Defence. The Rifle Range site was considered to be surplus to Defence's operational needs. DHA purchased the site in order to provide high quality, modern accommodation (one to four bedroom dwellings) for Defence personnel and their families, and to the wider community. DHA is seeking amendments to the Local Environment Plan (LEP) through a Planning Proposal to rezone the land for residential uses.

There is the potential that the Rifle Range site will be developed concurrently with the nearby Stockton Fort Wallace site, which was also purchased by DHA. If both sites are developed, cumulatively they would not have a significant impact on current and future populations, and services meeting increased demand.

1.2 Purpose of this report

GHD has been engaged by DHA to prepare a Social Impact Assessment (SIA) in support of the Planning Proposal for the Rifle Range site in Stockton. The SIA has been prepared in accordance with *Port Stephens Council's Social Impact Policy* (Amended 2014). The method and approach adopted for assessment is discussed in section 1.4.

1.3 The proposed development

1.3.1 Site location

The Rifle Range site is located on the Stockton peninsula north of the existing coastal village of Stockton, in Fern Bay. 7km north of Newcastle CBD on the northern side of the Hunter River within Port Stephens LGA. Fern Bay Rifle Range is approximately 115 hectares in area.

The site is bound by the Worimi Conservation Lands to the north, the Stockton Centre and Stockton Cemetery to the south, existing residential subdivision to the west and Stockton Beach and dune system to its east.

The Rifle Range site is currently accessible from the west via Popplewell Road which links back to Newcastle via Nelson Bay Road across the Hunter River. It is a 20 minute drive from Newcastle CBD via the Stockton Bridge, or alternatively 6 km from the 10 minute ferry service between Stockton and Newcastle.

The planning proposal indicates key features of the site including:

- Some European history with remnant defence buildings and gun emplacements with low heritage significance
- Cultural and archaeological significance for the local Aboriginal community
- Coastal dune system to its eastern boundary
- Close proximity to the beach and river

The site location and surrounding features are illustrated in Figure 1.



Source: Rifle Range, Urban Design and Landscape Report, Architectus and Spackman, Mossop and Michaels , 2016

Figure 1 Site location

1.3.2 The Planning Proposal

The site sits between the Worimi Conservation Lands and the Stockton Centre, of the communities of Stockton and Fern Bay. The RAAF Base Williamtown is located approximately 11 km north of the site, which would be the place of employment for many of the Defence residents of the subject site. The site is also proximal to the employment areas of Kooragang Island and Stockton, and is accessible to the Newcastle CBD.

The site was utilised for rifle shooting in the early 1900s, and contains an anti-aircraft battery, known as the Links Battery, to the north of the former range. From the 1950s the site was a training facility for all shooting in the region and was utilised by the police force, military, school cadets and civilian rifle clubs. The site also contains some Indigenous heritage.

Defence Housing Australia (DHA) purchased the land in 2015 and seeks to provide high quality, modern accommodation (3 to 4 bedroom dwellings) for Defence personnel and their families, and to the wider community. To develop the site for residential uses, rezoning of the land needs to be approved by Port Stephens Council.

The Planning proposal for this site seeks to partially rezone the land from the existing E2 Environmental Conservation zoning to a R2 Low Density Residential zoning to allow for residential development on part of the site. The planning proposal accordingly seeks to amend the minimum lot size and height of buildings control.



Source: Rifle Range, Urban Design and Landscape Report, Architectus and Spackman, Mossop and Michaels, 2016.

Figure 2 - Proposed Land Zoning Map

1.3.3 Concept Master Pan

To support the planning proposal concept, DHA has developed a Concept Master Plan for the site to illustrate its ability to accommodate residential development, and the nature of planning changes required. The concept master plan is outlined in the Rifle Range Planning Proposal (Architectus, 2016). The master plan responds to the site's natural and historic constraints, and through these considerations proposes a diverse mix of housing to accommodate a residential community. The concept master plan would facilitate the delivery of a residential development including;

- 249 dwellings (a mix of two to four bedrooms)
- Heritage integration
- Community parks and recreational facilities

The concept master plan envisages the 249 dwellings would comprise:

- 113 Coastal cluster homes (clusters of 2, 3 and 4 'apartments', 2 storey, 3 bedroom)
- 32 Single eco-homes (larger lot sizes 1-2 storeys, 3 bedroom)
- 48 Courtyard homes (2 storey, 4 bedrooms)
- 56 Townhouses/row houses with rear lane access (2 storey; 3 bedroom homes plus potential 1 bedroom studio)

The sites heritage would offer residents and visitors the opportunity to engage with the Rifle Ranges' history. The site has no associated heritage listings, but does comprise two items assessed to have heritage significance, including the Anti-Aircraft battery located to the northern

boundary of the site, and the remnants of the 1,000 yard rifle range, being the clear access ways from the central road at 100 yards. The planning proposal supports the sympathetic integration of the Links Battery future works to the Paths and public spaces. This would permit access to the beach, dune ecology and natural vegetation whilst protecting the ecology through:

- Ecological buffer/corridor
- Linear public park
- Conservation/protection zone

The public parklands proposed within the master plan would emphasize principles of "nature play" through the selection of play facilities and materials. An open lawn and playgrounds would be included in these communal spaces.

1.4 Methodology

This SIA has been prepared in accordance with Port Stephens Council's *Social Impact Policy* (Amended 2014). The aim of this policy is to facilitate the preparation and assessment of development applications with respect to social considerations in the interests of the developer, the broader community and the future of Port Stephens.

It also reflects the Planning Institute of Australia's *Social Impact Assessment Position Statement* (2010) which recommends that the SIA process involves analysing, monitoring, and managing these social consequences, both positive and negative, and any social change processes invoked by them.

In undertaking the SIA, GHD has undertaken a staged methodology based on the International Association for Impact Assessment Social Impact Assessment International Principles (2015)¹. This process is consistent with Port Stephens Council's requirements for a SIA. The process involves five stages as identified in Figure 3.



Figure 3 GHD's five stages for preparing the SIA



Source: Urban Design and Landscape Report Final Draft, Rifle Range, Stockton 2016.

Figure 4 Concept Master Plan

Stage 1: Scoping and profiling

Scoping was undertaken to identify the primary issues and associated stakeholders potentially impacted by the project, and the spatial extent of these issues in assessing the project area. Scoping was refined and adjusted throughout the profiling process. A visit to the site and surrounding areas was undertaken on 7 - 8 June 2017

A profile of the existing community that has the potential to be affected by the proposed rezoning was prepared based on 2011 census data and information provided by Newcastle Council and Port Stephens Council in regard to development approvals. A demographic profile of the potential future residents of the Rifle Range site and the local area was also prepared. In addition, a review was conducted of the available local social infrastructure.

A review of the Planning Proposal (Architectus 2017) and supporting documents was undertaken , including the Aboriginal Cultural Heritage and Archaeological Assessment Report (Umwelt 2017), Urban Design and Landscape Report Final Draft, Rifle Range, Stockton (Spackman, Mossop and Michaels, and Architectus, 2016) and, the Stakeholder and Community Engagement Outcomes Report (Elton Consulting 2016).

Stage 2: Identification of impacts

An assessment was undertaken to identify the possible risks and social impacts that may arise as a result of the proposed rezoning.

Stage 3: Consultation

Considerable consultation was undertaken in the development of the Rifle Range Planning Proposal. GHD has drawn on these outcomes and consulted with key stakeholders as outlined in section 5. This consultation has informed the SIA in both profiling, identifying impacts and developing mitigation measures.

Stage 4: Impact evaluation and analysis

GHD collated and further analysed the information obtained in Stages 1, 2 and 3. Key questions that were considered include:

- What is the likelihood that the impact will occur?
- Are the impacts likely to be experienced by all persons or will the impact be specific to certain demographic cohorts, stakeholders or special interest groups?
- Is the impact positive or negative? What weight or level of importance should be attached to each impact?
- What measures can be implemented that will mitigate the negative impacts or enhance the positive impacts?

The analysis included a community needs assessment that aimed to determine any gaps in existing community need, and the needs of the likely future population should the site be developed according to its potential under the rezoning proposal. The community needs assessment was informed by leading practice frameworks in social infrastructure, as outlined in section 4.

Stage 5: Recommendations and final report

The final report has been developed with recommendations that outline the options and procedures that could be pursued should the proposed rezoning be adopted and residential development pursued. These recommendations would seek to identify strategies to maximise positive social outcomes whilst also minimise social risk and avoid or ameliorate potential negative social impacts.

1.4.1 Study areas

The local study area determined for the Rifle Range site includes the suburbs of Stockton, Fern Bay and Fullerton Cove. Although these suburbs are different from each other, they share a number of common characteristics including:

- a relatively isolated position in relation to the district and regional areas
- shared access to local infrastructure and conveniences
- bordering two local government areas.

The geography of the suburbs (being on a peninsular spanning two LGAs) also results in the residents accessing district and regional infrastructure within the local government areas of both Port Stephens and Newcastle. The regional study area for the assessment was therefore assessed to include both Port Stephens and Newcastle LGAs.

1.5 Scope and limitations

1.5.1 Consideration of 2016 Census data

This social impact assessment was prepared in June 2017, drawing on demographic data from the 2011 census and informed by consultation with key stakeholders about change in the area and information about the number residential development approvals in the local area, as provided by Councils. At the conclusion of the study much of the 2016 census data became available.

The estimated current (2017) population of 8,141 people used in this assessment is in the order of 645 people higher than that reported in the 2016 census (7,496 people), This variation is likely due to a number of factors including;

- Additional development and occupation of residential dwellings since the 2016 census (resulting in a larger number for 2017 during the period of consideration
- The estimate assuming occupation of all approved development applications that may not yet have been built or occupied
- Errors in the estimate matching the actual situation

The key population number used in this report is the likely future population, estimated at 9,341 people. This estimates the 2011 population plus residential occupation of all currently approved residential developments and is thus considered to remain a relevant estimation for the purposes of the assessment, although it may be somewhat high.

A preliminary review of the 2016 census data for the local area indicates the significant changes since 2011 that were identified during consultation and are reflected and discussed in this social impact assessment (primarily a large overall population growth with the greatest growth in 0-4 years olds and seniors over 60 years of age).

The age structure estimated made for the assessment have varied from that indicated in the 2016 census, but again these can not be expected to be identical as further development in both Seaside and seniors living will continue to modify this structure.

Comparing with the 2016 census data, the likely age structure of the future population expects a higher proportion of 0 - 4 year olds and a lower proportion of over 60 year olds. The ageing population may be under represented in this estimate.

In summary these differences in numbers are not considered to significantly alter the key outcomes of the assessment, as the likely future population estimates are considered suitable

for the purposes of the assessment and qualitative consideration of these issues has been undertaken in the assessment and need and impact.

1.5.2 Limitations

This report has been prepared by GHD for Defence Housing Australia (DHA) and may only be used and relied on by DHA for the purpose agreed between GHD and the DHA as set out in section 1.2 and 1.4 of this report.

GHD otherwise disclaims responsibility to any person other or entity other than DHA arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by DHA and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report, which were caused by errors, or omissions in that information.

2. Policy context

This section provides information about the social policy context of the proposed site and identifies specific plans that align with the proposal and strategies, which inform this assessment. These include NSW Government and Newcastle City and Port Stephens Council documents.

2.1 State government

2.1.1 Hunter Regional Plan 2036

The Plan has been developed to guide the NSW Government's land use planning priorities and decisions over the next 20 years..

The *Hunter Regional Plan 2036* is the NSW Government's strategy guiding land use planning priorities and decisions over the next 20 years. The vision for the region is for a leading regional economy in Australia with a vibrant new metropolitan city of Newcastle at its heart. To achieve the vision, the plan identifies that the growing region would need to support thriving communities and greater housing choice and jobs. Greater Newcastle and revitalising Newcastle City Centre are identified as key components to the region's success. It is intended as a framework to guide subsequent and more detailed land use plans, development proposals and infrastructure funding decisions. The Plan also identifies priorities for each council to guide further investigations and implementation

Overall the growth strategy in the Plan supports the renewal of the site to deliver a diversity of housing to serve the housing needs of the local and defence force community, whilst making the most efficient use of existing social and physical infrastructure.

Although the Plan includes some conflicting mapping of the land use and development expectations for the site, it does indicate the site for residential and employment use in some figures. The Plan, representing a high level framework provides direction to local planning for specific sites. The Department of Planning and Environment has recommended to Councils that assessment of specific planning proposals have consideration for;

- Direction 20 Revitalise existing communities
- Direction 21 Create a compact settlement
- Direction 22 Promote housing diversity
- Direction 23 Grow centres and renewal corridors
- Direction 24 Protect the economic functions for employment land

The planning proposal responds to each of these directions;

- increasing demand and viability of existing social infrastructure in the Stockton-Fern Bay area;
- renewal of an area for residential use in close proximity to the city centre;
- seeking rezoning which supports a concept master plan that delivers diverse housing options which would support a diverse community;
- contributing to the development of the locally significant Fern Bay growth centre,
- supporting the nearby Williamstown RAAF base and Defence force personnel in the region by providing housing.

2.1.2 Draft Plan for Growing Hunter City 2015

The *Draft Plan for Growing Hunter City* accompanies the *Hunter Regional Plan 2036*. Hunter City is defined as the metropolitan area extending from Toronto and Swansea in the south to Raymond Terrace in the north and from Newcastle harbour in the east to Lochinvar in the west. The Newcastle City Centre falls under the Inner Newcastle district identified in the plan. It will be a major contributor to achieving the Regional Plan's goals to grow and diversity the Hunter economy. In order to support robust communities, communities will have access to a range of housing opportunities and jobs. Access to jobs, services, shops, recreation opportunities, entertainment and the arts will deliver quality living.

The plan identifies goals, directions and actions to guide land use planning across the Hunter Region including the metropolitan area.

Direction 7.2 in the Plan aims to manage growth to protect the strategic Northern Gateways District (which includes Fern Bay and Stockton). The Plan identified Stockton - Fern Bay as a future housing growth area and notes the NSW Government committing to encouraging urban renewal in areas including Stockton. This planning proposal is therefore consistent with the intentions of this direction.

2.2 Local Government

2.2.1 Port Stephens Integrated Plans 2013-2023

The Integrated Plans (2013-2023) comprise the Community Strategic Plan, Council's Delivery Program and Operational Plan. The Integrated Plans 2013-2023 are organised into five focus areas: Citizens, Lifestyle, Environment, Economy, and Council.

The Community Strategic Plan sets out which other areas of government are responsible for contributing to achieving the Strategic Directions and how these Integrated Plans align with the NSW State Plan NSW 2021 and the Hunter Regional Action Plan.

The key objectives of the Plans relevant to the planning proposal relate to:

- Enhancing public safety.
- Responding to future needs of an ageing population.
- Delivering facilities, services and opportunities for children.
- Providing recreational facilities for residents and visitors.
- Providing Strategic land use planning services.
- Promoting sustainable and improved, accessible and flexible transport modes.
- Support education and training in Port Stephens

The Plans seek to provide the community with assets to improve the liveability of the Port Stephens area, which have been considered in this assessment.

