

# CHARLESTOWN RECREATION & LAND PLAN

Adopted 28 September 2015



Lake Macquarie City Council  
126-138 Main Road Speers Point, NSW 2284  
Box 1906, Hunter Region Mail Centre, NSW 2310  
Telephone: 02 4921 0333  
Facsimile: 02 4958 7257  
[council@lakemac.nsw.gov.au](mailto:council@lakemac.nsw.gov.au)  
[www.lakemac.com.au](http://www.lakemac.com.au)

---

## Version History

Version No.	Date	Description
1	May 2015	Draft for Public Exhibition
2	September 2015	Plan adopted by Council

Cover photos – Red Bluff - Lake Foreshore Pathway, Warners Bay foreshore, St John No. 1 and Jack Stewart Netball

## **Disclaimer**

Lake Macquarie City Council has made reasonable effort to ensure that the information contained in this document was current and accurate at the time the document was created and last modified. The Council makes no guarantee of any kind, and no legal contract between the Council and any person or entity is to be inferred from the use of or information in this document.

The Council gives no warranty and accepts no responsibility for the accuracy or completeness of the information. No user should rely on the information, but instead should check for confirmation with the originating or authorising body. The Council reserves the right at any time to make such changes as it deems appropriate to that information.

Any links to external web-sites and/or non Lake Macquarie City Council information provided in this document are provided as courtesy. They should not be construed as an endorsement by Lake Macquarie City Council of the content or condition or views of the linked materials.

## **Copyright © 2002 Lake Macquarie City Council**

This document and its contents are subject to copyright under the laws of Australia and, through international treaties, other countries. The copyright information and materials in this document are owned by the Lake Macquarie City Council although the copyright in some materials incorporated within this document may be owned by third parties.

You are permitted to print extracts of this information and materials for your personal use only. None of this material may be used for any commercial or public use. You must not modify the copy from how it appears in this document and you must include the copyright notice "© 2002 Lake Macquarie City Council" on the copy.

You must not otherwise exercise the copyright in the whole or any part of this document for any other purpose except with the written permission of the Council or as expressly permitted by statute.

Department Name: Community Planning  
Council Ref: .....F2008/00939/03/01

Lake Macquarie City Council  
126-138 Main Road Speers Point, NSW 2284  
Box 1906, Hunter Region Mail Centre, NSW 2310  
Telephone: 02 4921 0333  
Facsimile: 02 4958 7257  
email: [enquiries@lakemac.nsw.gov.au](mailto:enquiries@lakemac.nsw.gov.au)  
Internet: [www.lakemac.com.au](http://www.lakemac.com.au)

## CONTENTS

EXECUTIVE SUMMARY .....	5
PART A - CONTEXT .....	6
1. Introduction.....	6
<b>PART B - DEMOGRAPHICS .....</b>	<b>13</b>
2. Existing Population .....	13
3. Future Population .....	17
<b>PART C - RECREATION .....</b>	<b>21</b>
4. Background .....	21
5. Sports Grounds .....	23
6. Sports Fields .....	24
7. Tennis Courts .....	29
8. Netball Courts.....	32
9. Multi-purpose half-courts .....	35
10. Parks .....	37
11. Playgrounds .....	43
12. Community Gardens.....	48
13. Dog exercise areas.....	52
14. Skate Parks .....	55
15. BMX Tracks .....	58
16. Shared Pathways .....	61
17. Tracks and Trails .....	67
18. Mountain Bike Areas.....	72
19. Surf Life Saving Facilities .....	74
20. Boat Ramps and Jetties.....	76
21. Swimming Pools .....	79
22. Indoor Sport and Recreation Centres .....	82
23. Other Recreation Facilities.....	84
<b>PART D – OPEN SPACE .....</b>	<b>87</b>
24. City Wide Provision .....	88
25. Charlestown CC .....	89
26. Charlestown Sub-Catchment .....	95
<b>PART E – APPENDICES.....</b>	<b>99</b>



## EXECUTIVE SUMMARY

The Recreation and Land Plan has been prepared to identify the needs of future recreation facilities required to serve the projected future growth in the Charlestown Catchment to 2025. The plan quantifies the existing provision, considers the type and distribution of that provision, and recommends future facilities considering the existing facilities, their location and density and location of the projected growth. The plan provides a diverse range of recreation opportunities to cater for the increasing proportion of older adults. Local and citywide standards, recommended government standards and planning policies and guidelines were considered, as well as the spatial/service area catchments for facility provision. These various standards were used as a guide for determining the provision standards. Refer to **Appendix 12** for the recommended standards for the Charlestown catchment.

Existing facilities or land was considered first thereby reducing the quantum of land required to provide the additional facilities. The result is a very conservative approach and future land acquisitions required at key locations. Once the land is acquired, and the facilities developed, they will provide benefits for the existing and future communities and intergenerational equity.

A carefully balanced plan considers all the community needs, including active and passive needs, to provide an outcome that serves the entire community. This plan attempts to provide that balance.

The Charlestown Contributions Catchment will experience significant growth estimated at 12,540 people to 2025. Approximately half of this growth is located within and around the Charlestown town centre. A number of facilities have been located as close as possible to this concentrated growth area. Refer to **Appendix 13** for a list of the planned recreation facilities within the catchment.

# PART A - CONTEXT

## 1. Introduction

Lake Macquarie City Council (LMCC) has a large local government area (LM LGA) comprising 787.4 km<sup>2</sup>. The centrepiece of the city is its lake comprising 110 km<sup>2</sup>, which is about twice the size of Sydney Harbour and recognised as one of the largest coastal saltwater lakes in Australia. It is the fastest growing city in the Hunter, and one of the largest cities in New South Wales.

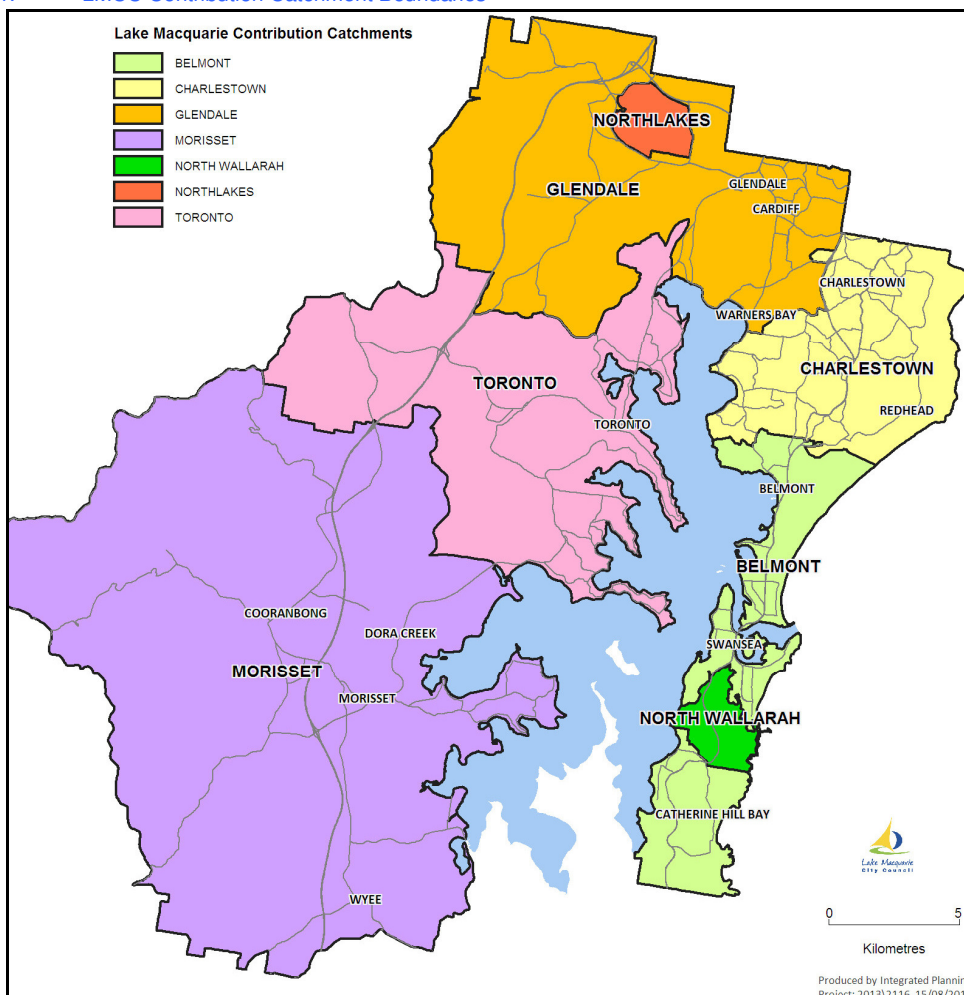
Parks and recreation facilities are integral to the liveability and successful growth of established and new communities. Quality public parks are essential to provide a quality lifestyle for the future populations of Lake Macquarie (LM).