2.2.2 Port Stephens Pathways Plan 2016

The Port Stephens Pathways Plan is a Councillor adopted plan by the Port Stephens Council, which indicates existing footpaths and shared paths throughout the Local Government Area, as well as identifies locations for future pathways through a series of maps, rather than a report. The identification of future pathway locations will allow Council to prioritise construction and to apply for grant funding to assist Council in the provision of pathway connections and missing links.

The below map is one of 20; the Plan identifies the need for shared pathways in the Fullerton Cove/Fern Bay area.



Figure 5 Port Stephens cycle plan map

Source: Port Stephens Council, 2016. Pathways Plan.

2.2.3 Newcastle 2030: Newcastle Community Strategic Plan

Newcastle 2030 is a strategic community vision developed by Newcastle City Council to inform policies and actions to become a "smart, liveable and sustainable City by 2030" (page 10). It focuses on seven strategic directions for Newcastle to become:

- A connected City;
- A protected and enhanced environment;
- Vibrant and activated public spaces;
- Caring and inclusive community;
- Liveable and distinctive built environment;
- A smart and innovative City; and
- Open and collaborative leadership.

The strategy outlines the key challenges facing Newcastle communities, including meeting the needs of a growing and ageing population. The development directly responds to key opportunities identified in the Plan, including creating public spaces, enhancing the environment and connecting the peninsula.

2.2.4 Newcastle Local Planning Strategy 2015

The Newcastle *Local Planning Strategy* (2015) presents a comprehensive land use strategy for Newcastle. It includes neighbourhood visions and population forecasts up on which planning is based.

Key local visions and objectives for Stockton include;

• Protection and enhancement of the existing beach and harbour side character and existing historic identify

Encouragement of development that is sympathetic to the existing character of Stockton

- Facilitate development of the commercial centre to improve local services and attract visitors
- Promote Stockton for tourism without compromising its residential appeal
- Protection and enhancement of public harbour side reserves

The Plan also includes population estimates for Stockton which indicate an increase in population by 2036 of only 72 people, and only 32 by 2026, noting that the largest increase over the period is likely to be in lone person households. It is apparent that this forecast has not included potential development of the Rifle Range or Stockton Centre sites.

The Plan notes the Stockton commercial area as a local centre, meeting the daily needs of the local community, but recognises that its desired pedestrian catchment (ped shed) does not include norther Stockton and that a new commercial centre may be justified there to meet the needs of new urban release areas.

2.2.5 Newcastle Social Strategy 2016-2019

The Draft City of Newcastle Social Strategy (2016-2019) is a four-year framework outlining the key priorities and actions to be delivered by Council in its commitment to investing in, promoting and delivering community development outcomes in Newcastle. The strategy, together with six others aims to deliver outcomes on the strategic directions outlined in the Newcastle 2030 Community Strategic Plan. The Draft Social Strategy identifies five focus areas for each action, including:

- Community wellbeing
- Innovation and creativity
- Healthy lifestyles
- Community infrastructure
- Community safety

2.2.6 Community Assets and Open Space Policy 2012

The purpose of the *Community Assets and Open Space Policy* is to provide Council with a framework and set of guiding principles for the consistent and integrated planning, acquisition, delivery management and disposal of community assets and open space across the Newcastle local government area.

This policy seeks to provide the community of Newcastle with the following community asset and open space outcomes:

- Encourage social connections, community participation, promote health and wellbeing;
- Multi-purpose, functional, safe and innovative places and spaces that are equitably distributed across the local government area;

- Management of community assets and open space from a quadruple bottom line perspective;
- Diverse places and spaces that accommodate a range of uses that are responsive to changing trends, aspirations and community needs;
- Timely delivery of community assets and open space that is integrated with other assets provided by Council and partner agencies;
- Co-location of community assets and open space to maximise the opportunity for Ing community connections and economies of scale; and
- Open and transparent governance and management of community assets and open space that provides the community with clear accountability of Council's actions.

2.2.7 Newcastle Safe City Plan 2017-2020

The City of Newcastle Council's *Safe City Plan* includes actions that contribute to safety and social inclusion within the community. This plan supports the objectives of Council's *Social Strategy 2016-2019* to improve community perceptions of safety. Key safety issues identified include drug and alcohol related crime, disengaged youth, fear of crime, discrimination, malicious damage to the built environment and anti-social behaviour.

In order to address safety issues, Council's priority areas include:

- Improving safety through public domain design and the built environment, such as increasing natural surveillance and perceptions of safety.
- Facilitating community inclusion, such as providing Council facilities that are safe, welcoming and inclusive, and providing open space and community assets that facilitate positive social interaction and wellbeing.

2.2.8 Newcastle Cultural Strategy 2016 – 2019

The Newcastle City Council's *Cultural Strategy 2016-2019* aims to support and develop a thriving creative culture within the city. It prioritises actions and resources to assist the local arts communities and increase opportunities for the community to participate in cultural activity. Priorities include creating:

- Vibrant and activated public places that provide diverse activity, safety and strengthen social connections, where cultural, heritage and place are valued.
- Liveable and distinctive built environments that maintain and enhance the city's sense of identity.
- Smart and innovative city with a thriving community that attracts people to live, work, invest and visit the city.

2.2.9 Newcastle Cycling Strategy and Action Plan 2012

The *Newcastle Cycling Strategy and Action Plan* builds on previous bike plans and expands on cycling- related strategies and initiatives from a range of Council documents.

The overall objective of the strategy is to make cycling a safe and attractive travel option to encourage more peoples to cycle. Strategies and actions to cover the broad areas to do this are:

- Bicycle network and infrastructure
- Promotion and education
- Leadership and advocacy

- Planning for active transport
- Monitoring and review

The plan identifies the need for proposed development to tie in with existing and planned cycling networks, and to cater for cyclists through the provision of infrastructure such as bike storage or hoops in both planned residential and commercial areas.

The plan, relevant to this proposal identifies the need for connected pathways in Stockton through the addition of a local bike route (L20 – Stockton). This route was proposed as an on road connector from the ferry terminal to R1 (Adamstown Heights to Fern Bay) at the northern end of Fullerton St, on Mitchell St, Barrie Cr, Griffith Ave Eames Ave and Meredith St. It is to be considered in conjunction with work on the Coastal Revitalisation project, in which an off road path from S2 to connect to R1 near Fullerton St north has been mooted.



Figure 6 Newcastle cycle plan map

Source: The City of Newcastle, 2012. Newcastle Cycling Strategy and Action Plan

2.2.10 Stockton Public Domain and Traffic Plan 2017

Newcastle City Council developed this public domain improvement program in consultation with the local community. Key elements of the plan which support improved community accessibility and social amenity, which is planned to commence in 2017/2018 includes;

- Footpath widening outside Stockton Library, including seating, a table and bike racks and the provision on 1 hour timed parking
- Exploring the provision of public toilets in the commercial centre
- Moving pedestrian crossings to improve safe access and increase parking

- Creating disabled parking spaces outside the seniors centre and surgery
- Potential for occasional road closures to support markets and community events

2.3 Current Council planning

Several strategies and plans are under preparation or planned by both Newcastle City and Port Stephens Councils of relevance to the Rifle Range planning proposal. Of particular note:

- Both Councils advise they are working collaboratively in reviewing Section 94 development contributions plans. As the proposal area is within a cross LGA border area, a contribution sharing arrangement has been agreed in the past and will also occur for future developments, recognising that the suburbs use local services primarily in Stockton.
- A Fern Bay Strategy is also in the early stages of development by Port Stephens Council. The strategy will address needs and demands for residential, commercial and recreational development in the area to guide sustainable future development in the area.

2.4 Implications for the SIA

Table 1 below summarises the implications of these policies for this report.

Table 1 Social policy implication for the SIA

Policy	Implications
Hunter Regional Plan	Identifies housing diversity , compact settlements and community revitalisation as directions for planning.
Draft Plan for Growing Hunter City 2015	 Identifies the need for residential renewal in Stockton as part of the Northern Gateway.
Newcastle Local Planning Strategy	• Recognises the potential future need for a commercial centre in the north of Stockton to serve existing and renewal populations
Newcastle 2030 Community Strategic Plan 2013	 Identifies strategies to deal with issues such as growing and aging population, and identifies opportunities including urban renewal, economic strengths and a revitalised town centre.
Newcastle Draft Social Strategy 2016-2019	 Identifies priorities and actions addressing public space activation, use of recreation area, activities and events to build connectedness and inclusion, creating local identity and, supporting urban renewal.
Newcastle Cycling Strategy and Action Plan 2012	 Identifies that new development should tie into existing or proposed cycle infrastructure and networks, and cater for cyclists.
Port Stephens Integrated Plans 2013-2023	 Identifies priorities, needs and actions for addressing a growing and aging population, demand for schooling and facilities for children, and the use and availability of public transport.

Port Stephens Pathways Plan 2016 • Identifies the locations of future pathway locations that will allow Council to prioritise construction in the provision of pathway connections and missing links.

3. Community profile

The sections below provide a summary of the key demographic indicators available from the 2011 census for the local study area as whole and with some notes as to variances between the suburbs. A comparison with the regional area is also included. The section also discusses likely changes in each indicator since the 2011, census based on the results of consultation and estimates of development since 2011.

3.1 **Population and age profile**

Consultation indicates that in recent years, there has been a significant amount of development within the local area, particularly in Fern Bay and Fullerton Cove. This development has predominantly been seniors living and residential. These include the new seniors living developments of Palm Lake Resort in Fern Bay and The Cove in Fullerton Cove. Expansion of the existing Bayway, a manufactured homes village has also occurred and is also marketed to seniors. The master-planned residential community of Seaside also continues to expand, attracting a younger demographic. The more established residential area of Fern Bay, which adjoins the Rifle Range, is older style one and two storeys dwellings. Stockton, some gentrification of housing has occurred, but the area is largely underdeveloped with older style one and two storey dwellings and key facilities located in the centre of town.

These developments are expected to have resulted in an increase in population, and changes in demographic structure since the 2011 census. To capture a more up to date profile this study has attempted to estimate a population profile based on the development information sourced from the respective councils.

In 2011 the local area had a total population of 6,130. The population of Stockton showed a slight decrease to 4,195 from 2006, whilst Fern Bay increased more than 40 percent to 1,625. A decrease in population for Fullerton Cove was the result of boundary changes reducing the area counted, but in 2011 the suburb recorded a population of 300.

Drawing on information provided by Port Stephens Council, an indicative estimate of the current resident population of the local area in 2017 is 8,141 people (see Appendix C). This estimate is based on information from Port Stephens Council with regard to approved dwellings and estimates of those currently developed for each of the residential developments noted above. Development on the peninsular has occurred in discreet pockets, with seniors living growing in Fern Bay and Fullerton Cove and new residential development in Fern Bay.

Suburb	2011 population*	Estimated 2017 population [#]
Fullerton Cove	300	546
Fern Bay	1626	3,400
Stockton	4,195	4,195
Total	6,121	8,141

Table 2 Indicative local area current population

Source: * ABS Census Data 2011, # GHD estimate based on dwelling numbers provided by Port Stephens Council and census averages

Table 2 represents a more than 80 percent increase in the population in Fullerton Cove. Fullerton Cove has historically been a rural residential locality; however, with the development of The Cove, seniors living has significantly increased the population in the suburb.

The population of Fern Bay is also expected to have more than doubled since the 2011 census with the expansion of the Seaside residential estate and the seniors relocatable home village, Bayway Village, and a new seniors living development, Palm Lakes Resort. The Stockton population is expected to have remained relatively stable, with little development and an ageing population.

This represents an estimated 498 new seniors living dwellings accommodating around 797 people aged exclusively over 50 years of age. 601 new residential dwellings are estimated to accommodate in the order of 1,642 people in predominantly young families.

In 2011 the local area was considerably older than the regional area, with average ages ranging between the suburbs from 47 and 54 years, compared with the regional average of 40.

An estimate of the likely age structure of the local population in 2017 has also been prepared to inform the assessment of community infrastructure and is presented in section 3.8. Although the estimates are indicative, the estimate indicates that the overall structure of the local area population has not altered dramatically with variations in proportions representation of each age cohort not more the 1.5 percent. By contrast, the older demographics of the local area, compared with the regional area is dramatic.

Table 3 Estimated current population and changes

	Local Ar	ea					Regional Area	Local vs Regional Area
	2011		2017		Char	ıge	2011	
	No	%	No	%	No	%	%	
No. of dwellings	2,588		3,542					
Total Persons	6,121		8,141					
Age groups:			`					
0 to 4 years	289	4.7%	495	6.1%	206	1.4%	6.2%	0.1%
5 to 11 years	400	6.5%	536	6.6%	136	0.1%	8.2%	1.6%
12 to 17 years	328	5.4%	366	4.5%	38	0.9%	7.0%	2.5%
18 to 24 years	423	6.9%	486	6.0%	63	0.9%	10.3%	4.3%
25 to 34 years	563	9.2%	871	10.7%	308	1.5%	13.2%	2.5%
35 to 49 years	1,197	19.6%	1,554	19.1%	357	0.5%	19.9%	0.8%
50 to 59 years	1,033	16.9%	1,325	16.3%	292	0.6%	12.8%	-3.5%
60 to 69 years	930	15.2%	1,259	15.5%	329	0.3%	10.6%	-4.9%
70 to 84 years	776	12.7%	1095	13.5%	319	0.8%	9.4%	-4.1%
85 and over years	181	3.0%	205	2.5%	24	0.4%	2.5%	0.0%
Aver household size	2.4		2.3					

* assumes a HH size of 1.6 and an age distribution of 20 percent 50-59 years, 40 percent 60-69 years, 37 percent 70-84 years, 3 percent 85 years and over

Reviewing the three suburbs in the local area, age profiles were characterised by:

- Fern Bay has slightly fewer high school aged children from 12 to 17 years (3.6 percent compared to 6.2 percent in Stockton and 5.7 percent in Fullerton Cove)
- Stockton had the youngest median age at 47 years in Stockton, compared with 50 years in Fullerton Cove and 54 years in Fern Bay. Fern Bay had the highest proportion of residents over 60 years of age. However Fern Bay also had a relatively larger young population with the greater proportions (12.3 percent) of children from 0 to 11 years percent compared to Fullerton Cove (8.7 percent) and Stockton (10.9 percent)
- Although Stockton had the highest proportions of primary and high school aged children, Fern Bay had the greatest proportion of 0 to 4 year olds (most likely reflecting the younger Seaside demographic)



3.2 Cultural diversity

The population has low levels of cultural diversity. The percentage of Indigenous residents in the local area ranged from 2.5 percent in Fern Bay to 3.7 percent in Fullerton Cove with a 3.2 percent average. However, school data indicates that the Indigenous population is young, with 12 percent of students at Fern Bay Public School and 10 percent of Stockton Public School students identifying as Indigenous.

In 2011 no residents of the local area were born in non-main English speaking countries with most residents speaking only English at home (91.1 percent) compared with the regional average of 89.7 percent.

3.3 **Dwellings and tenure**

In Stockton, Fern Bay and Fullerton, the number of dwellings that were separate houses were 75.1 percent, 95.8 percent and 69.3 percent respectively, which was higher compared to the regional average (67.6 percent).

This is a reflection that to date, most housing developments in the local areas have been low and medium density.

Suburbs in the local area and regional area have similar patterns in bedroom numbers. Onebedroom dwellings were the least prominent for all suburbs and the regional area ranging from 5 percent in Stockton and the regional area to the highest one bedroom percentage in Fullerton Cove (8 percent); three bedroom dwellings were the most common for all suburbs and the regional area. The average number of bedrooms for dwellings was highest in Fullerton Cove (3.1 bedrooms) compared to the regional area (3.0 bedrooms), Stockton (2.8 bedrooms), and Fern Bay (2.7 bedrooms).

	Stockton	Fern Bay	Fullerton Cover	Regional Area
One Bedroom	5%	7%	8%	5%
Two Bedrooms	27%	35%	14%	34%
Three Bedrooms	47.7%	37%	42%	45%
Four + Bedrooms	17.7%	19%	36%	24%
Average number of bedrooms	2.8 bedrooms	2.7 bedrooms	3.1 bedrooms	3.0 bedrooms

Table 4 - Average number of bedrooms per dwelling in the Local Area and theRegional Area (2011).

Tenure types indicated that home ownership (outright or with a mortgage) was more common in the local area than the regional area. Much higher proportions of home ownership was noted in Fern Bay and Fullerton Cove (87.4 percent and 92.9 percent respectively) and Stockton (66.0 percent) than in Newcastle LGA (64.9 percent) and Port Stephens LGA (71.4 percent) in and 66.0 percent in Stockton.

3.4 Households and families

The proportion of family households in the local area varies between suburbs, but is largely within the range of the regional LGAs (63.8 percent in Newcastle LGA, 73.2 percent in Port Stephens LGA). However Fullerton Cove showed a higher proportion with 82.2 percent family households.

The average household size also varies across the local area with the smallest average households in Fern Bay (2.1 people), then Stockton at 2.3 persons and the largest households in Fullerton Cove at 2.8 persons . These compare to 2.4 persons in Newcastle LGA and 2.5 persons in Port Stephens LGA.

Family composition was fairly consistent across all areas. Couple families with children were consistent amongst Newcastle LGA, Port Stephens LGA, Stockton and Fullerton Cove (38.1 percent on average) while Fern Bay local area smaller representation at 28.5 percent. Fullerton Cove and Stockton had higher proportions of single parent families (58.3 percent and 23.2 percent respectively) compared to the other areas (14.0 percent in Fern Bay, 18.5 percent in Newcastle LGA and 16.6 percent in Port Stephens LGA).

3.5 Employment, education and household income

The local areas had a slightly lower labour force participation rate (48.7 percent in Stockton, 39.7 percent in Fern Bay, 53.2 percent in Fullerton Cove) compared to Newcastle LGA (60.5 percent) and Port Stephens LGA (54.4 percent). The unemployment rate in Fern Bay and Fullerton Cove local areas (both 7.0 percent) was slightly higher than that of Newcastle LGA (5.7 percent), Port Stephens LGA (6.2 percent) and Stockton local area (5.7 percent).

In 2011, there was a higher percentage of people who did not have post-school qualifications in Stockton (49.1 percent), Fern Bay (50.0 percent), and Fullerton Cove (43.4 percent), compared to the percentage of people who completed year 12 (23.4 percent, 27.3 percent and 22.5

percent respectively). Of those who finish secondary education only a low percentage of students attended university (2.7 percent in Stockton, 2.2 percent in Fern Bay and 3.4 percent in Fullerton Cove) which is consistent with Port Stephens LGA (2.7 percent) and much lower than Newcastle LGA (8.8 percent).

Across all local areas there was a significantly higher percentage of students attending both government primary (76.6 percent in Stockton, 62.7 percent in Fern Bay, 72.2 percent in Fullerton Cove) and government secondary schools (60.8 percent in Stockton, 55.8 percent in Fern Bay, 64.7 percent in Fullerton Cove). The same trend can be seen with Newcastle LGA (71.7 percent primary students, 65.8 percent secondary students) and Port Stephens LGA (74.8 percent primary students, 70.2 percent secondary students).

Fullerton Cove had a higher percentage of primary students attending a Catholic school (27.8 percent) in comparison to the other local areas (17.1 percent in Stockton, 20.5 percent in Fern Bay) and LGA's (19.2 percent in Newcastle LGA, 13.9 percent Port Stephens LGA). When looking at the statistics for secondary students however, all local areas showed a higher percentage of students attending Catholic school (35.0 percent in Stockton, 30.2 percent in Fern Bay. 35.3 percent in Fullerton Cove) compared to the LGA's (20.2 percent in Newcastle LGA, 13.6 percent in Port Stephens LGA).

The weekly median household income in Fern Bay was significantly lower (\$690) than other local areas (\$1,072 in Stockton, \$1,062 in Fullerton Cove) and LGA's (\$1,165 in Newcastle LGA and \$999 in Port Stephens LGA).

Department of Defence was the most common employer of Fern Bay residents stated in the 2011 Census at ten percent of respondents (Elton, 2016).

3.6 Vehicle ownership and travel

In the Fullerton Cove local area, all households owned at least one vehicle (100.0 percent) compared to the Newcastle LGA (88.1 percent) and the Port Stephens LGA (94.2 percent). Stockton and Fern Bay households showed similar statistics to the LGA's (84.9 percent and 91.2 percent respectively).

The primary mode of transport across all areas was by car as the driver with an average of 76.4 percent. A highest proportion of residents who worked at home was in Fullerton Cove (10.7 percent) compared to other local areas and LGA's.

The Ferry is a major link in the local area, with strong commuter use in Stockton ((6.6 percent compared to bus use of 2.9 percent), but considerably lower with distance from the wharf (2.3 percent in Fern Bay compared to 2.7 percent for bus use). In Fullerton Cove, no commuter reported using trains or ferries to travel to work, with 2.5 percent using the train.

3.7 Crime and safety

For many common crimes, Newcastle LGA has higher rates than for neighbouring Port Stephens LGA, and the local area generally has rates between the two LGAs, with the exception of domestic and sexual assault which are higher that both LGA averages. Recent statistics indicate that the common crimes (listed in Table 5) have remained stable or have been in decline over the last 5 years.

Offence	5 year trend	Rate per 100,000			
		Local Area	Newcastle LGA	Port Stephens LGA	
Assault - domestic	Stable	557.1	446.8	502.0	
Assault - non- domestic	Down 2.5% /year	685.7	714.9	415.9	
Robbery	Down 15.8% /year	21.4	59.4	20.1	
Theft	Down 2.5% /year	3428.3	4918.7	3168.0	
Sexual offences	Stable	214.3	212.5	212.3	
Malicious damage to property	Stable	1234.1	1360.8	1084.5	

Table 5 Local and Regional Crime Statistics January 2016 to December 2016

Source: NSW Bureau of Crime Statistics and Research, 2017, http://crimetool.bocsar.nsw.gov.au/bocsar/

3.8 Expected future community

In assessing the potential social impact of development of the Rifle Range site for residential purposes, it is necessary to consider the magnitude and nature of the future residents of the site and also that of the likely local community. This section aims to estimate the possible magnitude and indicative structure of the local area population. This estimate is indicative only for the purposes of assessing the magnitude of future demand for social infrastructure.

Rifle Range site

Defence families likely to be accommodated at the Rifle Range site would primarily be working with the Air Force. The age of Defence personnel eligible to live at this site ranges between 24 and 60 years, with an average age of 40 years. About one-third are expected to have no dependents other than their spouse, with the remainder being households with children.

Of the estimated 249 dwelling yield from the site, 125 dwellings (50 percent of the total dwellings) would be occupied by Defence households with an estimated population of 413. Their likely age structure illustrated is in Table 6¹.

The other 124 dwellings would likely to be sold in the real estate market, and accommodate a population of around 285 people as they are expected to have smaller households. As a result, the Rifle Range site is expected to accommodate in the order of 698 people.

¹ DHA data on eligible Defence households has been adjusted to reflect the service age groups required to assess community needs. Data provided for 5 to 12 years olds has been spilt assuming an average across all ages within the group. Data provided for dependents 13 years or older has been assumed to be 70 percent dependents aged 13 to 17.

	DHA Re	sidents	Non DHA residents		Total
	%	Number			
0-4 years	8%	33	7%	20	53
5-11 years	15%	62	6%	17	79
12-17 years	13%	54	4%	11	65
18-49 years	60%	248	45%	128	376
50 + years	4%	17	38%	109	125
Total		413		285	698
Average household size		3.3		2.3	

Table 6 Estimated future Rifle Range population

Source: GHD estimates based on Forecast id data provided by Newcastle City Council and modified to breakdown percentages for under 18 year olds and 50-60 year olds. Average household size of 2.3 assumed for non DHA residents of the Rifle Range

Expansion of existing developments

The likely future population will also include residents of approved development applications, which have not yet been developed. Population estimates have included new or expanded development, including;

- Existing approvals for further development of seniors, or predominantly seniors living in Bayway Village, The Cove and Palm Lakes
- Further approved development of Seaside residential development

Information provided by Port Stephens Council indicates there are in the order of 262 approved seniors dwellings and 229 approved residential dwellings yet to be developed. The estimate assumes an otherwise low population growth in the existing Stockton community, and has not allowed for other potential new developments in the Stockton – Fern Bay area.

Suburb	Likely future	population	Rifle Range	Total	
	Estimated 2017 population [#]	Approved DAs#	Future population		
Fullerton Cove	546	176	722		
Fern Bay	3, 400	1,024	4,424	635	
Stockton	4,195	-	4,195		
Total	8,141	1,200	9,341	635	9,976

Table 7 Indicative future local area population

Source: [#] GHD estimate based on dwelling approval and development numbers provided by Port Stephens Council and using relevant average household sizes from 2011 ABS Census SA1 areas.

If rezoning and consequent development of the DHA Fort Wallace site is achieved it is likely that this would generate in the order of a further 263 people in Stockton in the future. Whilst not included in the assessment of social infrastructure, the potential for both this, and the nearby development of the Stockton Centre are noted. To facilitate assessment of the community needs of this population, an indicative age structure has been considered, as noted in Table 8.

Table 8 Indicative age profile for future local area population

Age group	Future Stockt population	on Fern Bay
0 to 4 years	7%	653
5 to 11 years	6%	561
12 to 17 years	4%	374
18 to 60 years	53%	4,951
60 years and over	30%	2,802
Total population		653

Source: GHD estimates based on the likely future population in Table 7 and on Forecast id data provided by Newcastle City Council and modified to breakdown percentages for under 18 year olds. These are also comparable with GHD 2017 population age structure estimates in Table 3.

4. Social infrastructure

Development of the Rifle Range site will increase demand for social facilities and services. This review of social infrastructure focuses on the capacity of facilities and services currently used at the local level to support the likely future population (as outlined in Table 3 which includes realisation of all currently approved developments in the local area). Local level infrastructure has been defined as that which is required to meet the daily needs of people living in a population catchment of up to 10,000 people.

This review identifies current gaps in key local social infrastructure facilities based on ;

- *demographic* needs how the size of the population influences need
- *identified* needs what the community and managers identify as needed
- **best practice** needs based on rates of provision detailed in unpublished *Draft Social Infrastructure Guidelines* developed by GHD for NSW Department of Planning).

Social infrastructure discussed in this section is illustrated in Figure 7.

Figure 7 Local social infrastructure maps

Legend	Category	Name	di di	FULLEEDEN
		AH1 - Bayway Village	1 de tra	10 1
	Annual Insurance	AH2 - Palm Lake Resort		and a
	Aged housing	AH3 - The Cove	AHD AND AND AND AND AND AND AND AND AND AN	A ALA MAN
		AH4 - Wescott Aged Care	1 1 aler	Seaside
		AH5 - Meals on Wheels Stockton		Village
	Aged services	AH6 - Senior Citizena Association	A CONTRACTOR	
	Childcare - long day care	OC1 - Mission Australia Early Learning Stockton	A LIVE	FERNEAM
	Childcare - OOSH	CC2 - Stockton School Kids Fun Club Association		
	Childcare - preschool	OC4 - Stockton Public School Preschool	THE	
		DN1 - Butcher Stockton		
	Daily needs and	DN2 - IGA Stockton		The
	tresh food	DN3 - Pharmacy Stockton		Rifle
		DN4 - Post Office		
		E1 - Fem Bay Primary School	12 10	A. A.
	Education	E3 - St Peter's Primary School		
		E4 - Stockton Primary School	A DOUDING	
		ES1 - Stockton Ambulance Station		
	Emergency	E52 - Stockton Fire Station	Fort	
		ES3 - Stockton Police Station	Wallace	
		HF1 - Dr Hamid M A		
	Health facilities	HP2 - Pern Bay Medical Centre	SI SI	
		Hr3 - Stackton Surgery		



4.1.1 Community centres and libraries

The Fern Bay Community Centre is the only Council owned community centre in the local area and is within 400m walk of the boundary of the Rifle Range site. A development application is currently being considered by Council to redevelop this centre. The redevelopment would replace the existing hall and adjacent tennis club building and separate toilets. The site is adjacent to a recently upgraded playground and the Fern Bay Public School. The proposed centre will include a multi-function hall (approximately 160m²), tennis club office/storage, a kitchen facility, reception desk and publicly accessible amenities.

The Stockton Beach Surf Club, Stockton Bowling Club, Stockton RSL and Citizens Club, and Newcastle Golf Course each have meeting rooms/ and or event halls that are used by residents of the local area. The RSL and Citizens Club has the largest facilities with meetings rooms and an auditorium which fits up to 250 people.

A Defence Communities Organisation funded community centre operates for Defence families at the Williamstown Base. It organises activities including playgroups and social gatherings.

Best practice rates of provision suggest that one multipurpose centre or two community spaces be available to communities of less than 20,000 people, with multipurpose centres having a minimum of 500 m². Public, affordable and accessible meeting and activity spaces are important for all communities, and especially so for this local area which is isolated from its district and regional area. The local area also presents specific challenges in regard to the spatial and consequently social dislocation between residential communities or areas, with some of this being related to it's peninsular geography, and some by the nature of the development that has occurred (gated seniors living and pocket residential developments). These factors, as indicated in consultation, reinforce the need for indoor public activity spaces in the local area to support social cohesion and equitable access.

It is likely that a need for a community space in Stockton will remain even after the redevelopment of the Fern Bay community hall. Any such community space would need to be multipurpose and to respond to diverse community needs.

Existing Provision	Demographic need	Identified need	Rates of provision	Facility/service required
Fern Bay Community Centre ~200m ² No public facilities in Stockton	Population growth of around 33 percent expected since 2011 and up to in the near future	Need for multipurpose centre to centralise services and facilities Need for community facility in Seaside / Fern Bay	1 centre or 2 space: less than 20,000 people	The new Fern Bay Hall may service the needs of the Fern Bay community. It could be revised to be a larger multipurpose centre, or a new space or multipurpose centre developed in Stockton

4.1.2 Other community and cultural spaces

There are Men's sheds in some of the seniors living developments that are for the exclusive use of their residents, however it was noted during consultation that the shed at Palm Lakes Resort has limited use due to restrictions relating to noise. The Newcastle Men's Shed is also without a venue, having been unable to afford their previous site in the Steelworks. Consultation has indicated a demand in the local and regional area for a Men's shed. With an ageing population

in the local area, and a need for social inclusion between seniors, a Men's shed would meet this need, and also provide an opportunity for intergeneration inclusion.