LMCC requires developer contributions to partially or fully fund new facilities, and expand existing facilities, resulting from new development. The NSW Department of Planning (DoP) has prepared draft guidelines recommending indicative standards, the nexus, and contribution required from new development to meet the increased demand for infrastructure resultant from new development.

This plan draws on a range of studies and reports and undertakes a needs assessment to determine the standards for service provision in the Charlestown Contributions Catchment (Charlestown CC) to meet the future needs to 2025.

The City is divided into five contribution catchments. The Charlestown CC extends from Adamstown Heights and Highfields in the north, to the coastal suburbs of Dudley and Redhead in the east, south to Belmont North and Floraville, and to the lake foreshore suburbs of Eleebana/Valentine. Refer to **Figure 1** for the boundaries of the Charlestown CC.

Figure 1. LMCC Contribution Catchment Boundaries



## 1.1 Mission Statement

Our mission statement '**Quality Lifestyle**' represents and embodies our overarching goal in providing these services, and is simple but instantly accessible.<sup>1</sup> Quality parks and recreation facilities are an essential ingredient in providing a quality lifestyle.

## 1.2 Vision

The vision for the future provision of recreation facilities and open space is:

- To provide a living environment that has a strong quality of life, health and well-being focus
- To provide a diverse range of recreation opportunities that keep pace with the changing needs of the community which is aging
- To provide quality recreation facilities that encourages community participation into physical activity
- To consider a sustainable approach by expanding existing facilities, where possible, co-locate facilities to maximise use
- To utilise the City's natural attributes in the provision of informal recreation facilities

## 1.3 Purpose

LMCC has prepared this Recreation and Land Plan to support and inform the preparation of a Developer Contributions Plan (CP) for Charlestown.

The purpose of this plan is to predict the recreation needs for the future growth forecasts in the Charlestown CC and determine if the existing recreation land is able to meet those needs. If the existing land is inadequate for the development of the proposed facilities then identify suitable land with the attributes required for the development of the new or augmented facilities. The plan has been prepared with an understanding of the NSW Department of Planning (DoP) guidelines.<sup>2</sup>

## 1.4 Scope of the Plan

The Charlestown CC is an established urban area with a range of community infrastructure provided by government, non-profit organisations and the private sector. This plan identifies the type, location and range of existing recreation infrastructure used by the population and/or specific target groups within the community (i.e. older people, children, and people with a disability).

The plan also identifies recreation infrastructure provided by non-profit organisations and the private sector, which may also cater for local needs. Non-Council facilities do play an important role in the community, and Council has considered these facilities to reduce duplication and ensure that a full range of recreation facilities is provided through a coordinated approach. Where private facilities are more broadly available to the community, and if closed, would result in a major gap in service provision in the CC, these facilities have been included in the existing provision.

The existing provision identified may not include all the available recreation facilities in the CC but it has focused on the recreation facilities, primarily available for public use. This approach is consistent with Council's role as identified in the Local Government Act 1993.

## 1.5 Policy Context

LMCC has reviewed existing strategies, policies, plans and guidelines to establish the parameters for the future provision of recreation and open space in the Charlestown CC. These provide the framework for the development of future recreation facilities across the City and for the Charlestown CC.

<sup>1</sup> LMCC (2013) *City of Lake Macquarie Community Strategic Plan 2013-2023*, p. 8.

<sup>2</sup> NSW DoP (2009) *Local Development Contributions Guidelines*, and relevant directions/circulars released by the Department of Planning.

## State and Federal Government Strategies

### • NSW 2021: A plan to make NSW number one

NSW 2021 is a plan to make NSW number one. It is a 10-year plan to rebuild the economy, provide quality services, renovate infrastructure, restore government accountability, and strengthen our local environment and communities. It is the NSW Government's strategic business plan, and sets priorities for action and guiding resource allocation.

The relevant goals, targets or actions within the plan include:

- Increase walking and cycling - To increase walking and cycling to help ease transport congestion and build a healthier, more active community<sup>3</sup>
- Obesity rates - Reduce overweight and obesity rates of children and young people (5–16 years) to 21% by 2015; stabilise overweight and obesity rates in adults by 2015, and then reduce by 5% by 2020<sup>4</sup>
- 'In the next 25 years, the population of people aged 65 years and older in NSW is expected to more than double' - Develop and implement a whole of NSW government strategy on ageing by 1 July 2012<sup>5</sup>
- Increase participation in sport, recreational, arts and cultural activities in rural and regional NSW from 2010 to 2016 by 10%<sup>6</sup>

### • Lower Hunter Regional Strategy

The *Lower Hunter Regional Strategy 2006-2031* (LHRS) is a major long-term macro-level plan that will guide future development in the Lower Hunter for a projected population increase of around 160,000 people and 115,000 new dwellings over the next 25 years. The LHRS includes the LGA's of Newcastle, Lake Macquarie, Port Stephens, Maitland, and Cessnock. For Lake Macquarie, the LHRS identifies a population increase of between 60,000-70,000 people and by 36,000 additional dwellings.

Key elements of the strategy include:

- The Lower Hunter is characterised by a population which is older than, and continuing to age at a rate faster than the NSW average<sup>7</sup>
- Population growth and the demand for new housing and associated services, can lead to increasing pressure on the Region's environment including a greater demand for drinking water and recreational opportunities<sup>8</sup>
- The Government's vision for the Lower Hunter embraces a sustainable future for the Region – balancing environmental, economic and social outcomes so that quality of life can be enhanced without burdening future generations<sup>9</sup>
- More sustainable transport and healthier communities by giving more people the option of taking public transport, walking or cycling<sup>10</sup>
- Charlestown is identified as a major regional centre providing 4,400 jobs and 3,200 new dwellings<sup>11</sup>

The strategy includes Neighbourhood Planning Principles to ensure high quality development outcomes:

Table 1. Lower Hunter Regional Strategy - Neighbourhood Planning Principles

Neighbourhood Planning Principles		
<ul style="list-style-type: none"> <li>• A range of land uses to provide the right mix of houses, jobs, open space, recreational space and green space.</li> <li>• Easy access to major town centres with a full range of shops, recreational facilities and services along with smaller village centres and neighbourhood shops.</li> <li>• Jobs available locally and regionally, reducing the demand for transport services.</li> </ul>	<ul style="list-style-type: none"> <li>• Streets and suburbs planned so that residents can walk to shops for their daily needs.</li> <li>• A wide range of housing choices to provide for different needs and different incomes. Traditional houses on individual blocks will be available along with smaller, lower maintenance homes, units and terraces for older people and young singles or couples.</li> </ul>	<ul style="list-style-type: none"> <li>• Conservation lands in-and-around the development sites, to help protect biodiversity and provide open space for recreation.</li> <li>• Public transport networks that link frequent buses into the rail system.</li> </ul>

Source: NSW Department of Planning (2006) *Lower Hunter Regional Strategy 2006-31*, NSW Government, p. 26

<sup>3</sup> *Ibid.*, Goal 8, p. 20

<sup>4</sup> *Ibid.*, Goal 11, p. 23

<sup>5</sup> *Ibid.*, Goal 25, p. 48

<sup>6</sup> *Ibid.*, Goal 27, p. 51

<sup>7</sup> NSW DoP (2006) *Lower Hunter Regional Strategy 2006-31*, NSW Government, p. 5

<sup>8</sup> *Ibid.*, p. 8

<sup>9</sup> *Ibid.*, p. 9.

<sup>10</sup> *Ibid.*, p. 14.

<sup>11</sup> *Ibid.*, p. 18.

## Local Government Strategies and Plans

### • Lifestyle 2030 Strategy

This strategy, adopted by Council on 11 March 2013, provides the long-term strategic directions for the future land use pattern for the City, based on achieving the principles of sustainability. The strategic directions include a city that makes an equitable contribution to global sustainability; is a well-designed, adaptable and liveable city; a well-serviced and equitable city and a city responsive to the wellbeing of its residents.