There are no public cultural or indoor youth spaces in the local area. The nearest cultural facilities are located in Newcastle CBD. Best practice suggests that such spaces be incorporated into multipurpose centres or other spaces. Whilst regional level facilities are available in Newcastle, a local space is justified given the relative isolation of the peninsular. Such a local facility could be integrated within any new multipurpose space.

4.1.3 Libraries

The Stockton Library operates two full days and two half days per week. It is a small library (approximately 200 m²) that reports strong use by both preschool and school ages children and seniors. Newcastle City Library indicates that use of the library has increased over recent years with services such as story time reading for pre-schoolers and young school aged children in creasing from once a month to once a week. Council also notes that they have recorded increasing library registrations from residents of seniors living developments of Fern Bay and Fullerton Cove. Port Stephens operates a mobile library, which visits the Fern Bay Reserve fortnightly for public access and use by Fern Bay Public School. The mobile library does not visit Seaside due to the difficulties in navigability of the roads. Residents in both LGAs have free access to library services in both LGAs.

Each of the seniors living developments and the Bayway relocatable home development have some provision of libraries, community activity and meeting facilities for the exclusive use of their residents which reduces somewhat their demand for external or publically provided facilities however they are also noted to be users of public facilities and services.

Consultation indicates the existing library operations in Stockton are inadequate to meet the growing needs of the existing and future population and the changing nature of library services and roles in the community.

The limited capacity and flexibility of the Port Stephens mobile library service is not currently meeting the demands of the local population. The service is unable to provide services in Seaside as planned, as the mobile library can not safely access the area or gain access to utilities to operate. Consultation suggests increasing the frequency of visits and duration to Fern Bay Hall, and greater integration of services to the site (e.g book return) would improve access for the local community. Potential collocation or integration of library and community space on Department of Education land could be beneficial to both the Fern Bay Public School and the local Fern Bay community

Existing Provision	Demographic need	Identified need	Rates of provision	Facility/service required
Stockton Library ~ 200 m ² Port Stephens mobile library	Existing unmet needs from local area, especially Seaside residents. Likely growing need from Fern Bay PS	Existing Stockton library requires extended hours until replacement (as no room to expand) Increase in frequency of mobile services to Fern Bay	People Places populatio n based benchmar k : 645m ²	Extend existing hours of operation of Stockton Library Increase frequency of Port Stephens mobile library Consider collocation of library in school grounds Consider collocation of library services with any potential future public

4.1.4 Childcare

Long day care

In Stockton there is one long day care centre (49 places) and. four family day care services, two in Seaside and one each in Stockton and Fullerton Cove providing approximately 16 places and some OOSH places (around 6).

A 94 place long day care service has been approved for a development in Seaside.

Consultation indicates many residents are using services at or enroute to their place of work, and that lack of access to long day care is also likely limiting the ability of many parents to return to work. It is estimated that the future community will have a need for 130 long day care places, whereas only 65 are currently available locally. However development of the recently approved 94 place centre at Seaside would meet this demand.

Existing Provision	Demographic need	Identified need	Rates of provision	Facility/service required
49 places, plus around 16 in family day care	Future population of 653 children	No current spare capacity, many families use facilities enroute to and at work	1 place: 5 children ages 0-4 years Suggests need for 130 places.	Newly approved facility should meet this need

Preschool

Stockton Preschool is operated by the Department of Education as part of Stockton Public School, with 40 places. Fern Bay and Fullerton Cove residents are outside the catchment for the Stockton Preschool so they are not prioritised for places in the preschool and as a result have limited access to the preschool. A Defence preschool was formerly located at Williamstown base but was relocated, and is expected that it will relocate to Medowie in 2018 where it would likely be used by Defence families from Rifle Range.

There is clear demand for preschool services in the local area with only 40 places available, and estimated future preschool population of 210, requiring 105 places. 2011 data indicates lower than regional attendance of preschool in the local area. Further, consultation suggests that levels have declined with increasing population yet no expansion of services. Whilst the proposed new long day care centre may meet some of this need (as it will likely offer a preschool program), there is a clear current and future need for a new preschool service, with a gap in the order of 65 places.

Existing Provision	Demographic need	Identified need	Rates of provision	Facility/service required		
Preschool						
40	Estimated future population of 210	Strong demand especially from Seaside community with	1 place: 2 children ages 4-5 years	Clear need for an additional service, particularly catering to Fern		

a very young population	Suggests need for 105 places	Bay. Some need will be met through long day care
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The Fern Bay Progress Association suggests that a service (potentially mobile) be provided out of the new Fern Bay Hall. Colocation of a Department of Education preschool at Fern Bay Public School could also address this demand.

Out Of School Hour (OOSH) Care

Two OOSH providers service the local area. The Stockton Kids Fun Club provides OOSH services from Stockton Public School with 30 places servicing both the school and St Peters Primary School students (who travel between the schools on the school bus). WeMOOSH, an OOSH business, operates an umbrella service for Fern Bay Public School students from West Mayfield. Children are dropped at the centre in Mayfield in the morning and collected in the afternoon from the Fern Bay Hall. The service aims to negotiate use of the new Fern Bay Hall once completed for a 30 place onsite service. As noted above, around 6 OOSH places are provided through family day care in Fern Bay and Fullerton Cove.

There is clear demand for OOSH services in the local area with only 33 places locally available, and most of these prioritising children from Stockton. With a likely future need for in the order of 110 places, there is clear need for more OOSH services. WeMOOSH expect to provide 30 places in the new Fern Bay Hall when it is completed, going some way to meeting this demand.

Existing Provision	Demographic need	Identified need	Rates of provision	Facility/service required
OOSH				
36 (6 in family day care)	Estimated future population of 552		1 place: 5 children ages 5-11 years Suggests need for 110 places	Strong demand for an additional service. New service may largely meet current demand

Further, as young families in the local area mature, the demand for long day care and OOSH services is expected to increase.

4.1.5 Public open space and recreational facilities

The local areas is well resourced with passive outdoor recreation areas, with proximity and access to beach, river, bushland and parkland areas. Upgrades to facilities such as skate parks and playgrounds are ongoing, and together with the Stockton Swimming Centre are valuable resources for the community and visitors alike. The bulk of this recreational infrastructure however is located in Stockton, with only one park with a playground, two tennis courts and a half basketball court in Fern Bay Reserve. Fern Bay Reserve is adjacent to Fern Bay Primary School, approximately a 400m walk from the nearest boundary of the Rifle Range site. Parks, sporting and recreation facilities in the local area include:

- Pitt Street Reserve and the nearby skate park
- Stockton Swimming Centre
- Griffith Park (concept design for district playground and street skate park)
- Ballast Ground (dog off-leash park)
- Hunter Street Reserve
- Breen Park
- Rawson Park
- Corroba Park
- Lynn Oval (cricket ground)
- North Stockton boat ramp (currently being upgraded)
- Fern Bay Reserve (playground, half basketball court and 2 tennis courts)
- Corroba Oval Courts (1 Basketball court)
- Darby Oval (5 Tennis courts)
- Newcastle Golf Club

Consultation indicates that there is a need for sporting facilities in Fern Bay – Fullerton Cove. Currently there are only two tennis courts in this area. Residents use sports facilities in Stockton and consultations indicate that the quality and facilities of the netball courts, the tennis courts and some other utilities require improvements. The Fern Bay Fullerton Cove Progress Association proposes that two dual marked netball and basketball courts be developed at the Fern Bay Reserve.

Existing Provision	Demographic need	Identified need	Rates of provision	Facility/service required
1 netball/ basketball court and 2 netball courts	Future population expected to be 9,341	Two multipurpose netball/basketball courts at Fern Bay Reserve	2 multipurpose courts per 10,000 people	One to two full sized multipurpose courts at Fern Bay.
4 tennis courts (2 in Stockton, 2 in Fern Bay)		Current supply adequate	2 tennis courts per 10,000 people	No requirement
4 playing fields in Stockton		No provision in Fern Bay, but no land available to support more fields there	1 sports ground (comprising two playing fields per 5,000 people	Adequate overall provision in the local area. Opportunities for provision of playing fields in Fern Bay could be explored in the future.

It is of note that seniors living developments in Fern Bay and Fullerton Cove include significant open space and social and recreational infrastructure to varying degrees including pools, tennis

courts, activity centres and meeting rooms that are available for the exclusive use of residents. As result, there is a lower demand for these services from these residents.

4.1.6 Education

There are three primary schools in the local area. Both Stockton and Fern Bay each have a public primary school. St Peters Primary School is located adjacent to the commercial centre in Stockton.

Stockton Public School currently has 267 enrolments which it considers close to capacity, with relatively stable enrolments in recent years. It has some out of area students from Fern Bay. Consultation with the school indicates that it is close to capacity, however, Department of Education long range plans consider that school classrooms are running at only 60% utilisation (indicating significant potential for absorbing growth). The plans also anticipate further growth in enrolments of 12 students by 2021².

Fern Bay Public School is small with only 34 enrolments in 2016, although this has increased significantly to 60 in 2017³. The school has one permanent and one demountable classroom⁴ and generous open space and recreation areas. It also uses the facilities in the adjacent Fern Bay including the fortnightly visits from the Port Stephens mobile library⁵. Consultation indicates that several factors have contributed to formerly low attendance by Seaside residents; by indicating an intention to attend Stockon Public School residents are eligible to go to Stockton Preschool, the only one in the local area, a historically poorer reputation of Fern Bay Public School compared to Stockton Public School, and the need to travel (by bus or car) to either facility eliminating this as a factor in choosing a local school. Although Department of Education long range plans appear to underrepresent current enrolments, it is still considered to be operating at 200% utilisation, indicating no capacity. With an area of 1.01 ha, the site has considerable space for expansion for accommodate a growing population.

St Peters Primary School currently has 136 enrolments and expects 150 in 2018. St Peters notes its enrolments have expanded significantly since 2015 largely through gain in students from Seaside who represent approximately one third of the school population. The school expects that the current capacity and future expansion would be sufficient to accommodate students from a growing population in the near future. The 2011 census indicates 18.4 percent of primary students attend Catholic schools and 73.2 percent attend government schools. 2011 census data also indicates that the proportion of students attending Catholic schools increases in high school, with 34.3 percent of students in the local area at Catholic schools and 60.3 percent at government schools. With the planned development of a new Catholic high school in Medowie, it is likely this school would attract some students from the local area.

Most high school students in Stockton attend Newcastle High School, however consultation indicates Fern Bay residents are more likely to attend catholic schools. The nearest and most common Catholic high school is San Clemente in Mayfield.

4.1.7 Health

Stockton has two GP surgeries, both of which indicate they have capacity for new patients. One has only started taking new patients in recent years due to increased demand. Together the services provide one full time and three part time doctors and two part time nurses, with one bulk billing and the other with some potential to bulk bill. A pharmacy is located in the Stockton commercial centre.

² NSW Department of Education, Stockton Public School Land Range Forecast

³ 2016 Fern Bay Public School Annual Report

⁴ NSW Department of Education – Long Range Schools Report

⁵ http://www.fernbay-p.schools.nsw.edu.au/school-plans

The Fern Bay Medical Centre is located in Palm Lake Resort but is open to the broader community. This centre has one full time doctor and a part time nurse and generally does not bulk bill. A commercial development approved for development in Seaside includes health consulting rooms.

Residents of seniors living community residents have indicated during consultations that a pharmacy is needed in the Fern Bay area.

An early childhood health service operates home visit services out of Stockton (in the same building as Meals on Wheels). Consultation with Newcastle City Council indicates that the service is experiencing a high demand from the new growth area of Seaside, and that the current building is not meeting the needs of the service, due it its age, cost and facilities.

Overall, current general medical services are considered adequate in the local area, with likely future expansion through an approved health services space in Seaside.

4.1.8 Aged services

Meals on Wheels operates from Stockton delivering meals to around 52 clients in the local area, three days a week. They have indicated that they have capacity for further growth in demand.

Westcott Aged Care facility provides 20 home care packages within the community and also has a respite care facility. Community transport is also available within the local area from Newcastle and Port Stephens Community Transport providers.

Each of the seniors living developments and the Westcott aged care facility have services to their residents which meet many of their daily needs. The Senior Citizens Association of Stockton has a facility in the Stockton commercial centre, next to Meals on Wheels where it is understood they hold social gatherings and activities and offer the centre for hire, though it was not possible to contact them for input to the SIA.

Current services appear to be meeting demand, however as the local area is ageing, and this is intensified by the ageing of the seniors communities, demand is expected to grow significantly. A greater diversity of outreach and locally available aged services will be needed in the future.

4.1.9 Public and active transport

Public transport in the local area is provided by bus and ferry services. A 10 minute ferry service operates between Queen Street Wharf in Newcastle and the Stockton peninsular. The service operates three times an hour in peak hours and one to two times an hour at other times.

The Department of Transport NSW buses service the Stockton area, with bus routes averaging 40 to 50 minutes to get to and from Newcastle CBD as the bus route is through the peninsula along Fullerton Street and across Nelson Bay Road Bridge. Bus times are varied, but generally area available every 30 minutes to an hour.

A school bus services Fullerton Cove, Seaside (with a bus stop inside the development), Fern Bay Public School, St Peters' Primary School and Stockton Public School. This bus is also used for students from St Peters to travel to and from OOSH care at Stockton Public School. The nearest bus stops at the entrance to Rifle Range and the entrance to the adjacent Stockton Centre.

It is also understood that regional coaches operating between Newcastle and Port Stephens regularly stop on Nelson Bay Road opposite Vardon Road for passengers to use the public toilets there. Passengers also regularly cross to the take away food shop on the opposite side of the road.

A shared pathway connects the southern end of the Stockton peninsular to the southern end of Fern Bay. The path runs along the western side of Fullerton Street, crossing at the roundabout

intersection with Nelson Bay Road and continuing north on the eastern side of Nelson Bay Road past the Stockton Centre, through the cemetery and terminating in Fullerton Street, Fern Bay. Further north, a footpath of variable width and quality continues to the bus stop at Bayway Village. A short section of footpath lines the houses on the western side of Nelson Bay Road at Fern Bay, but does not extend to the seniors living developments further north. The development of footpaths will be further assessed in the concept master plan at the development approval stage. There is currently only one pedestrian crossing (outside Stockton Centre) along this north-south road that connects the three suburbs. One pedestrian island is located in the southern sections of Fullerton Road in Stockton and one where the shared pathway crosses Fullerton Road. As a result, access to both western bus stops and much of the shared pathway involves crossing busy roads. In recent years a student was fatality injured crossing Nelson Bay Road.

4.1.10 Emergency Services

The Stockton Fire and Rescue is a retained station that is usually staffed during business hours and is otherwise supported by retained crew in the community. No obvious changes in the number of fire or rescue calls have been observed in recent years and it is likely that it will be adequate to meet the needs of the growing community.

Stockton Ambulance is staffed 24 hours, 7 days a week, with one day time and one night time shift each day. There has been increases in demand state wide with an ageing population, and this is also true of the Stockton-Fern Bay area.

The Stockton Police Station is staffed for up to four shifts per week, with service outside these times provided by the Waratah station. Local staff indicate that incidences in the area have increased in keeping with trends in other areas (but not really a reflection on the growing population) and do not note any specific concerns or hot spots, although incidents are more common in Stockton, than in the northern areas.

4.1.11 Internet and technology

NBN fibre to the node is currently being installed in the local area with connection imminent. Availability of quality broadband will enhance the ability of local service providers and businesses to operate efficiently and enhance connectivity for residents.

Consultation indicates that there are several areas, primarily in Fern Bay and Fullerton Cove where there is no, or very patchy mobile reception, including areas of the Rifle Range.

4.1.12 Fresh food and retail

A small commercial centre is located along Mitchell Street in Stockton. The centre includes a small format grocery store, bakery, butcher, pharmacy, two banks (credit unions), newsagent and a number of other specialist shops and services. However, the main shopping outlets close to the area include the Newcastle CBD or the Mayfield shopping centre. A number of local residents also shop at Medowie. A take away shop in Fern Bay on Nelson Bay Road is the only public commercial facility in Fern Bay. Consultation has also indicated that it is common for elderly residents on restricted drivers licenses to shop at Kooragang (3.5 km from Stockton bridge) where an express supermarket is adjacent to a petrol station which defines the spatial limit of their restricted licenses. Consultation has indicated that many residents of Fern Bay and Fullerton Cove consider a supermarket is needed in the area. Stockton residents have also indicated the need for a larger format supermarket that is more cost competitive.

A commercial development in Seaside has been approved to include a neighbourhood shop which is likely to serve the basic daily needs of local residents. It also understood that there is commercial interest in rezoning some land along Nelson Bay Road for a supermarket and commercial area, although no such zoning has been approved to date.

5. Consultation

5.1 Approach

Consultations to inform the SIA were through face-to-face meetings and phone calls with key stakeholders. Consultation has focussed on the overall provision and capacity of existing social infrastructure, and existing or expected social issues relevant to the proposal and the future population. -

GHD has consulted with;

- Newcastle City Council and Port Stephens Council
- Defence Families Association
- NSW Department of Education
- Stockton Publc School and St Peters Primary School
- Fern Bay Fullerton Cove Progress Association
- Stockton Library
- Facility managers of seniors developments (Palm Lakes Resort, The Cove, Bayway Village, Westcott Aged Care)
- Stockton Police, Fire and Ambulances services
- Local service providers, including medical centres, childcare, preschool and OOSH providers in Stockton and Fern Bay

5.2 Consultation outcomes

The outcomes of all discussions were recorded by GHD and have been reviewed to identify key themes and issues outlined below.

Themes	Issue							
Population change and development	A diverse community with varied access to services and varied socio- economic status							
	Extensive new development in seniors living in the local area, with potential expansions in the future							
	Seaside, a new development aimed towards a younger demographic is resulting in new families or couples re-locating to the area							
Social infrastructure	Demand for childcare facilities and sportsgrounds/community centres to facilitate the needs of new families with younger children							
	Baby boom in the local area of primary school aged children, highlighting the need for both pre-schools, primary schools and high schools							
	The Port Stephens mobile library van goes to the Fern Bay community hall, but cannot go to Seaside development due to the size of the van and the narrow roads							
	The Fern Bay Community Hall is planned to be rebuilt and there are no other public buildings for community use.							
Access and mobility	Nelson Bay Road acts as a barrier to community cohesion as it is not safe to cross, and there are not adequate paths to connect the developments							

Themes	Issue
	community would like a shared cycle-way and footpath (to also support motorised scooters) to extend along Fern Bay and to the Ferry, to improve access to amenities and alleviate parking pressures, which could promote social engagement
Social issues	Trend of social exclusion/isolation created through the developments; with both a larger child aged and elderly demographic, an inadequate number of facilities to service both age groups and physical urban forms (i.e. roads) creating a barrier between these populations

The outcomes of the consultation have been considered in the assessment of potential social impacts and the recommended mitigation measures (section 6).

6. Social impact assessment

This section considers the potential social impacts and opportunities that may result from residential development (as informed by the concept master plan) of the Rifle Range, should the site planning proposal be approved. The assessment addresses the potential for residential development rather than the master plan itself in the context of the potential of the site to support a socially sustainable community. As such, it does not consider in detail any elements of the master plan, but rather the vision and nature of development it would facilitate.

6.1 Accommodation and housing

Rezoning of the Rifle Range site would facilitate increased housing supply in Fern Bay and the local area, contributing to the Hunter Regional Plan 2036. The site is estimated to yield 249 dwelings, accommodating in the order of 635 people. Residential development of the site would also respond to the directions for revitalising existing communities, creating compact settlements, and promoting housing diversity contained in the *Hunter Regional Plan 2016* and the *Draft Plan for Growing Hunter City*,

The development, whilst not providing affordable housing as such, is accommodating key worker (Defence personnel) housing. It would provide 125 dwellings for Defence families within an accessible distance of their place of work. The delivery of housing for Defence personnel would support social diversity, housing diversity and affordability for these key workers in the region.

The concept master plan supports diverse housing options with dwellings sizes ranging from two to four bedrooms and including typologies that integrate potential fonzie or granny flats. This is particularly relevant for Fullerton Cove and Stockton with higher proportions of single parent families and seniors within their community. As indicated in Table9 the master plan envisages a higher proportion of dwellings with fewer bedrooms that would suit these varied household types. This is especially important for local housing diversity given that consultation indicates the Seaside development includes predominantly larger dwellings (4 bedrooms and larger) and that many of the smaller dwellings currently in the local area are within private seniors communities.

	Stockton	Fern Bay	Fullerton Cover	Regional Area	Concept master plan
One Bedroom	5%	7%	8%	5%	20%
Two Bedrooms	27%	35%	14%	24%	10%
Three Bedrooms	48%	37%	42%	45%	67%
Four + Bedrooms	18%	19%	36%	24%	3%
Average number of bedrooms	2.8	2.7	3.1	3.0	

Table 9 Dwelling size

6.2 **Population change and impacts on social infrastructure**

Rezoning of the Rifle Range site would facilitate it's residential development bringing in a new population to the peninsula. As outlined in section 3.8, development of the order demonstrated in the concept master plan is likely to yield of 249 dwellings and a population of 635. It is likely that around half of new residences will be occupied by Defence households and the other half will be private owners and renters, likely attracting both younger couples and families and empty nesters, due to the diverse housing typologies envisaged. The demographic structure of such a population is expected to vary somewhat from the 2011 population, as illustrated in section 3.1.

Development of the Rifle Range site would be unlike recent developments in Fern Bay and Fullerton Cove. Whilst these have increased the population significantly in these suburbs, they have occurred in considerably insular nodules, spatial isolated from the established residential area of Fern Bay. Residential development of the Rifle Range according to the concept master plan would in effect be an extension to this established area, more than doubling its 2011 recorded population of 520 people.

6.2.1 Community centres and spaces

Community centres

As indicated in section 4.1.1 there are no public community centres in Stockton, with privately held halls and clubs providing spaces for community gatherings. The Fern Bay Hall is an old facility and a development application for its replacement and amalgamation with the tennis club is in progress.

There is an existing need for an additional public community centre or space in the local area. As there are no existing public cultural, youth or seniors spaces in the local area, such a new community spaces should be multipurpose with the capacity to provide spaces for these users groups and the services and programs they require. Within the area surrounding the proposed development there is existing demand for an additional public community centre or space. The proposed development at Fort Wallace together with the proposal for Rifle Range has the potential to result in an additional 635 residents. This increase in population would therefore contribute to this demand for a new facility, however it is anticipated that the needs of these future residents could be addressed through the refurbishment of Fern Bay Hall. As the development application for the hall is still in progress, then consideration should be given for multipurpose facilities that could meet the demand both of the new population and the surrounding community.

6.2.2 Libraries

Whilst the potential new population of Rifle Range would add to the demand for currently under met services, this is not a significant increase overall, with minor impact on the determination of need for this infrastructure. Using the People Places (State Library of NSW, 2012) population benchmark, the additional Rifle Range population would increase the proposed needs for space, by 48m².

The development would however put further demand on the mobile Port Stephens library. Council provision of services to an expanded population in this par to Fern Bay could explore alternative service mechanisms that could be integrated into the proposed new Fern Bay community hall (e.g. book return facilities, order collection facilities, increased mobile service frequency, cooperation/integration with the Fern Bay Public School).

6.2.3 Child care

Residential development of the Rifle Range site would likely generate in the order of 10 long day care places, 9 preschool places and 12 OOSH care places for new residents. The potential relocation of the Defence preschool to Medowie may result in some DHA families using this facility. This number of places is moderate in the context of overall demand in the local area, as discussed in section 4.1.4. To support a socially sustainable community at the Rifle Range, there will be a need for existing service gaps to be addressed and have capacity for further population growth. Much of this future provision is expected to be delivered by the private or not for profit sector.

6.2.4 Recreation facilities

There is existing need for further sports courts in the Fern Bay area, which, if built, would likely be used by Rifle Range residents.

Rezoning of the Rifle Range site for residential development could facilitate the delivery of public access to a new community park (approximately 6,500 m²) with a playground within the development, and formal access to the beach and dune environment via a dune boardwalk linking to Stockton in the south, including a beach lookout, as described in the concept master plan.

As noted above, the growing local area has an existing shortage of sports courts, and the population growth facilitated by the proposed rezoning would add to this demand.

6.2.5 Education

Residential development of the Rifle Range site would likely generate in the order of 59 primary school aged and 45 secondary school aged students. The Rifle Range would fall within the catchment of Fern Bay Public School (60 students on a 1.01 ha site). As noted in section 4.1.6, there is no current capacity at the school however consultation indicates it is actively encouraging new enrolments. The school has adequate land to expand its current number of classrooms to accommodation this demand, even though it could represent a potential almost doubling of current enrolments.⁶.. Fern Bay Public School is a 400 m walk from the boundary of the Rifle Range, with the furthest residents about 1.1 km from the school. The proposal includes a shared path which would facilitate this access for students to the school If the proposed OOSH services are available at the school, it is likely that the proximity of the school and availability of these services will attract a high proportion of resident students to the school.

Capacity at St Peters Primary School is being rapidly taken up by students of the expanding Seaside development however the school suggests it has capacity for future expansion and would be sufficient to accommodate students of a development at the Rifle Range. The 2011 census indicates 18.4 percent of primary students attend Catholic schools and 73.2 percent attend government schools. 2011 census data also indicates that the proportion of students attending Catholic schools increases in high school, with 34.3 percent of students in the local area at Catholic schools and 60.3 percent at government schools. With the planned

⁶ NSW Department of Education, Stockton Public School Land Range Forecast

development of a new Catholic high school in Medowie, it is likely this school will attract some students from the local area.

Overall, it is considered that local primary schools have the capacity (some expansion) to accommodate new residents at the Rifle Range, and that schools planning should consider this new population in Department of Education facilities planning.

Should rezoning of the site be approved, it is recommended that Council advise the Department of Education of this change to consider in their planning, with the expectation that Fern Bay Public School be expanded.

6.2.6 Youth services

There are no youth services or facilities based in the local area. There is a need for a public indoor facility that can host services and activities for young people and also provide a venue to gather and socialise informally. This could be a new multipurpose community centre, as a specific youth centre is not justified at the local level, nor recommended. A multipurpose space would need to be located in close proximity to other services and attractions and easily accessible by public transport. Youth services and programs could also be hosted in the new Fern Bay Hall, and could be included in a Community Development and Welcome Program as discussed in section 6.4.

6.2.7 Aged services

Many of the facilities and programs available to seniors in the local area are provided in the seniors developments, exclusively for their residents. The implications of this inequality in access to services affects social cohesion and connectedness between older residents in different parts of the local area. Older residents of the Rifle Range site would have access to limited aged services in the local area.

Seniors services and programs could also be hosted in the new Fern Bay Hall, and could be included in a Community Development and Welcome Program as discussed in section 6.4.

6.3 Access and mobility

Proximity of residential areas to local infrastructure and services and other destinations of interest is key to their viability. Access and connectivity is a key issue in the local area with spatial separation between Stockton and Fern Bay/Fullerton Cove, and many of the seniors and residential developments in Fern Bay and Fullerton Cove in discreet, independent and often private pockets that discourage or prevent connectivity between communities and limit access. The Rifle Range however will adjoin the established residential area of Fern Bay, with access to passive recreation spaces (Stockton Beach and Worimi Conservation Lands) and within walking distance (within 800 m) to the school, community hall, local convenience store and bus stops on Nelson Bay Road. Should development of the planned shared path along Nelson Bay Road and footpaths along Vardon Road be developed, the Rifle Range would have a quality active travel link south to Stockton and the ferry service to Newcastle CBD. Currently the route comes to within 400m of the site, terminating as it leaves the Stockton Cemetery.

Any likely future commercial development in Fern Bay is likely to be to the north, so the importance of the development of a shared path (for pedestrians, cyclists and in the local area increasingly motorised scooters) is also important. Access to bus stops on Nelson Bay Road is also dangerous for pedestrians, as the road has a 70km/hr speed limit with considerable traffic and no safe crossing points. Consultation indicates that traffic management measures at the intersection with Vardon Road are being discussed with NSW Roads and Maritime. The

inclusion of safe pedestrian crossing in any such changes will be required to support safe active travel in the local area and for residents of the Rifle Range.

Walkable streets with footpaths and active travel networks within the site would facilitate this local mobility and attract and facilitate public access into and within the site, especially the community park and to the boardwalks, which could potentially be part of a longer coastal walk connecting to Stockton.

Consultation indicates that mobile phone connectivity is unreliable on the peninsular, in particular in parts of Fern Bay and the Rifle Range. Future site planning would need to ensure reliable mobile phone reception is available across the site.

Residential development of the Rifle Range, as per the concept master plan will also facilitate public access to a formerly restricted area and enhance access to the coastal area.

6.4 Community cohesion and connectedness

A sense of connectedness is an important contributory factor to achieving significant positive impacts on health, well-being, and mental health for both individuals and groups of people. Communities with strong social capital and sense of identity have improved levels of passive surveillance, stronger informal assets that can be relied upon by members and more inclusive social networks, which celebrate diversity.

A challenge facing potential development of the Rifle Range site is the development of a sense of community and belonging, both internally for residents within the development and for those residents within the broader community. For new residents, this sense of community and belonging can be developed in many ways including:

- Getting to know neighbours.
- Being aware of and using local services.
- Being aware of and involved in local sports or common interest groups.
- Creating new social networks.
- Connecting with people with similar backgrounds.
- Being involved in the decision making process in the local area.