The strategic directions, outcomes, and intent statements relevant for the Charlestown CC include:

- More extensive building and development in vacant areas of the City's centres, such as Charlestown and Cardiff, (infill redevelopment) occurs. Such development should incorporate medium density housing (approx. 30-40 dwellings per hectare) to achieve a 30% medium density housing (not including duplexes) target by 2030.<sup>12</sup>
- Development at major intersections and gateways exhibit a high quality of urban design and sense of place including such locations as at Charlestown<sup>13</sup>
- Good quality neighbourhood (destination) parks are provided in close proximity to high-density urban development.<sup>14</sup>
- Development on previously undeveloped land should not occur unless essential physical and social infrastructure can be provided and funded.<sup>15</sup>
- The pedestrian and cycle network is well maintained, more extensive and better utilised, including the completion of both commuter and recreational cycleways such as the Fernleigh Track, the Wallsend-Glendale cycleway, and the cycleway around the Lake<sup>16</sup>
- Urban development, including new release development, has a high degree of vehicular, pedestrian and cyclist connectivity, such as by utilising a modified grid layout, pedestrian /cyclist friendly intersections, off road paths and linked open space<sup>17</sup>
- Augment pedestrian systems with improved cycle systems to extend the catchment of urban centres and key public transport systems. Measures will include:
  - Provision of cycleways and/or on-road cycle routes/lanes to all new developments, linking residential areas to shops, schools, urban centres and public transport systems, such as public transport interchanges and train stations
  - Provision of bicycle parking facilities with higher security and/or undercover bicycle parking at major centres<sup>18</sup>
- Centres are the fundamental building block of the urban structure of the LGA, and intended to be the focus for:
  - Safe, convenient, and accessible pedestrian, cycling and public transport
  - Places for social and community interaction and recreation
  - Higher density housing, and mixed-use development incorporating housing<sup>19</sup>
- Major Regional Centre Charlestown:
  - Contains a concentration of mixed use, business, higher order retailing, employment, professional and social services, and generally includes civic functions and facilities
  - Contains medium and higher density residential within and adjoining the centre
  - Services a number of districts
  - Is readily accessible by foot and cycling<sup>20</sup>
- The Urban Structure Map
  - There will be intensification of development in and around the Centres throughout the LGA, three major areas of infill and new release urban development will provide additional housing, which includes:
    - The 'East Lake Intensification Corridor', area generally from Charlestown to Belmont along Pacific Highway<sup>21</sup>

<sup>12</sup> LMCC (2013) *Lake Macquarie City Lifestyle 2030 Strategy*, Outcome 3.3, p. 15.

<sup>13</sup> *Ibid.*, Outcome 3.23, p. 16.

<sup>14</sup> *Ibid.*, Outcome 3.27, p. 16.

<sup>15</sup> *Ibid.*, Outcome 4.3, p. 17.

<sup>16</sup> *Ibid.*, Outcome 4.10, p. 18.

<sup>17</sup> *Ibid.*, Outcome 4.11, p. 16.

<sup>18</sup> *Ibid.* 6.1, p. 25.

<sup>19</sup> *Ibid.*, 6.1, p. 25.

<sup>20</sup> *Ibid.*, 6.1, p. 26.

<sup>21</sup> *Ibid.*, 6.1, p. 28 and p. 32.



- Cycle and Pedestrian Network:
  - LS2030 recognises the importance of the cycle and pedestrian network to the movement system.
  - Cycle facilities should be provided so that cycling is an attractive, practical, and safe form of movement
  - Where possible cycle paths should be off road rather than on road, to increase safety and ensure the widest possible range of users
  - The cycleway network should be designed to meet recreational and commuter needs
  - To meet LS2030 accessibility outcomes, regional, town and local centres, and transport interchanges should be the focus of cycleway and pedestrian networks for their surrounding areas, with links to other areas as appropriate to the scale of the centre<sup>22</sup>

## • **Community Strategic Plan**

The Lake Macquarie City Council (2013) *City of Lake Macquarie Community Strategic Plan 2013 – 2023* sets out the strategic directions of the council, which includes:

- A city responsive to the wellbeing needs of its residents
- A well serviced and equitable city
- A well designed adaptable and liveable city

The strategy identified the main priorities of the community, and sets out the long-term strategies developed to respond to these priorities, including:

Caring for our Community:

Objective: Advocate for and develop opportunities that will ensure all residents have equal opportunity to participate in the economic and social life of the community

How we will know the priorities have been achieved: Delivery of services consistent with the changing demographics of the community<sup>23</sup>

Sport, Recreation and Culture:

Objective: Provide a balanced range of well-maintained and accessible recreation, community, education, sporting, arts and cultural facilities across the City<sup>24</sup>

How we will know the priorities have been achieved: Recreation facilities, services and programs meet the growing needs of the community<sup>25</sup>

## • **Social Plan**

The *Social Plan 2009-2014* recommends the provision of infrastructure for healthy activities such as shared pathways and sporting and recreational facilities.<sup>26</sup>

Issues raised during the consultation phase of the social plan include:

- The need for better cycleway connections between schools, sporting facilities, transport, and residential and commercial areas and the need to incorporate park and ride facilities at public transport hubs<sup>27</sup>
- The strategy is to develop new on-road and off-road cycleways<sup>28</sup>
- The need to make better use of Council facilities and parks<sup>29</sup>
- Limited choice for older people seeking recreational activities<sup>30</sup>
- Need to ensure that residents have access to walking and cycling tracks and community fitness centres. The strategy is to provide 6 kms of new on-road and off-road cycleways annually<sup>31</sup>

## • **Ageing Population Plan**

LMCC has prepared a *Lake Macquarie Ageing Population Plan 2014-2017* that identifies that Lake Macquarie has an older population than the NSW average, with the area experiencing a 'premature ageing' of its population, with 18.3% of the LGA's population aged 65 years and over. In NSW 14.7% are aged 65% and older. The most recent population projections up to 2026 show a continued increase in Lake Macquarie's population aged 65 years and over to 23.9%.

<sup>22</sup> Ibid., 6.2, p. 36 and 37.

<sup>23</sup> LMCC (2013) *City of Lake Macquarie Community Strategic Plan 2013-2023*, p. 41 and 43.

<sup>24</sup> Ibid., p. 45 and 47.

<sup>25</sup> Ibid., p. 41.

<sup>26</sup> Ibid., p. 18.

<sup>27</sup> Ibid., p. 23.

<sup>28</sup> Ibid., p. 25.

<sup>29</sup> Ibid., p. 32.

<sup>30</sup> Ibid.

<sup>31</sup> Ibid., p. 33.

The Hunter Valley Research Foundation found that 73.3% of people aged 60-69 years were overweight or obese in the Hunter Region and that LM residents had a higher than NSW average of not meeting the physical activity recommendation of 20 minutes exercise 5 days per week. The strategy identified that parks and foreshore areas are popular with seniors particularly those with picnic facilities, toilets and pathways. The strategy identifies certain actions such as the need to maintain a range of community and recreation facilities that are accessible and suitable for seniors and the provision of outdoor exercise equipment in areas with high populations of seniors.<sup>32</sup>

## • Youth Strategy

LMCC has prepared a *Lake Macquarie Youth Strategy 2014-2019*, which address the needs of young people identified through the community consultation conducted for the development of the strategy. Young people are people aged 12 years to 24 years old. Some responses relevant for Charlestown include:

- Open space for young people to hang out which is designated for young people 12 – 24 years
- Young people have a right to socialise in recreational places
- Not enough youth dedicated supported space
- Lake Macquarie Loft Style Venue, possibly in Charlestown or Belmont.
- Dedicated Youth Centre on the old School Site – Charlestown
- Young people want to go to the gym but cannot afford the fees
- Shared pathway continued from Speers Point and Warners Bay right through to Croudace Bay and Valentine
- Develop Charlestown Skate Park<sup>33</sup>
- Improve cycleways and pedestrian access, improve linkages between locations
- Improve recreational opportunities, more passive recreational spaces
- Encourage the provision of non-sport recreational opportunities for young people<sup>34</sup>

## • Recreation Plan

LMCC engaged H M Leisure Planning Pty Ltd to prepare the *Lake Macquarie City Council Recreation Plan* (Recreation Plan) in 1998. The Recreation Plan analysed existing trends, facility provision and population projections, and it included an extensive program of community consultation. The plan recommends certain strategies and actions, which are included in the relevant sections of this plan. General trends identified include:

- A demand for a greater diversity of leisure opportunities and for sites which permit a greater diversity of socially-oriented, healthy activities<sup>35</sup>
- A greater demand for active, non-competitive and participatory recreation experiences<sup>36</sup>
- Participation in a far broader array of activities<sup>37</sup>

## • Open Space Strategy

In 2001, Council engaged URS to prepare an Open Space Strategy for the City. A component of that strategy included a recreation participation study, which involved 1,400 households (200 in each of the seven planning districts<sup>38</sup>), and 3,519 residents, a representative sample of the City. Refer to Appendix 1 for a map of the planning districts. Thirty-two different recreation activities in eight different settings were included in the survey. Key findings of the survey included:

- The dominance of 'walking for exercise' and 'swimming/surfing at a beach' as the two primary recreation activities throughout the LM LGA, and
- The total participation time for soccer, tennis, football (AFL, RL, RU) and cricket combined is less than half the total participation time spent 'walking for exercise'.<sup>39</sup>

<sup>32</sup> LMCC (2008) *Ageing Population Plan 2014-2017*, p. 27.