This challenge is exacerbated in the local area by the existing social and spatial separation between Stockton and Fern Bay and between the various discreet developments within Fern Bay and Fullerton Cove. Development of the Rifle Range would avoid creating such isolation, instead creating a public and permeable development that directly connects to an existing community.

For Defence families social connections and community cohesion is of great importance. As a frequently mobile population, they are often remote from friends and family, and rely on each other for social and support networks. The community centre at Williamstown RAAF base will be an important facility for Defence families to meet and development social networks within the Defence community and also learn about the local and regional area. The community park proposed in the concept master plan will also provide important social congregation points in the community for people from both within and outside the development to meet and socialise. However, as noted in section 6.2.1 there is an existing need for a local public community centre or space to provide an accessible and affordable place for people to come together. Such a space could also support the delivery of varied programs and services.

Fern Bay Community Hall would meet some of this need, however it is not a multipurpose centre and is thus limited somewhat in it's potential uses.

Ensuring development of a welcoming and inclusive community delivers sustainable social outcomes for both individuals and the community. Effective and efficient activation of the communal spaces within the site and use of facilities outside the site for activities that are inclusive of the surrounding community (of both adjacent and broader residents of Fern Bay such as Seaside residents and seniors development residents) would contribute to positive social outcomes and are recommended to be delivered for residents upon development of the site.

It is recommended that a Community Development and Welcome Program be prepared and resourced for the site by any developer of the site. The program would assist new residents with a particular focus on making new residents feel welcome and part of the community, on activating community spaces within the development, and more inclusive activities that engage the broader local community. A particular focus of the program would be to facilitate inclusive activities and social networks between residents of the Rifle Range and the adjacent established residential area of Fern Bay. The program would enhance and complement existing programs and natural social connections such as through schools, sports clubs, seniors groups and playgroups, and include programs for those not engaged, such as youth. The program could potentially be delivered in partnership with a non-profit/community-based organisation. Such a partnership has the benefit of supporting community/non-profit groups; connecting to community networks; utilising grant funding/sponsorship where available and potentially long-term sustainability of the program.

6.5 Health and wellbeing

Access to social and economic resources is essential to support healthy lifestyles through all stages of life. Access to health services, education, child and older peoples care, efficient public transport, to passive and active recreation areas and programs, to fresh food and daily needs, and to public and social spaces is needed to make places liveable and socially sustainable.

The Rifle Range site is located outside a desirable walking catchment to most services and facilities (with the exception of the primary school, reserve and community hall), and will have many of the daily needs of it's community available around 5km away in Stockton. If the proposed shared path identified by Council was to be developed, this would provide a continuous route to Stockton. Alternatively, the potential development of the dune boardwalks would also provide an alternate recreation path to the south.

In addition to the social infrastructure needs identified in section 0, promoting the use of active travel modes to new residents for local trips (e.g to the park, and to school) would enhance their uptake and set in place new travel habits. A community development and welcome program (as discussed in section 6.4) should include an objective as promoting this mode uptake. It should also promote the accessibility of Newcastle by ferry for both commuting and recreational access. Further, the social connections that the program would seek to develop under the plan would deliver social and health benefits across diverse age groups in the new and existing community.

Current access to fresh food is limited in the local area (a small format supermarket and local butcher), with consultation indicating that many people shop outside the local area at major supermarkets. With significant commercial interest in the development of a major supermarket in Fern Bay, it is likely that this will result in coming years and would adequately service the local area.

The Health Foundation is a key driver in Australia of planning for healthy communities. Their 2016 Master Checklist for Healthy Active Living by Design, identifies a number of considerations of relevance to planning for healthy populations at the level of rezoning for residential development. These considerations have been used to consider the health impact of the

rezoning of Rifle Range. The checklist is a tool to help development encourage and support physical activity and health outcomes including healthy eating. The key considerations with regard to the development are considered in Table 10. In general, at this stage of site planning, the concept master plan supports or enables future development in compliance with many of the principles of Healthy Active Design. Those aspects not consistent with the principles have also been identified in other sections of this SIA.

Principle Consideration	Assessment	Recommendation
Destinations : <i>Access</i> – are they within a safe and easy 400m-800m catchment	Facilities internal to the site are accessible and some locally, however most local services and destinations are more than 5km from the site	Implement the Port Stephens Pathways Plan (section 6.3)
<i>Access</i> – do paths and cycleways connect surrounding communities	Site connects well to the established residential area of Fern Bay	
Open space : <i>Access</i> : at least one space within 400m-800m walk	Community park within this catchment	
Sense of place: Have heritage and cultural features been acknowledged, integrated and protected?	Yes	Interpretation and information about the Indigenous history and significance of the area is included in master planning.

Table 10 Healthy Active by Design Review

6.6 Cultural values and beliefs

Cultural values provide significant meanings and reference points for individuals and groups. The celebration and protection of cultural values is a key element in building strong and resilient communities. The Port Stephens Integrated Plans identify the need to increase access to cultural activities (including the mobile library), increase protection of culturally significant Aboriginal places and objects and increased access to, and opportunities for, recreation and leisure.

The proposed concept master plan would avoid disturbing areas likely to contain significant Aboriginal items and a layout that respects the impact o the development on the boundaries of the Worimi Conservation Lands. The plan would also support improved local pedestrian access to the Stockton Beach and via the dune boardwalks, to the surrounding coastal area, with the potential to create a significant recreational coastal walk.

Consultation with local Aboriginal groups (as part of the Aboriginal Heritage Study⁷) concluded that the Stockton Peninsula, including the site, is considered to have very high Aboriginal

⁷ The SIA team was unable to gain input from the Worimi Local Aboriginal Land Council during the SIA study

cultural value to the Worimi people due to a nearby burial site. The Rifle Range has heritage and historic significance due to its former defence use.

It is recommended, if the Rifle Range rezoning is approved, that further consultation should be undertaken with the Worimi Local Aboriginal Land Council and other Aboriginal elders within the area to ensure Aboriginal cultural values of the area are integrated into detailed site planning.

6.7 Local economy and employment

Renewal of currently unused areas through residential expansion will generate increased demand for services and businesses in the local area, further supporting the demand for a growth in retail and social services in the local community. Development of the Rifle Range site to accommodate Defence families is also important for the ongoing sustainable operation of the Williamstown RAAF base, being able to provide quality accommodation close to their personnel's place of work. As identified in the *Draft Plan for Growing Hunter City*, Fern Bay, as part of the Norther Gateway is an important residential area proximal to employment areas in Newcastle city, the port and airport. The planning proposal would therefore complement existing employment lands.

6.8 Crime and safety

Consideration for crime and public safety relate to:

- The safety of new residents in the existing environment.
- How the development will alter the built environment and create or reduce public safety.
- How new residents themselves alter community safety in the area.

Crime in the local area is largely comparable to that in Newcastle, however there are higher levels of domestic and sexual assault. The rezoning of the Rifle Range is not expected to impact the incidence of such crimes, however any future residential development on the site should include awareness raising programs for issues associated with this violence and of support services for victims of it as part of a developer led community development and welcome program.

The concept master plan would create a community with high levels of passive surveillance and aim to create accessible and visible shared open spaces. Should rezoning be approved for the sites, further planning for the site would incorporate Crime Prevention Through Environmental Design (CPTED) principles to maximise community safety. This will be an important consideration in the planning and activation of the heritage precinct.

A Community Development Program could also activate public spaces within the development and in the Fern Bay Reserve and Hall, create a sense of safety and security for community members (both within and surrounding the proposed development) and as a result enhance passive surveillance. The importance of vibrant, active, inclusive and safe communities is reinforced in the Port Stephens Integrated Plans which identify community perceptions of safety as key measures in improving community safety.

6.9 Summary of social impacts

Table 11 below provides a summary of the social impacts, benefits and needs relevant to the potential development of the Rifle Range sites in a manner suggested by the concept master plan, and recommendations in response to these identified issues.

Table 11 Summary of social impacts

Potential impact/risk/opportunity	Impact type	Social Considerations for future development
Accommodation and housing		
Increased housing supply and diversity in Northern Gateway, including smaller format dwellings and varied numbers of bedrooms	Positive	
Delivery of affordable and accessible housing for Defence personnel	Positive	
Population change		
Development will attract households at more diverse life stages and household types	Positive	
Social infrastructure		
Existing unmet need for <i>community space</i> <i>and library</i> services will be increased by a population at Rifle Range	Need	Port Stephens Council consider potential for the proposed Fern Bay Hall to be augmented to increase its multifunctional capacity
		Short term increases to Stockton Library hours and increased frequency of Port Stephens mobile library service
Absence of <i>cultural or youth spaces</i> in the local area which is spatially isolated	Need	New multipurpose facility to meet diverse community needs (community/youth/cultural/ seniors, library)
Existing unmet need for <i>preschool and OOSH services</i> , especially in Fern Bay	Need	Port Stephens Council to facilitate private sector delivery of preschool and OOSH services in the local area,
Existing need for sports courts and playing fields in Fern Bay	Need	and explore options for sports courts and fields in Fern Bay
Potentially significant increase in student numbers thus a need for expansion in Fern Bay Public School .	Need	Regional Councils liaise with Department of Education in order to plan for any enrolment growth if the Rifle Range is rezoned
The Rifle Range would deliver a local public playground, open space dune boardwalks and beach access	Positive	
Access and mobility		

Potential impact/risk/opportunity	Impact type	Social Considerations for future development
Zoning would support public recreational access to the natural areas, including a coastal dune boardwalk to run along the peninsular	Positive	
Pedestrian access from the Rifle Range to bus stops on Nelson Bay Road is not safe	Need	Port Stephens Council and NSW Road and Maritime consider pedestrian and cycle crossing options for the intersection of Vardon and Nelson Bay Roads
Active travel access to local services (in Stockton) is not complete	Need	Port Stephens Council develop shared paths as per the Port Stephens Pathways Plan 2016, and ensure future commercial development is located along these networks
Limited mobile phone coverage in the area	Negative	Any site developer ensure adequate mobile phone reception throughout the site
Community cohesion and connectedness		
Need to promote social connection between Rifle Range residents and adjacent established Fern Bay residents. Existing communities of the local area are socially fragmented and lack public spaces to connect making inclusion of new residents difficult. This is particularly relevant for teenagers in Defence families and seniors who do not have access to facilities in the private communities	Negative	Regional Councils consider a multipurpose community centre A community development and welcome program be pursued by any site developer
Local economy and employment		
Residential development in an area that supports existing employment lands, especially for Defence staff at Williamstown Base	Benefit	
Growing population to increase demand for services in the area which may assist in prompting private sector delivery	Benefit	
Crime and safety		
Site design should minimise crime risks and maximise resident and visitor safety	Risk	Undertake a CPTED assessment for any future master plan

Potential impact/risk/opportunity	Impact type	Social Considerations for future development
		Implement Community Development and Welcome Plan to address existing crime issues and increase passive surveillance

7. Conclusion and recommendations

The social impact assessment has not identified any social considerations that would preclude the development of the site for residential development.

The proposed rezoning of the Rifle Range would facilitate the delivery of increased housing and housing diversity for key workers at a range of life stages. The concept master plan envisages the delivery of 249 dwellings, with around half of these occupied by Defence households. The site would likely accommodate in the order of 635 residents, would effect renewal of currently unutilised land within a designated future housing growth area and facilitate public access to local natural areas. The development would build on the established residential community of Fern Bay and its facilities, creating a more compact settlement type than has resulted in other areas of Fern Bay in recent years. It would also support the ongoing needs for quality, proximal housing for Defence families working in the region and particularly at the Williamstown RAAF base.

The site is within a local area undergoing considerable development and recent population growth and with existing unmet needs for social infrastructure. Additional social infrastructure (in terms of facilities, services and programs) would be required to support the development of a sustainable, healthy and inclusive community. The recommendations within this SIA and summarised below have been developed to inform future planning that would be required to support socially sustainable residential development under the proposed planning changes.

Area of Change	Proposed mitigation or enhancement measure
Social infrastructure	Port Stephens Council consider potential for the proposed Fern Bay Hall to be augmented to increase its multifunctional capacity
	Short term increases to Stockton Library hours and increased frequency of Port Stephens mobile library service
	New multipurpose facility to meet diverse community needs (community/youth/cultural/ seniors, library)
	Port Stephens Council to facilitate private sector delivery of preschool and OOSH services in the local area, and explore options for sports courts and fields in Fern Bay
	Regional Councils liaise with Department of Education in order to plan for any enrolment growth if the Rifle Range is rezoned
Access and mobility	Future site planning include pedestrian access to the Stockton Centre bus stop and pedestrian crossing Port Stephens Council and NSW Road and Maritime consider pedestrian and cycle crossing options for the intersection of Vardon and Nelson Bay Roads
	Port Stephens Council develop shared paths as per the Port Stephens Pathways Plan 2016, and ensure future commercial development is located along these networks
	Any site developer ensure adequate mobile phone reception throughout the site

Area of Change	Proposed mitigation or enhancement measure
Community cohesion and connectedness	Regional Councils consider a multipurpose community centre A community development and welcome program be pursued by any site developer
Crime and safety	Undertake a CPTED assessment for any future master plan Implement Community Development and Welcome Plan to address existing crime issues and increase passive surveillance

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Appendix A Demographic summary