<sup>33</sup> LMCC (1998) *Lake Macquarie Youth Strategy 2014-2019*, p. 26, 27.

<sup>34</sup> *Ibid.*, p. 31.

<sup>35</sup> LMCC (1998) *LMCC Recreation Plan: Volume 2*, prepared by H M Leisure Planning Pty Ltd, p. 27.

<sup>36</sup> *Ibid.*, p. 27.

<sup>37</sup> *Ibid.*, p. 27.

<sup>38</sup> The study area of this plan combines the Charlestown and Windale Planning Districts.

<sup>39</sup> LMCC (2001) *Lake Macquarie Open Space Strategy*, prepared by URS, p. 4-7.

## • Open Space Plan

Council engaged Clouston to prepare an Open Space Plan, which included a telephone survey and focus group consultation. The recreation demand survey revealed that outdoor recreation is a significant activity in the City. Non-organised recreation activities are the most popular with walking and associated family based activities predominating. The recreation survey revealed that the Lake Foreshore is the most popular setting, with beaches second most favoured.<sup>40</sup> Although one third of the population do not take part in organised sport, sporting activity is popular with younger age groups. Whilst there are many sports venues in the City, these facilities are often not well developed. Improved co-operation and sharing of facilities were seen as important initiatives to pursue as were multiple use.<sup>41</sup>

The Strategy recommends the following principles be considered as the foundation for all future strategies that address recreation in the City:

- Recreation planning should be aimed at capitalising on and conserving the City's natural attributes provided by the beach, lake, bushland and mountains<sup>42</sup>
- A balance of structured and non-structured recreation facilities should be provided, that recognise that one third of the population do not partake in structured recreation<sup>43</sup>

## • Council's Community Survey

LMCC engaged Micromex Research to undertake a community survey to examine community attitudes and perceptions towards current and future services and facilities provided by Council. The results of the *Lake Macquarie City Council Community Research* (2012) are available on LMCC's website.<sup>44</sup> The survey was conducted during the period 30th January – 8th February 2012 and a sample size of 1,000 residents aged 18 years or older.

According to the community, the following services or facilities were included as Council's core strengths and identified as high importance and high satisfaction.<sup>45</sup> They include lake and foreshore maintenance, ovals and sporting facilities, cycleways and walking paths, picnic and barbeque areas, overall appearance of city parks, swimming pools, and playgrounds. In these areas, Council should attempt to maintain or even improve, as these are influential and address clear community needs.

## • Charlestown Master Plan

Council adopted the Charlestown Master Plan in 2008 after extensive community consultation and consultant input and provides the urban design principles and strategies to ensure that development of this major regional centre supports the overall objective of making Charlestown an 'accessible, vibrant, healthy, beautiful, and sustainable place to live, work and play.' The plan proposes a future urban form comprising 4-5 storey buildings along the Pacific Highway, some 6-8 storey and 9 storey buildings at key gateway locations and corner sites is expected to yield 1,000 to 1,500 new dwelling units over 25 years.

## • Charlestown Streetscape Master Plan

Council adopted the Charlestown Streetscape Masterplan in June 2012. Master Plans are prepared to ensure a unified approach to undertaking public domain works by Council, developers and the community. The Streetscape Master Plans are intended to improve the aesthetic appearance of the town centres, promote the areas personality, increase opportunity, accessibility, functionality, economic effect, and provide a modern easily maintainable public domain.

## • Development Control Plan

The development control plan (DCP) identifies the Charlestown town centre as the major commercial centre in Lake Macquarie providing high order retail, commercial and community facilities for the city. The DCP proposes a future urban form comprising a mixture of building heights with three (3) to eight (8) storey buildings along the Pacific Highway and up to 15 storey buildings at key gateway location on corner sites. Council adopted the Town Centre DCP – Part 3 – Charlestown Town Centre on 23 July 2012.

<sup>40</sup> LMCC (2001) *Lake Macquarie Open Space Plan: Volume 1*, prepared by Clouston, p. 20

<sup>41</sup> LMCC (2001) *Lake Macquarie Open Space Plan: Volume 2*, prepared by Clouston, p. vi

<sup>42</sup> *Ibid.*, p. 26.

<sup>43</sup> *Ibid.*

<sup>44</sup> LMCC (2012) *LMCC Community Research: March 2012*

<http://www.lakemac.com.au/downloads/4FF799C2D96EAD33D9E162DCD3CBC2BA5A473787.PDF>

<sup>45</sup> *Ibid.*, p. 10.



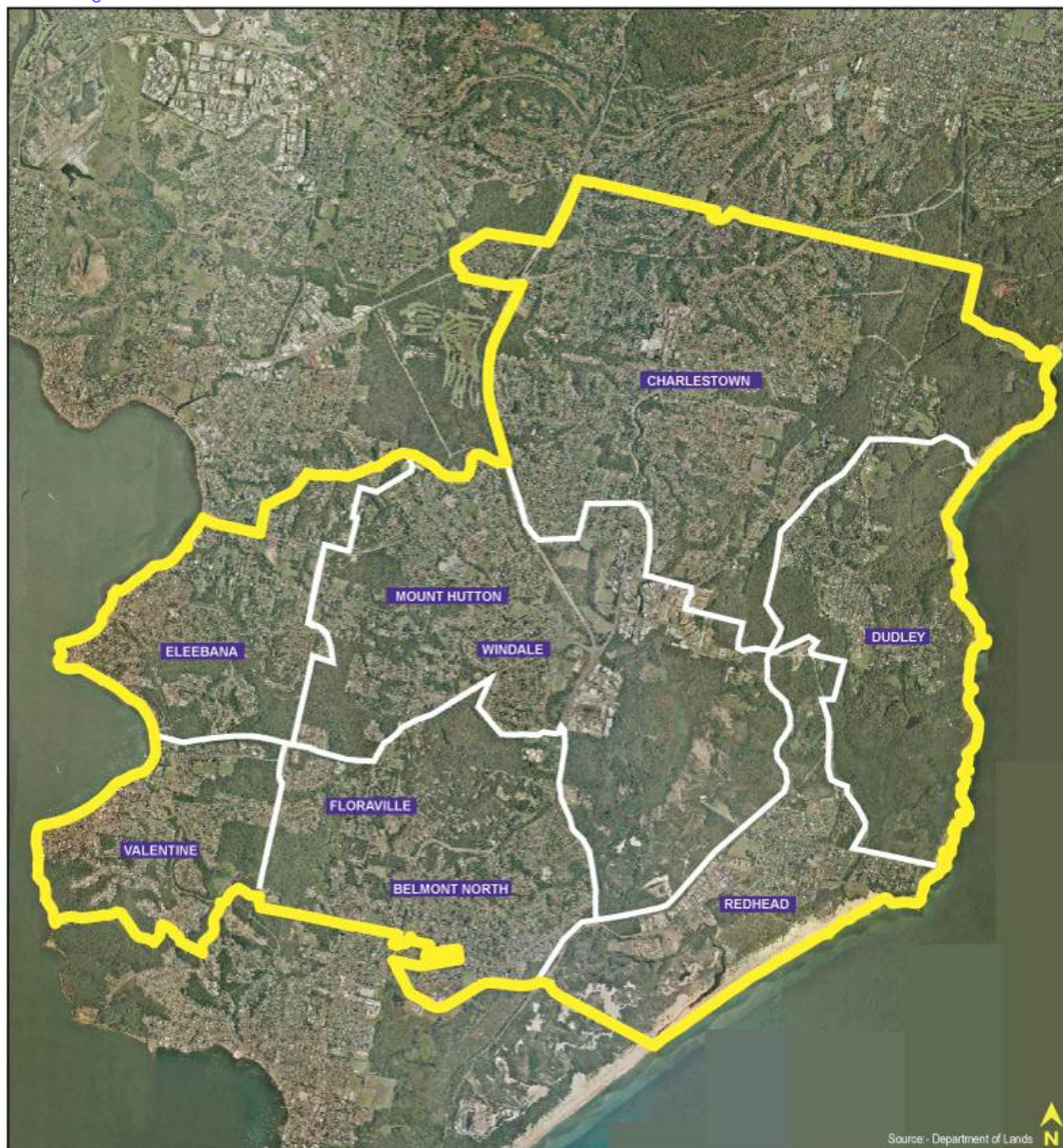
## PART B - DEMOGRAPHICS

The Charlestown CC, referred to as the study area, is located in the north-eastern portion of the LM LGA bounded by the Pacific Ocean, Lake Macquarie and the city boundary. The study area comprises 56.85km<sup>2</sup> and indicated by the yellow unbroken line in **Figure 2**.

### 2. Existing Population

In 2006, the Charlestown CC had a residential population of 59,200 persons. This comprises 32% of the total LMCC LGA population (183,139 persons) and includes people living in non-private dwellings such as nursing homes, residential colleges, boarding houses, and private hotels (ABS, 2006 Census).

Figure 2. Charlestown CC – Catchment and Sub-catchments



Source: LMCC (2010) *Residential Population and Non-Residential Development Growth Forecasts Charlestown Contributions Catchment* prepared by Don Fox Planning, p. 5.

The catchment is also divided into seven sub-catchments as indicated by the white unbroken lines in **Figure 2**. The sub-catchments had the following resident population living in private dwellings.



## LAKE MACQUARIE CITY COUNCIL

Table 2. Charlestown CC – Sub-catchments

Sub-catchment	Suburbs	Persons 2006 ABS
Charlestown	Kotara South, Adamstown Heights, Kahibah, Whitebridge (part of), Hillsborough, Gateshead	15,746
Mount Hutton/ Windale	Mount Hutton, Windale, Tingira Heights, Gateshead (part of)	12,038
Belmont North/ Floraville	Belmont North, Floraville, Jewells	7,708
Eleebana	Eleebana, Warners Bay (part of)	6,508
Valentine	Croudace Bay	5,764
Dudley	Dudley, Whitebridge (part of)	5,635
Redhead	Redhead, Belmont (part of)	3,131
<b>Total</b>		<b>56,530</b>

There are nine centres within the catchment and Charlestown is a regional centre, Mount Hutton/Windale a district centre, and smaller neighbourhood centres are interspersed throughout the catchment. **Figure 3** also displays the suburb boundaries within the Charlestown CC.

Figure 3. Charlestown CC – Centres and Suburb Boundaries



Source: LMCC (2010) Residential Population and Non-Residential Development Growth Forecasts Charlestown Contributions Catchment, prepared by Don Fox Planning, p. 3.



LMCC commissioned Don Fox Planning (DFP) to prepare the demographic information for the existing population and prepare forecasts for residential population growth for the Charlestown CC. The following population characteristics derived from the 2006 ABS Census for the study area are:<sup>46</sup>

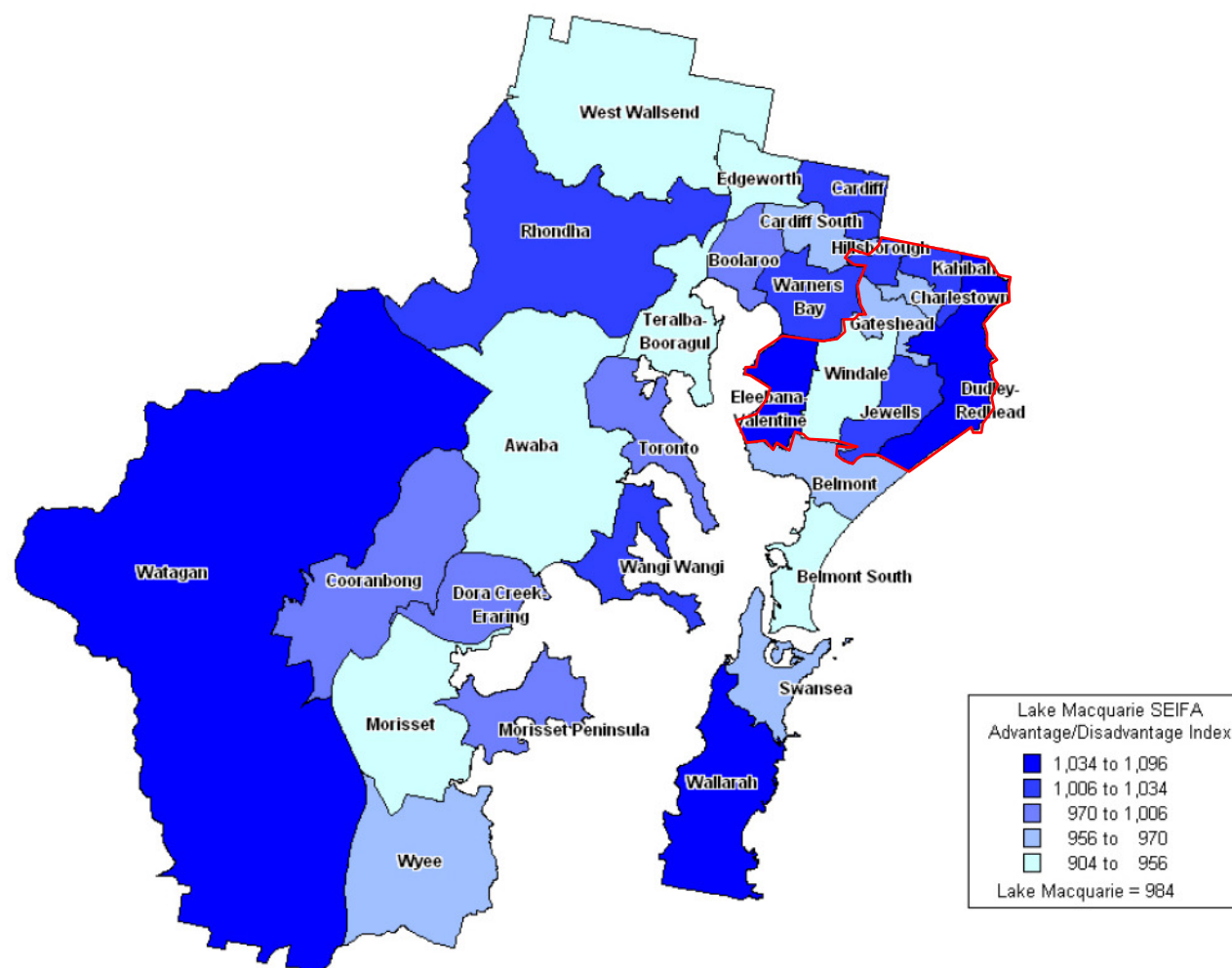
- The total population is almost 59,200 persons
- The occupancy rate was 2.63 persons per dwelling for the 21,521 occupied dwellings which was higher than the LGA (2.56 persons per dwelling) and the region (2.51 persons per dwelling).
- Majority of dwellings were detached (over 88%) and only 11.5% of dwellings were medium density housing
- The most dominant family 'type' comprised a couple with children.
- The proportion of lone person households (20.9%) was about 2% less than the LM LGA (23%) and just over 4% less than the region (lower hunter region)
- There was an average of 1.7 vehicles per household and only 8% of households having no vehicle in the Charlestown CC

In addition, the suburbs of Windale and Gateshead have high levels of social disadvantage, as shown in Socio-Economic Indices for Areas (SEIFA) map in **Figure 4**. The SEIFA index of Advantage/Disadvantage, measured by the Australian Bureau of Statistics (ABS) in 2006, identifies areas of high disadvantage and areas with the lowest scores are the most disadvantaged. A high proportion of residents in these areas being less educated, having lower incomes, less skilled occupations and higher unemployment. Windale has a high concentration of public housing and a high proportion of the residents are less educated, have low incomes, are less skilled, have higher unemployment and fewer car ownership (a/c to the 2011 census 26% of dwellings in Windale have no motor vehicle) and 40.9% are one parent households.

---

<sup>46</sup> LMCC (2010) *Residential Population and Non-Residential Development Growth Forecasts: Development Contributions Plan Charlestown Contributions Catchment*, prepared by Don Fox Planning, p. 15.

Figure 4. Socio-Economic Indices for Areas (SEIFA) Map of LM LGA – Advantage/Disadvantage Index 2006 Census



### 3. Future Population

Don Fox Planning examined three different growth scenarios, low, medium, and high for the predicted growth within the Charlestown CC to 2025. Council officers selected a Hybrid Development Scenario - a combination of the low and medium growth scenarios. The Hybrid Development Scenario represents the results of the medium forecasts for the Charlestown Sub-Catchment and the low forecasts for the remainder of the CC as the rate of growth in and around Charlestown is expected to be greater than the other parts of the catchment. **Table 5** reflects the hybrid growth scenario.

The Charlestown CC is expected to reach 74,410 persons by 2025, an additional 11,200 private residents (19% increase) from 2010, it reflects the steady growth since 1996.