				_			r			r			
Basic Community Profile File Name (Incl File Extension Jds or Jdsx):	FernBay.xis				Stockton.xls			FullertonCove.xis			Regional Area		
	No	% Within File	% Of Precinct	No	% Within File	% Of Precinct	No	% Within File	% Of Precinct	No	% Within File	% Of Precinc	
Population:													
Total Persons	1625	100.0%	0.7%	4195	100.0%	1.9%	300	100.0%	0.1%	213342	100.0%	49.39	
Age groups:													
0 to 4 years	108	6.5%	0.8%	180	4.3%	1.3%	9	3.0%	0.1%	13132	6.2%	49.49	
5 to 11 years	95	5.8%	0.5%	277	6.6%	1.6%	17		0.1%	17437	8.2%	49.49	
12 to 17 years	59	3.6%	0.4%	260	6.2%	1.7%	17		0.1%	14922	7 0%	49.4%	
18 to 24 years	67 163	4.1%	0.3%	327	7.8%	15%	26		0.1%	22031 28243	10.3%	49.59	
25 to 34 years 35 to 49 years	245	10.0%	0.6%	883	21.0%	1.3%	61		0.1%	42508	13.2%	49.39	
50 to 59 years	193	11.9%	0.7%	775	18.5%	2.7%	61		0.1%	27264		49.19	
60 to 69 years	349	21.5%	1.5%	534	12.7%	2.3%	55		0.2%	22583	10.6%	49.09	
70 to 84 years	312	19.2%	1.5%	432	10.3%	2.1%	33	11.0%	0.2%	19976	9.4%	49.0%	
85 and over years	35	2.2%	0.6%	148	3.5%	2.7%	0	0.0%	0.0%	5247	2.5%	49.19	
Under 18 years	200	16.0%	0.6%	717	17.1%	1.5%	43	14.3%	0.1%	45491	21.3%	49.49	
15 years and over	1395	85.8%	0.8%	3626	85.4%	2.0%	267	89.0%	0.1%	175405	82.2%	49.3%	
Median Age (years)	54			47			50			40			
Cultural Diversity:													
Indiana and a second	40	2.5%	0.6%	148	3.5%	2.3%	11	3.7%	0.2%		2.9%	49.2%	
Indigenous persons		2.5%	0.039	140	3.074	2.575		3.179	0.2.9	6251	2.5%	49.2.9	
Persons born in Non Main English Speaking countries	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	
Language spoken at home other than English	41	2.5%		100	2.4%		11	3.7%		14237	6.7%		
Speaks English Only	1512	93.0%		3862	92,1%		265	88.3%		189373	88.8%		
Speaks other language and speaks English very well or well	30	1.8%		43	1.0%		9	3.0%		8592	4.0%		
Household Characteristics:													
Family households	472	64,5%	0.8%	994	66.8%	1.8%	83	82.2%	0.1%	54852	66.5%	49.3%	
Lone person household	250	34.2%	1.0%	442	29.7%	1.9%	18	17.8%	0.1%	23156	28.1%	49.2%	
Group household	10	1,4%	0.2%	52	3.5%	1.2%	0	0.0%	0.0%	4418	5.4%	49.7%	
Average household size (number of persons)	2.1			2.3			2.8						
Family Characteristics:													
Total families	478		0.8%	1,014		1.8%	83		0.1%	55862		49.3%	
Couple family with children	135	28.5%	0.6%	382	37.7%	1.7%	29	34.9%	0.1%	22445	40.2%	49.4%	
Couple with children under 15 years	99	20.7%		232	22.9%		15	18.1%		15400	27.7%		
Couple with children over 15 years	37	7.7%		150	14.8%		14	16.9%		6979	12.5%		
Couple family without children	270	56.5%	1.2%	379	37.4%	1.6%	42	50.6%	0.2%	22430	40.2%	49.2%	
One parent family	67	14.0%	0.6%	235	23.2%	2.3%	12	14.5%	0.1%	10003	17.9%	49.2%	
One parent with children under 15 years	26	38.8%	0.5%	110	46.8%	2.1%	7	58.3%	0.1%	5187	51.9%	49.3%	
One parent with children over 15 years	41	61.2%	0.8%	125	53.2%	2.5%	5	41.7%	0.1%	4816	48.1%	49.19	
Other family	5	1.0%	0.5%	18	1.8%	1.8%	0	0.0%	0.0%	9.84	1.8%	49.4%	

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Basic Community Profile File Name (Incl File Extension .xts or .xtax):	FernBay.xls				Stockton.xls		FullertonCove.xls			Regional Area		
	No	% Within File	% Of Precinct	No	% Within File	% Of Precinct	No	% Within File	% Of Precinct	No	% Within File	% Of Precinct
Other characteristics:												
Need for assistance	154	9.5%	1.2%	714	17.0%	5.4%	15	5.0%	0.1%	12295	5.8%	48.3%
Dwellings:												
Separate House	732	95.8%	1.1%	1,277	75.1%	2.0%	88	69.3%	0.1%	62738	67.8%	49.2%
Semi-detached, terrace house, townhouse	0	0.0%	0.0%	98	5.8%	1.0%	7	5.5%	0.1%	9655	10.4%	49.7%
Flat, unit or apartment	0	0.0%	0.0%	105	6.2%	1.1%	0	0.0%	0.0%	9218	10.0%	49.7%
Other dweIings	0	0.0%	0.0%	6	0.4%	0.8%	7	5.5%	1.0%	716	0.8%	49.6%
Not stated	0	0.0%	0.0%	3	0.2%	2.9%	0	0.0%	0.0%	99	0.1%	49.3%
Total occupied private dwellings	732	95.8%		1489	87.6%		102	80.3%		82425	89.0%	
Unoccupied private dwellings	32	4.2%	0.3%	211	12.4%	2.0%	25	19.7%	0.2%	10172	11.0%	49.3%
Tenure Type:												
Fully owned	476	67.0%	1,7%	537	37.2%	1.9%	49	50.0%	0.2%	27076	34.0%	49.0%
Owned with a mortgage	145	20.4%	0.5%	416	28.8%	1.6%	42	42.9%	0.2%	26085	32.8%	49.4%
Rented (Total):	89	12.5%	0.3%	490	34.0%	1.8%	7	7.1%	0.0%	26433	33.2%	49.5%
Real estate agent	27	30.3%	0.2%	251	51.2%	1.7%	0	0.0%	0.0%	14283	54.0%	49.5%
State or territory housing authority	0	0.0%	0.0%	136	27.8%	3.0%	0	0.0%	0.0%	4354	16.5%	49.2%
Person not in same household	12	13.5%		87	17.8%		4	57.1%		5582	21.1%	
Housing co-operative/community/church group	0	0.0%		3	0.6%		0	0.0%		609	2.3%	
Other landlord type	43	48.3%		10	2.0%		0	0.0%		1181	4.5%	
Landlord type not stated	7	7.9%		3	0.6%		3	42.9%		424	1.6%	
Other Tenure Type	3	3.4%	0.5%	16	3.3%	2.4%	0	0.0%	0.0%	643	2.4%	49.3%
Not stated	18	20.2%	0.8%	31	6.3%	1.4%	3	42.9%	0.1%	2190	8.3%	49.4%
Individual Income:												
Median Individual Income (S/weekly)	396			508			442			531		
Negative/Nil Income	58			160	4,4%		14	5.3%		10963	6.3%	
\$1-\$199	82	5.9%		221	6.1%		16	6.1%		12806	7.3%	
\$200-\$299	298	21.4%		357	9.9%		38	14.5%		20746	11.8%	
\$300-\$399	213			547	15,1%		39	14.9%		21040	12.0%	
\$400-\$599 \$600-\$799	208	15.0%		340	21.3%		31	11.8%		22172	12.6%	
\$800-\$799	70			236	6.5%		28	10.7%		13657	7.8%	
\$1,000-\$1,249	69			230	6.2%		12	4.6%		13368	7.6%	
\$1,250-\$1,499	48			173	4.8%		9	3.4%		9377	5.3%	
\$1,500-\$1,999	74			204	5.6%		16	6.1%		11612	6.6%	
\$2,000 or more	54	3.9%		160	4,4%		9	3.4%		9012	5,1%	
Individual income not stated	106	7.6%		230	6,4%		29	11.1%		12771	7.3%	

Basic Community Profile File Name (Incl File Extension .xls or .xlsx):		FernBay.xls			Stockton.xis		1	FullertonCove.xl	•	Regional Area				
	No	% Within File	% Of Precinct	No	% Within File	% Of Precinct	No	% Within File	% Of Precinct	No	% Within File	% Of Precinct		
Household Income:														
Madine Maurah ald Income (Plausalda)														
Median Household income (\$/weekly)														
	690			1.072			1,062			2164				
Negative/Nil Income	6	0.9%		17	1.2%		0	0.0%		824	1,1%			
\$1-\$199	11	1.6%		25	1.8%		4	4.3%		1124				
\$200-\$299	31	4.5%		42	3.0%		4	110 11		2749				
\$300-\$399	108	15.5%		130	9.4%		5	01010		6826	8.9%			
\$400-\$599	140	20.1%		166	12.0%		12			8626	11.3%			
\$600-\$799	91	13.1%		149	10.8%		13			7427	9.7%			
\$800-\$999	56	8.1%		114	8.2%		8	0.0 %		6514	8.5%			
\$1,000-\$1,249	38	5.5%		109	7.9%		8	8.5%		6387	8.4%			
\$1,250-\$1,499	26	3.7%		95	6.9%		11			5706	7.5%			
\$1,500-\$1,999	45	6.5%		147	10.6%		7			9111	11.9%			
\$2,000-\$2,499	35	5.0%		129	9.3%		10			6531	8.6%			
\$2,500-\$2,999	40	5.8%		102	7.4%		6			5613	7.3%			
\$3,000-\$3,499	25	3.6%		55	4.0%		0			3365	4.4%			
\$3,500-\$3,999	9	1.3%		31	2.2%		0	0.014		1396	1.8%			
\$4.000 or more	8	1.2%		28	2.0%		6			1921	2.5%			
All incomes not stated	26	3.7%		46	3.3%		0	0.0%		2253	2.9%			
Labour Force:														
Labour force participation	554	39.7%	0.5%	1,766	48.7%	1.7%	142	53.2%	0.1%	102919	58.7%	49.4%		
Total employed	515	93.0%		1,665	94.3%		132	93.0%		96869	94.1%			
Employed full-time	329	63.9%		1,023	61.4%		84	63.6%	6	58887	60.8%			
Employed part-time	154	29.9%		531	31.9%		40	30.3%		31879	32.9%			
Unemployed persons	39	7.0%	0.6%	101	5.7%	1.6%	10	7.0%	0.2%	6050	5.9%	49.49		
Not in labour force	764	54.8%		1,684	46.4%		100	37.5%		63264				
Occupation:														
Managers	74	14.4%	0.7%	145	8.7%	1.4%	16	12.0%	0.2%	9895	10.2%	49.4%		
Professionals	92	17.9%	0.4%	293	17.6%	1.3%	18		0.1%		22.5%	49.5%		
Technicians and trades	75	14.6%	0.5%	299	17.9%	2.0%	24	18.0%	0.2%	14616	15.1%	49.3%		
Community and personal service	60	11.7%	0.6%	195	11.7%	1.8%	18	13.5%	0.2%	10376	10.7%	49.49		
Clerical and administrative	66	12.9%	0.5%	235	14.1%	1.7%	15	11.3%	0.1%	13507	, 13.9%	49.4%		
Sales	30	5.8%	0.3%	143	8.6%	1.4%	4	3.0%	0.0%		10.0%	49.59		
Machinery operators and drivers	35	6.8%	0.5%	126	7.6%	1.9%	18			6310	6.5%	49.3%		
Labourers	66	12.9%	0.7%	195	11.8%	2.1%	10	12.0%	0.2%		9.5%	49.39		
Not Stated	15	2.9%	1.0%	34	2.0%	2.1%	10	3.0%	0.2%			49.19		

				-						-				
Basic Community Profile File Name (Incl File Extension .xts or .xtsx):		FernBay.xls			Stockton.xls			FullertonCove.xl		Regional Area				
	No	% Within File	% Of Precinct	No	% Within File	% Of Precinct	No	% Within File	% Of Precinct	No	% Within File	% Of Precinct		
Key Industry:														
Agriculture, forestry & fishing	0	0.0%	0.0%	12	0.7%	2.2%	3	2.3%	0.6%	529	0.5%	49.3%		
Mining	11		0.7%	50		3.0%	6		0.4%	1596	1.6%	49.0%		
Manufacturing	54	10.5%	0.6%	195	11.7%	2.0%	22	16.5%	0.2%	9274	9.6%	49.3%		
Electricity, gas, water & waste services	7	1.4%	0.5%	25	1.5%	1.7%	з	2.3%	0.2%	1416	1.5%	49.4%		
Construction	44	8.6%	0.6%	139	8.3%	2.0%	16	12.0%	0.2%	6908	7.1%	49.3%		
Wholesale trade	16	3.1%	0.6%	54	3.2%	1.9%	0	0.0%	0.0%	2722	2.8%	49.4%		
Retail trade	38	7.4%	0.4%	117		1.1%	15	11.3%	0.1%	10420	10.8%	49.6%		
rvetali trabe	30	1.478	0.475		7.070	1,179	15	11.376	0.170	10420	10.070	49.076		
Accommodation & food services	27	5.3%	0.3%	135	8.1%	1.7%	3	2.3%	0.0%	7808	8.1%	49.5%		
Transport, postal & warehousing	21	4.1%	0.5%	87	5.2%	2.0%	10	7.5%	0.2%	4306	4.4%	49.3%		
Information media & telecommunications	6	1.2%	0.5%	19	1.1%	1.7%	0	0.0%	0.0%	1074	1.1%	49.4%		
Financial & insurance services	5	1.0%	0.2%	35	2.1%	1.2%	0	0.0%	0.0%	2851	2.9%	49.7%		
Rental, hiring & real estate services	4	0.8%	0.3%	23	1.4%	1.4%	o	0.0%	0.0%	1560	1.6%	49.6%		
Professional, scientific & technical services	36	7.0%	0.5%	104	6.2%	1.6%	3	2.3%	0.0%	5446	6.7%	49.5%		
Administrative & support services	28	5.5%	0.9%	44	2.6%	1.5%	0	0.0%	0.0%	2914	3.0%	49.4%		
Public administration & safety	80	15.6%	1.0%	125	7.5%	1.6%	3	2.3%	0.0%	7600	7.8%	49.3%		
Education & training	25	4.9%	0.3%	109	6.5%	1.3%	13	9.8%	0.2%	8312	8.6%	49.6%		
Health care & social assistance	81	15.8%	0.6%	274	16.4%	1.9%	19	14.3%	0.1%	14210	14.7%	49.4%		
Arts & recreation services	12	2.3%	0.9%	22	1.3%	1.6%	3	2.3%	0.2%	1341	1.4%	49.3%		
Other services	12	2.3%	0.3%	65	3.9%	1.7%	10	7.5%	0.3%	3736	3.9%	49.4%		
Not Stated	6	1.2%	0.3%	32	1.9%	1.7%	4	3.0%	0.2%	1843	1.9%	49.4%		
Educational attainment: Completion of Year 12 (or equivalent)	326	23.4%	0.4%	990	27.3%	1.4%	60	22.5%	0.1%	71436	40.7%	49.5%		
Without post-school qualifications	697	50.0%	0.9%	1782	49.1%	2.3%	116	43.4%	0.1%	76541	43.6%	49.2%		
Educational institution attending:														
Total	318			966			82			64375				
Pre-school attending:														
Pre-school	27	25.5%		42	23.3%		6	66.7%		3851	29.3%			
Infants/Primary education attending:				204	70.07			35.04		11723	10.24			
Government Catholic	52	62.7% 20.5%		206	76.6%		13	72.2%		2813				
Other Non Government	14			17	6.3%		0	0.0%		1585				
Total	83			269			18			16121				