From 2010-2025, new residents are concentrated in the north of the catchment as indicated:

- Charlestown - additional 6,370 residents (36% increase) total of 23,720 persons;
- Dudley - additional 1,350 residents (22% increase) total of 7,400 persons;
- Redhead – additional 750 residents (22% increase) total of 4,180 persons;
- Mount Hutton/Windale - additional 2,380 residents (17% increase) total of 15,530 persons;
- Belmont North/Floraville - additional 860 residents (8% increase) total of 9,410 persons;
- Eleebana – additional 480 residents (5% increase) and total of 7,410 persons; and
- Valentine - additional 450 residents (5% increase) and total of 6,760 persons.

Charlestown will become more dominant with its population more than three times larger than the smaller centres of Dudley, Valentine, Eleebana, and Redhead. The greatest change will be in Charlestown where 50% of the expected growth 6,370 persons will be located within Charlestown. Refer to **Figure 5** opposite.

Table 3. Estimated Resident Population Growth – Hybrid Development Scenario<sup>47</sup>

Estimated Residential Population by Sub-Catchment 2010-2025 (DFP, 2010)					
Locality	Persons				
	2010 (Existing)	2015	2020	2025	Growth 2010-2025
Charlestown	17,350	19,480	21,460	23,720	6,370
Dudley	6,050	6,400	6,840	7,400	1,350
Mt Hutton / Windale	13,160	14,010	14,980	15,530	2,380
Eleebana	6,930	7,050	7,280	7,410	480
Valentine	6,310	6,470	6,610	6,760	450
Belmont North / Floraville	8,550	9,000	9,250	9,410	860
Redhead	3,440	3,690	3,930	4,180	750
<b>Total</b>	<b>61,790</b>	<b>66,100</b>	<b>70,350</b>	<b>74,410</b>	<b>12,640</b>

From 2010 to 2025, the age profile of the catchment is expected to change significantly, as **Table 6** indicates. Charlestown CC will house an:

- Increased number of adults 55 years and over (retirees), an additional 6,803 persons with the greatest increase in residents aged 70 -74 years (56% increase) and 75 plus years (55% increase).
- An additional 1,209 number of adults aged 25-29 years, (36% increase) and an additional 2,226 adults aged 30-34 years (81% increase). The above two age groups have traditionally been the child-bearing age and are usually singles or couples with the possibility of establishing a family. This is reflected in the associated growth in 0-4 years old (31% increase) and the 5-9 years old (23% increase).
- Decline in the number of adults aged 45-49 years old (16% decrease) and a decline in the number of adults aged 50-54 years (7% decrease). These small decreases reflect the changing age profile of the CC and are expected to remain relatively stable as the younger age groups move through the demographic cycle.

<sup>47</sup> LMCC (2010) Residential Population and Non-Residential Development Growth Forecasts, Development Contributions Plan Charlestown Contributions Catchment, prepared by Don Fox Planning

Figure 5. Geographic Distribution of Expected New Private and Non-Private Residents by 2025

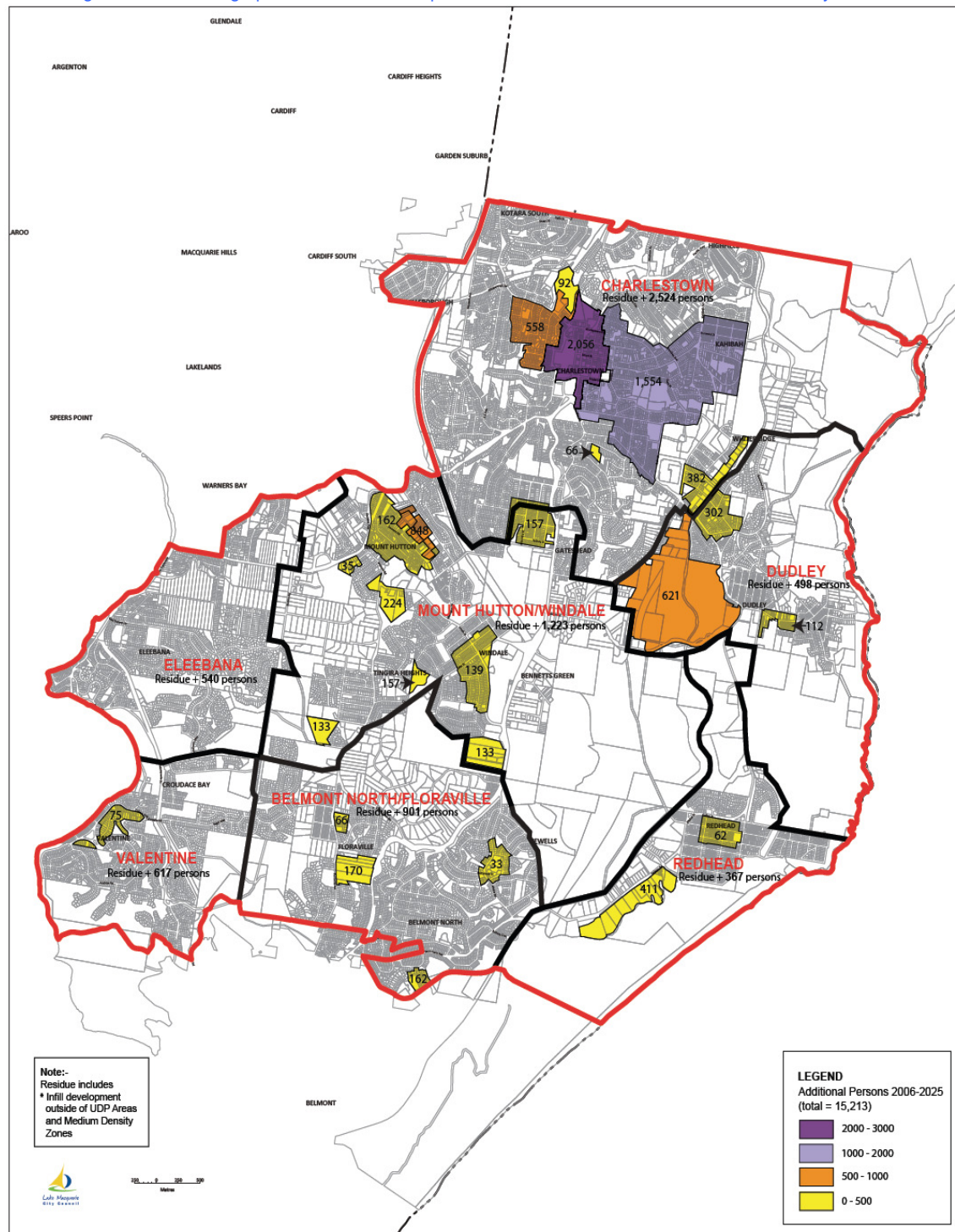


Table 4. Estimated Age Profile – Medium Growth Scenario<sup>48</sup>

Forecast Demographic Profile 2010-2025										
Age (years)	2010		2015		2020		2025		Growth 2010-2025	
	Persons	%	Persons	%	Persons	%	Persons	%	Persons	% Change
0-4	3,350	5.6	3,624	5.7	4,077	5.9	4,379	6.1	1,029	31
5-9	3,493	5.9	3,625	5.7	3,907	5.7	4,286	5.9	793	23
10-14	3,897	6.5	3,806	5.9	3,947	5.7	4,146	5.7	249	6
15-19	4,402	7.4	4,203	6.6	4,121	6	4,180	5.8	-222	-5
20-24	4,292	7.2	4,631	7.2	4,440	6.5	4,294	5.9	2	0
25-29	3,364	5.7	4,472	7	4,810	7	4,573	6.3	1,209	36
30-34	2,751	4.6	3,594	5.6	4,694	6.8	4,977	6.9	2,226	81
35-39	3,394	5.7	3,022	4.7	3,858	5.6	4,889	6.8	1,495	44
40-44	3,959	6.7	3,677	5.7	3,303	4.8	4,067	5.6	108	3
45-49	4,210	7.1	4,247	6.6	3,968	5.8	3,521	4.9	-689	-16
50-54	4,446	7.5	4,454	6.9	4,490	6.5	4,146	5.7	-300	-7
55-59	4,077	6.9	4,634	7.2	4,643	6.8	4,612	6.4	535	13
60-64	3,756	6.3	4,180	6.5	4,717	6.9	4,672	6.5	916	24
65-69	3,148	5.3	3,752	5.9	4,150	6	4,615	6.4	1,467	47
70-74	2,505	4.2	3,040	4.7	3,587	5.2	3,913	5.4	1,408	56
75+	4,475	7.5	5,154	8	6,015	8.8	6,952	9.6	2,477	55
<b>TOTAL</b>	<b>59,520</b>	<b>100</b>	<b>64,117</b>	<b>100</b>	<b>67,186</b>	<b>100</b>	<b>72,223</b>	<b>100</b>	<b>12,703</b>	<b>21</b>
<b>Note:</b> Age Profile based on persons in occupied private dwellings only The projected growth for the catchment is 12,540 not 12,703 as indicated above, therefore % changes will vary slightly										

The table above indicates the estimated age profile for the medium growth scenario, Don Fox Planning did not provide a table for the hybrid growth scenario. However, the total difference (12,703 – 12,540) is only 163 persons which would mean only a marginal difference on the above figures.

Charlestown sub-catchment will have a high proportion of apartments expected to attract a range of different lifecycle groups including young couples, couples starting families, older couples, and singles. This mix of age groups will result in a different demographic profile for Charlestown by 2025.

### 3.1 Workers

The Charlestown CC had an estimated total workforce of 17,833 persons in 2010 and an estimated 32% of residents in the Charlestown CC work locally (2006 Journey to Work data).

Worker growth in the catchment is expected to be significant with 4,710 additional workers between 2010 and 2025. According to the growth forecast workers in the CC will reach 22,540 persons by 2025 with over 60% (13,863 persons) expected to be working in Charlestown<sup>49</sup>. Moderate growth will also occur in Mount Hutton/Windale (additional 1,026 persons), Redhead (217 persons) and Belmont North/Floraville (79 persons) over the same period. The number of workers in Dudley, Eleebana and Valentine is not expected to change significantly.

### 3.2 Journey to Work

Don Fox Planning examined the 2006 Journey to Work (JTW) data and the following are extracts from section 4.2.2 of the report:<sup>50</sup>

- 40% of all work trips by employed persons living in the Charlestown CC are to localities within the Catchment (this includes those who live in the same travel zone)
- Almost half (47%) of employed persons living in the Charlestown sub-catchment and 43% of those in the Dudley sub-catchment worked in the Newcastle LGA.

<sup>48</sup> Ibid., p. 41.

<sup>49</sup> Ibid.

<sup>50</sup> Bureau of Transport Statistics (2010) 2006 Journey to Work Data Set



### 3.3 Tourists

The CC provides excellent access to ocean beaches and Lake Macquarie; has a range of tourist accommodation from hotel/motels, holiday parks and bed and breakfast accommodation; with the Pacific Highway providing good access for tourists.

From 2010 to 2025, tourism in the catchment is expected to increase by an estimated 420 beds provided by the following:<sup>51</sup>

- 20 short-term caravans/mobile homes;
- 50 bed and breakfast accommodation;
- 70 hotel/motel/serviced apartments; and
- Backpacker, boarding house and hostel accommodation.

However, the demand generated by tourism developments is likely to be moderate compared to the concentrated demand expected from residents and workers in the Charlestown area. Further development of caravan parks/mobile home villages may occur along Kalaroo Road Redhead. Tourism development is anticipated to generate an additional 400 beds/person places to 2025, which needs to be considered in the context of an additional 12,620 residents and 4,710 workers. Refer to **Table 7**.

Table 5. Summary of Type of Residential Development – Hybrid Growth Scenario

Estimated Residential Development 2010-2025 (DFP, 2010)						
Residential Dwelling Type	Occupancy Rate <sup>A</sup>	# Dwellings / Beds				Growth
		2010	2015	2020	2025	
<b>Private Dwellings<sup>B</sup></b>	2.39	<b>22,540</b>	<b>24,490</b>	<b>26,360</b>	<b>28,140</b>	<b>5,600</b>
Dwelling House / Lot	2.70	20,350	20,870	21,360	21,680	1,330
Residential Accommodation <sup>C</sup> with 1 bedroom / bedsit	1.20	150	310	470	640	490
Residential Accommodation <sup>C</sup> with 2 bedrooms	1.59	450	920	1,400	1,910	1,460
Residential Accommodation <sup>C</sup> with 3 or more bedrooms	2.44	400	820	1,240	1,700	1,300
Seniors Housing <sup>D</sup>	1.37	850	1,170	1,420	1,670	820
Moveable Dwellings (Long -term)	2.03	340	400	470	540	200
<b>Non-Private Dwellings (Beds)<sup>E</sup></b>	-	<b>1,700</b>	<b>1,960</b>	<b>2,260</b>	<b>2,640</b>	<b>940</b>
Residential Care Facility	bed	500	630	790	980	480
Hostels/Boarding Houses/Backpacker's/Group Homes/Hospitals	2.12	850	930	1,020	1,130	280
Educational Establishments (residential component)	bed	120	130	140	160	40
Moveable Dwellings (Short -term)	2.03	30	40	40	50	20
Bed and Breakfast Accommodation	bed	20	30	50	70	50
Hotel or Motel Accommodation / Serviced Apartments	bed	180	200	220	250	70
<b>Notes:</b> A. Forecast average occupancies across the Contributions Catchment as at 2025. B. This is the average occupancy rate of all dwellings in the Contributions Catchment as forecast to 2025 for residential development. C. Excluding boarding houses, dwelling houses, group homes, hostels and seniors housing. D. Excluding residential care facilities (Estimates based on 2001 and 2006 ABS Census data). E. NSW Average based on 2001 and 2006 ABS Census data.						

Source: LMCC (2010) *Residential Population and Non-Residential Development Growth Forecasts: Development Contributions Plan Charlestown Contributions Catchment*, prepared by Don Fox Planning

The provision of key infrastructure e.g. the Fernleigh Track, the lake cycleway, and the coastal recreational trail are draw cards together with coastal and lakeside parks and the All-Abilities playground are key amenities also used by tourists.

<sup>51</sup> Based on an average of 2 beds per accommodation type

# PART C - RECREATION

## 4. Background

Informal recreational activities are popular for all ages and especially important for people 55 years and over. They cover a wide range of activities including walking for exercise, walking the dog, swimming, cycling, jogging, fishing, sailing, picnicking/BBQ's, playgrounds, and community gardening. The Recreation Participation Survey of Lake Macquarie residents highlights a strong preference for informal recreation activities such as walking for exercise, swim/surf at beach, golf, spectator at sports, swim public pool, picnic/BBQ, lawn bowls, exercise the dog, cycling, children to playground.<sup>52</sup> Whereas young people may prefer activities such as skateboarding, surfing, BMX, and mountain bike riding.

According to a survey undertaken in 2002, the most popular active recreational activities for older people were walking, swimming, cycling, bowls, golf, billiards and keep fit activities (e.g. yoga, tai chi, dance).<sup>53</sup> In the last few years, new sports such as walk ball, petanque and disc golf are also gaining acceptance with older people. Local focus groups held in 2006 in LM, identified the preferred active recreation activities for people aged 60 years and over as walking, bowls, swimming, tennis and fishing.<sup>54</sup>

National Research from the Australian Sports Commission (ASC) identified that there is an increasing trend towards non-organised sport. The total participation rate for non-organised physical activity was 70.8% in 2010. Most participants engaged partially or fully in non-organised activity (86.1%).<sup>55</sup> The total participation rate in organised physical activity was 40.0% in 2010. About half of all participation in physical activity was partially or fully organised (48.6%) and the total participation rate in club-based physical activity was 25.7% in 2010.<sup>56</sup>

Lake Macquarie is a coastal community and it already has an older population profile compared to federal or state levels, and this trend of an increasing aging population is likely to continue into the future. This plan provides an adjustment in provision to increase the informal recreation opportunities, which are particularly appropriate for older adults and some, such as, walking and cycling are appropriate and highly used by the entire community.

### 4.1 Future of Recreation Infrastructure

In developing this Recreation and Land Plan, several elements were considered including the range of recreation opportunities, current standards, a hierarchy of provision, and asset maintenance.

- **Recreation Opportunities**

Historically, recreation facilities provided by Council's were primarily sports fields, tennis and netball courts, parks and playgrounds. Nowadays people want a diverse range of recreation opportunity with flexibility as to when they participate and informal recreation facilities fit this criterion. In addition, a larger proportion of the population is aging, so the use of major parks, shared pathways (off-road cycleways), recreational trails, parkland areas, and community gardens is increasing.

- **Standards**

This plan considers the existing local provision, the existing citywide provision, and compares these with the two standards prepared by DoP. The *Draft Development Contributions Guidelines* provides indicative standards according to population thresholds<sup>57</sup> and the *Recreation and Open Space Planning Guidelines for Local Government* provides standards for open space planning in NSW based on distance from most dwellings.<sup>58</sup> This plan recommends a locally appropriate provision standard that may deviate away from the standard in the guidelines.

<sup>52</sup> LMCC (2001) *Lake Macquarie Open Space Strategy*, summary of participation by activity - graph 4.2.