							-			_		
Basic Community Profile File Name (Incl File Extension .xts or .xtsx);		FernBay.xls			Stockton.xls			FullertonCove.xl	•		Regional Area	
	No	% Within File	% Of Precinct	No	% Within File	% Of Precinct	No	% Within File	% Of Precinct	No	% Within File	% Of Precinc
Secondary education attending:												
Government	24	55.8%		132	60.8%		11	64.7%		8186	67.4%	
Catholic	13	30.2%		76	35.0%		6	35.3%		2176	17.9%	
Other Non Government	6	14.0%		9	4.1%		0	0.0%		1791	14.7%	
Total	43	72.9%		217	83.5%		17	100.0%		12153	81.4%	
Technical or Further Educational Institution(a):												
Full-time student:										0		
Aged 15-24 years	0	0.0%		20	23.3%		0			824		
Aged 25 years and over	0	0.0%		12	14.0%		0	#DIV/0!		589	11.7%	
Part-time student:										0		
Aged 15-24 years	0	0.0%		33	38.4%		0			1436		
Aged 25 years and over	22	100.0%		21	24.4%		0	#DIV/0!		2124	42.2%	
Full/Part-time student status not stated	0	0.0%		0	0.0%		0	#DIV/0!		58	1.2%	
Total	22	1.6%		86	2.4%		0	0.0%		5031	2.9%	
University or other Tertiary Institution attending:												
Full-time student:										0		
Aged 15-24 years	10	33.3%		30	30.6%		5	55.6%		6310	51.2%	
Aged 25 years and over	3	10.0%		13	13.3%		0	0.0%		2288	18.6%	
Part-time student:										0		
Aged 15-24 years	3	10.0%		12	12.2%		0			836	6.8%	
Aged 25 years and over	14	46.7%		43	43.9%		4	44.4%		2842	23.1%	
Full/Part-time student status not stated	0	0.0%		0	0.0%		0	0.0%		42	0.3%	
Total	30	2.2%		98	2.7%		9	3.4%		12318	7.0%	
Other type of educational institution attending:												
Full-time student	0	0.0%		4	22.2%		4	100.0%		292	24.8%	
Part-time student	4	100.0%		14	77.8%		0	0.0%		862	73.3%	
Full/Part-time student status not stated	0	0.0%		0	0.0%		0	0.0%		22	1.9%	
Total	4	0.3%		18	0.5%		4	1.5%		1176	0.7%	
Type of educational institution not stated	109	7.8%		236	6.5%		28	10.5%		13725	7.8%	
Mobility:												
Lived at same address 1 year ago	1,267	78.0%		3,430	81.8%		230	76.7%		167716	78.6%	
Lived at same address 5 years ago	747	46.0%	0.7%	2,476	59.0%	2.2%	173	57.7%	0.2%	109668	51.4%	49.2%
Transport:												
Households without a motor vehicle	62	8.8%	0.7%	216	15.1%	2.6%	0	0.0%	0.0%	8028	10.1%	49.1%
One motor vehicle	362	51.5%	1.1%	578	40.4%	1.8%	28	29.2%	0.1%	31561	39.6%	49.2%
Two motor vehicles	211	30.0%	0.7%	452	31.6%	1.5%	30	31.3%	0.1%	28845	36.2%	49.4%
Three motor vehicles	48	6.8%	0.6%	135	9.4%	1.7%	24	25.0%	0.3%	7853	9.9%	49.3%
Four or more motor vehicles	20	2.8%	0.6%	50	3.5%	1.5%	14	14.6%	0.4%	3338	4.2%	49.4%

Basic Community Profile File Name (Incl File Extension .xls or .xlsx):		FernBay.xls			Stockton.xls		1	FullertonCove.xls		Regional Area			
	No % Within File % Of Precinct			No % Within File % Of Precinct			No	% Within File	% Of Precinct	No	% Of Precinc		
Journey to work (by one method only):													
Train	0	0.0%	0.0%	15	1.1%	1.6%	3	2.5%	0.3%		1.1%	49.59	
Bus	12	2.7%	0.5%	41	2.9%	1.9%	0	0.0%	0.0%		2.6%	49.49	
Ferry	10	2.3%	4.2%	94	6.6%	39.5%	0	0.0%	0.0%	134	0.2%	36.09	
Tram (includes light rail)	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	0.0%	50.0%	
Taxi	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	174	0.2%	50.0%	
Car, as driver	355	80.3%	0.5%	994	70.0%	1.5%	89	73.6%	0.1%	64432	77.2%	49.4%	
Car, as passenger	33	7.5%	0.6%	81	5.7%	1.4%	3	2.5%	0.1%	5527	6.6%	49.59	
Truck	5	1.1%	0.6%	14	1.0%	1.6%	3	2.5%	0.3%	863	1.0%	49.49	
Motorbike/scooter	8	1.8%	1.0%	11	0.8%	1.3%	0	0.0%	0.0%	798	1.0%	49.4%	
Bicycle	0	0.0%	0.0%	27	1.9%	1.9%	0	0.0%	0.0%	1406	1.7%	49.5%	
Other	3	0.7%	0.7%	15	1.1%	3.6%	3	2.5%	0.7%		0.5%	48.79	
Walked only	4	0.9%	0.1%	70	4.9%	2.0%	7	5.8%	0.2%	3482	4.2%	49.49	
Worked at home	12	2.7%	0.4%	58	4.1%	1.8%	13	10.7%	0.4%	3129	3.8%	49.39	

Source: Australian Bureau of Statistics, 2011.

Appendix B Local Social Infrastructure

Name	Address	Size /capacity
Community Centre		
Fern Bay Community Hall	Fern Bay Reserve, Vardon Rd	Around 160m ² Plans in progress for rebuilding One main hall, Kitchen, tables and chairs, disabled toilets.
Senior Citizens Centre	76 Mitchell St, 2295 - Stockton NSW	Not able to contact
Childcare – long day o	care	
Mission Australia Early Learning Stockton	2 Barrie Crescent, Stockton NSW 2295	
Childcare – preschool	I	
Stockton Public School Preschool	10 Clyde Street, Stockton 2295	40 children in two groups
Childcare - OOSH		
Stockton School Kids Fun Club Association	1 Monmouth St, Stockton NSW 2295	30 Placements Serves– St Peters Primary and Stockton Public School
Wemoosh – Mayfield west	Gregson Avenue, Mayfield West	Currently in negotiation to have 30 students in Fern Bay Hall once the construction finishes
Open space		
Stockton Beach		
Stockton Off-leash Dog Area		
Pitt Street Reserve and the nearby skate park	Pitt Street, Stockton	Skate Park.
Stockton Swimming Centre	Pitt Street, Stockton	50m outdoor pool.
Griffith Park (future district playground and street skate park)	Hunter Street, Stockton	

Name	Address	Size /capacity
Ballast Ground	Hunter Street, Stockton	Dog off-leash park
Hunter Street Reserve	Hunter Street, Stockton	
Breen Park	Dunbar St, Stockton	
Rawson Park	Mitchell Street	
Corroba Park	Meredith Street	
Lynn Oval (cricket ground)	Mitchell Street	Cricket ground.
North Stockton boat ramp (currently being upgraded)	Booth St, Stockton	
Fern Bay Reserve and playground	Vardon Rd, Fern Bay	Playground facilities.
Playgrounds		
Pitt Street Reserve	Pitt Street, Stockton	
Hunter Street Reserve	3 Hunter Street	
Griffith Park	5 Hunter Street,	
Ballast Ground	Lot 74 Hunter Street,	
Breen Park	79 Dunbar Street	
Corroba Park	2 Meredith Street	
Sports grounds		
Corroba Oval	Meredith Street	Used for soccer, little athletics and cricket; also has a basketball court.
Lynn Oval	Mitchell Street	Used for both cricket and rugby league.
Outdoor sports courts	/fields	
Corroba Oval	Meredith Street	1 basketball court
Dalby Oval Courts	Mitchell Street	Five tennis courts 2 netball courts
Golf Course		
Newcastle Golf Club	Vardon Rd,	18 hole green.
Library		

Address	Size /capacity
Fern Bay Reserve, Vardon Rd. Next to school	Once a fortnight
	Opens three days a week
78 Mitchell Street, Stockton	2-3 part time doctors and 2 par time nurses
18 Mitchell Street, Stockton	1 full time GP
Palm Lake Resort, 1117 Nelson Bay Road, Fern Bay	1 full time doctor, 1 part time nurse
128 Fullerton Street, Stockton, NSW, 2295.	128 permanent care bed facility, 20 community care packages, a day therapy centre and 8 independent living units. Also provides respite care
The Cove Village; 15 Fullerton Cove Rd, Fullerton Cove NSW 2318	Currently 200 dwellings, Approximately 380 residents. Over 55's gated and private community
	532 properties. Gated private community with modest communal facilities. Primarily over 50s, but also have around 10 younger families.
1117 Nelson Bay Road, Fern Bay, NSW, 2295	247 villas, approximately 380-400 residents.Over 50's lifestyle resort with extensive facilities. Private- gated. Public medical centre on site.
74 Mitchell St, Stockton NSW 2295	Service 52 clients, 3 days a week; usage has increased over the past few years
Vardon Rd, Fern Bay	34 enrolments in 2016 and 60 in 2017
	Fern Bay Reserve, Vardon Rd. Next to school78 Mitchell Street, Stockton18 Mitchell Street, StocktonPalm Lake Resort, 1117 Nelson Bay Road, Fern Bay128 Fullerton Street, Stockton, NSW, 2295.The Cove Village; 15 Fullerton Cove Rd, Fullerton Cove NSW 23181117 Nelson Bay Road, Fern Bay, NSW, 22951117 Nelson Bay Road, Fern Bay, NSW, 2295

Name	Address	Size /capacity
Stockton Public School	Clyde St, Stockton .	267 enrolments, which it considers close to capacity
Newcastle High School	Parkway Ave, Hamilton South	
St Peters Primary School	Dunbar St, Stockton	St Peters Primary School currently has 136 enrolments and expects 150 in 2018.
Emergency Services		
Stockton Fire Station	Hereford St, Stockton	
Stockton Police Station	Douglas St, Stockton	
Stockton Ambulance Station	Hereford St, Stockton	

Appendix C Age Structure Profile

Basic Community Profile¤	Ваум	ay BCP	_1123213.xls=			Seas						FernBayPl	-BCP_1123	212.xls¤		Fullerton Cove BCP_1123214.xls¤					Fern B				
D	2011	٥	Estimated growth since 2011¤	2017*¤		2011		Estimated growth since 2011¤	2017*s	1	2011	•	Estimated growth since 2011*¤	2017¤		2011=	2	Estimated- growth- since- 2011*¤	2017*¤		2011¤		2017¤		Perce ntage- chang e ^o
D	No¤	%¤	ø	No¤	%¤	No¤	%¤	n	No¤	%¤	No¤	%¤	a	No¤	%¤	No¤	%¤	n	No¤	%¤	No¤	%¤	No¤	%¤	
number of dwellings	4300	α	91¤	521¤		1450		456¤	601¤	0	211¤	0	253¤	464¤	490¤	102¤	n	154¤	256¤	319¤	888¤	a		a	0
Population:a		0	0	0				a	۵		a	a	0	0		8		0	0	0	a	0		8	0
Total- Persons¤	741=		145.6¤	833.6¤		365	n	1276.8¤	1641 .8¤		520¤	a	404.8¤	923.8¤		300¤	8	246.4¤	546.4¤	0	1926¤	a	3945.6¤	a	
Age-groups:¤	۵	α	0	0	۵	۵		0	۵		۵	a	0	0		8		0	0	0	a	0		0	0
0-to-4-years¤	4α	0.5%¤	0	4a	0.5%¤	59¤	16.2%¤	206¤	265¤	16.2%¤	37¤	7.1%¤	0	37¤	4.0%¤	9α	3.0%¤	0	9a	1.6%¤	109¤	5.7%¤	315¤	8.0%¤	2.3%¤
5-to-11-years¤	14¤	1.9%¤	0	14¤	1.7%¤	39¤	10.7%¤	136¤	175¤	10.7%¤	53¤	10.2%¤	0	53¤	5.7%¤	17¤	5.7%¤	0	17=	3.1%¤	123¤	6.4%¤	259¤	6.6%¤	0.2%¤
12·to·17· years¤	6α	0.8%¤	۵	6¤	0.7%¤	11¤	3.0%¤	38¤	49¤	3.0%¤	34¤	6.5%¤	a	34¤	3.7%¤	17¤	5. 7% ¤	D	17¤	3.1%¤	68¤	3.5%¤	106¤	2.7%¤	-0.8%¤
18-to-24- years¤	20¤	2.7%¤	¤	20¤	2.4%¤	18¤	4.9%¤	63¤	81¤	4.9%¤	32¤	6.2%¤	۵	32¤	3.5%¤	26¤	8.7%¤		26¤	4.8%¤	96¤	5.0%¤	159¤	4.0%¤	-1.0%¤
25 to 34- years¤	15¤	2.0%¤	×	15¤	1.8%¤	88¤	24.1%¤	308¤	396¤	24.1%¤	60¤	11.5%¤	2	60¤	6.5%¤	21¤	7.0%∞		21¤	3.8%¤	184¤	9.6%¤	492¤	12.5%¤	2.9%¤
35-to-49- years¤	57¤	7.7%¤	Ø	57¤	6.8%¤	1020	27.9%¤	357¤	459¤	27.9%¤	93¤	17.9%¤		93¤	10.1 %¤	62¤	20.7%¤		62¤	11.3%¤	314¤	16.3%¤	671¤	17.0%¤	0.7%¤
50-to-59- years¤	94¤	12.7 %¤	29.12¤	123¤	14.8 %¤	38¤	10.4%¤	133¤	171¤	10.4%¤	65¤	12.5%¤	81¤	146¤	15.8 %¤	61¤	20.3%¤	49¤	110¤	20.2%¤	258¤	13.4%¤	550¤	13.9%¤	0.6%¤
60-to-69- years¤	2590	35.0 %¤	58.24¤	317¤	38.1 %¤	30	0.8%¤	10¤	13¤	0.8%¤	80¤	15.4%¤	162¤	242¤	26.2 %¤	54¤	18.0%¤	99¤	153¤	27.9%¤	396¤	20.6%¤	725¤	18.4%¤	-2.2%¤
70-to-84- years∞	2500	33.7 %¤	53.872¤	304¤	36.5 %¤	7¤	1.9%¤	24¤	31¤	1.9%¤	54¤	10.4%¤	150¤	204¤	22.1 %¤	33¤	11.0%¤	91¤	124¤	22.7%¤	344¤	17.9%¤	663¤	16.8%¤	-1.0%¤
85-and-over- years¤	22¤	3.0%¤	4.368¤	26¤	3.2%¤	0¤	0.0%¤	0°	00	0.0%¤	11=	2.1%¤	12¤	23¤	2.5%¤	0α	0.0%¤	7¤	7¤	1.4%¤	33¤	1.7%¤	57≏	1.4%¤	-0.3%¤
Median-Age- (years)-¤	66¤	α	Ø		Ω.	33¤	<u>n</u>	¤	n	2	43¤		0		۵	50¤			a		51¤	12		¤	.0
Average household size (number of persons)¤	1.6¤	Ø	۵	¤		2.8¤	۵	0	Ø	۵	2.5¤	۵	2	0		2.8¤			8		2.3¤	۵	¤	¤	
۵		umes a		and∙an∙a	ge-distrib	oution	of-20-perc	ent-50-59-yea	rs, 40-pe	ercent-60	-69-yea	irs,-37-per	cent-70-84-y	ears, 3-pe	ercent				۵		8	•			
۵			a from Port St n·2011 census		ouncil fo	r·com	pleted app	proved-dwelling	s since	2011. Es	timates	made at	the SA1 leve	el. Estimat	es for S	easide u	used avera	ige househo	ld size an	d∙age	n	D 3	٥	۵	a

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		Name	Signature	Name	Signature	Date
A	A Mithieux	P Mandke	Altant	M Lander	Marder	29/06/17
0	L Jessup	P Mandke	Altant	M Lander	Marder	17/07/17
1	L Jessup	M Lander	Mander	M Lander	Marder	22/08/17



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