<sup>53</sup> Australian Bureau Statistics (2002) *Directory of Culture and Leisure Statistics*

<sup>54</sup> LMCC (2008) *Ageing Population Plan 2008-2017*

<sup>55</sup> ASC (2010) *Participation in Exercise, Recreation and Sport: Annual Report 2010 State and Territories Tables for NSW*, p. 2.

<sup>56</sup> *Ibid.*, p. 3.

<sup>57</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*.

<sup>58</sup> NSW DoP (2010) *Recreation and Open Space Planning Guidelines for Local Government*, Table 4, p. 29.

- **Hierarchy**

The plan aims at providing a hierarchy of provision, which may mean some facilities are developed to a higher standard, providing greater recreation opportunities and a higher capacity. For playgrounds, this principle is demonstrated in the provision of the all-abilities playground at Speers Point Park. The unprecedented use of this large playground is a good example of how people are prepared to travel to a quality facility. Rather than Council providing numerous small facilities with limited recreation value, this plan recommends the provision of some larger facilities that have more recreation opportunities and supporting infrastructure. Refer to **Appendix 7**.

- **Asset Maintenance**

Council is responsible for the continued maintenance of new and existing assets. Asset maintenance is a considerable burden on many Councils and LMCC with its extensive LGA is no exception. Where appropriate this plan recommends the enhancement of existing recreation infrastructure, which may be expanded to obtain the extra capacity needed for the additional population. This planned approach was used for sports fields, courts, playgrounds, and parks.

**Climate Change** – Climate change impacts, such as, the increase in the frequency and severity of storms and sea level rise may lead to the need to pay attention to climate change-related risk management, which results in higher maintenance costs associated with heat stress, storms and bushfires.

## 4.2 Methodology

The following key indicators were considered in determining the level of provision, the range and location of recreation facilities for Charlestown.

- **Existing Provision** - details on the current facilities provided to the community. Both the public and private facilities were considered as these are the total existing facilities that service the need.<sup>59</sup>
- **Population Growth** – Figure 4 show the development areas, moderate infill development and higher density development
- **Identified need** examines various surveys, plans, guidelines, strategies and Council reports, demonstrating the provision needed for the future;
- **Comparative** analysis considers service equity by comparing the provision within the catchment, the provision within the LGA and compares it with the relevant planning standards
- **Best practice** considers industry standards, best practice guidelines and new service models.
- **Analysis** provides the basis on how the recommended locally appropriate standard is derived.
- **Recommendations** identifies and lists the proposed new work which is prioritised according to:
  - Very high priority – purchase land as soon as possible
  - High priority works – short-term up to 2020
  - Medium priority works – mid-term up to 2025
  - Low priority works – long-term beyond 2025

This plan considers all of the above key indicators and provides a broad spectrum of recreation facilities, aimed to encourage increased participation of its residents. This is consistent with Council's Community Plan goal 'a city responsive to the well-being of its residents'.<sup>60</sup>

<sup>59</sup> NSW DoP (2009) *Draft Local Development Contribution Guidelines*, Matters for Consideration, p. 92.

<sup>60</sup> LMCC (2008) *Lake Macquarie Community Plan 2008 – 2018*, section 2.1.

## 5. Sports Grounds

A sports ground is an area developed with sporting facilities used for organised or competition sport. The area may comprise one or more sports fields, ovals or courts (netball or tennis). The actual area of a sports ground refers to the total area used for sporting activities together with the associated facilities such as, car parking, amenities, and access road. It does not include natural area within the parcel retained for environmental purposes. The actual area, detailed below as 'Actual Ha' differs from the area of land categorised as sportsground, as detailed in the LMCC Community Land PoM and outlined in **Part D** of this plan. The land categorised sports ground typically included the entire parcel and it included land that maybe suitable for the future development of a sports ground.

### 5.1 Existing Provision

There are 21 sports grounds in the Charlestown CC listed below:

Table 6. Charlestown CC – Sports Ground - Existing

SUBURB	FACILITY NAME	ACTUAL HA	NO. OF SPORTS GROUNDS
<b>SMALL SPORTS GROUND</b>			<b>16</b>
ADAMSTOWN HEIGHTS	Pickering Oval	1.95	1
BELMONT NORTH	Lenaghan Park	4.1	1
CHARLESTOWN	Charlestown Oval	2.16	1
CROUDACE BAY	Junior Cricket Ground	1.33	1
DUDLEY	Lydon Field John Balcomb	4.28	1
DUDLEY	Reay Park	1.14	1
ELEEBANA	Eleebara Oval	2.24	1
FLORAVILLE	Marks Oval	4.5	1
GATESHEAD	Windsor Park/Carbeen St Oval	3.61	1
HILLSBOROUGH	Hillsborough Oval	2.76	1
HILLSBOROUGH	Mount Hutton Equestrian	2.88	1
MOUNT HUTTON	John Peschar Park/Holford Oval	2.8	1
REDHEAD	Redhead Tennis	0.36	1
WHITEBRIDGE	Riawena Park	0.8	1
WHITEBRIDGE	Lisle Carr Oval	2.66	1
WINDALE	Bahloo Reserve	3.24	1
<b>MEDIUM SPORTS GROUND</b>			<b>4</b>
GATESHEAD	Harold Knight Complex Fred Wright Oval Mick Middleton Field	6.61	1
GATESHEAD	Ernie Calland Field Allen Davis Field Goundry St Oval	8.58	1
REDHEAD	Liles Oval	5.49	1
WINDALE	Hunter/Barnett Fields Michael Bird Field	9.14	1
<b>MAJOR SPORTS GROUND</b>			<b>2</b>
CROUDACE BAY	Croudace Bay Complex	10.32	1
KAHIBAH	Kahibah Oval & Andy Bird Field St Johns No. 1 & Ferris Field Jack Stewart Netball	15.31 4.34	1
<b>TOTAL SPORTSGROUNDS</b>		<b>100.6</b>	<b>22</b>

Existing sports grounds are collated according to the following hierarchy. Existing provision includes sportsgrounds with one field or oval, however, **two sports fields** is the minimum for future provision.

Table 7. Charlestown CC – Sports Ground - Hierarchy

DESCRIPTION	SIZE	CATCHMENT	FIELD/OVALS
Small Sports Ground	up to 5 ha	1 km	1 to 2
Medium Sports Ground	5 to 10 ha	2 kms	3 to 5
Major Sports Ground	over 10 ha	5 kms	5 plus

## 6. Sports Fields

A sports field is an area of land within a sports ground used to play sport. It is usually a rectangular or oval area, grassed or synthetic surface, developed for a sporting use in accordance with current acceptable standards. Currently, sports fields in LM are used for AFL, archery, athletics, baseball, croquet, cricket, equestrian, rugby league, rugby union, soccer, and softball.

### 6.1 Existing Provision

The catchment has 41.5 generic sports fields providing an even distribution and a range of sporting uses as detailed in the table below. In addition, there are two city sporting facilities, the Lake Macquarie Regional Football Facility and the Hunter Sports (Athletics) Centre. In recognition that users travel from all parts of the city to these facilities, these fields are apportioned to the six catchments.

Table 8. Charlestown CC – Sports Fields – Existing

SUBURB	FACILITY NAME	EXISTING USE	NO. OF FIELDS/OVALS	SUMMER & WINTER USE
SPORTS FIELDS IN CATCHMENT				
ADAMSTOWN HTS	Pickering Oval	cricket	1	
BELMONT NORTH	Lenaghan Park	rugby league	1.5	
CHARLESTOWN	Charlestown Oval	cricket/soccer	1	●
CROUDACE BAY	Croudace Bay Complex	cricket/league, cricket/soccer junior soccer, mini rugby league	4 1	●
CROUDACE BAY	Junior Cricket Ground	cricket	0.5	
DUDLEY	Lydon Field	soccer	1	
	John Balcomb	rugby league	1.5	
DUDLEY	Reay Park	cricket/athletics	1	
ELEEBANA	Eleebana Oval	soccer	1	
FLORAVILLE	Marks Oval	cricket/soccer	2.5	●
GATESHEAD	Windsor Park (Carbeen St Oval)	baseball	2	
GATESHEAD	Harold Knight Field	soccer	1	
	Fred Wright Oval	soccer	1	
	Mick Middleton Field	cricket/soccer	1.5	●
GATESHEAD	Ernie Calland Field	cricket/rugby league	2	●
	Allen Davis Field	rugby union/league	1	
	Goundry St Oval	cricket	0.5	
HILLSBOROUGH	Hillsborough Oval	cricket/AFL	1	●
HILLSBOROUGH	Mount Hutton Equestrian	equestrian	1.5	●
KAHIBAH	Kahibah Oval	cricket/soccer	2	●
	Andy Bird Field	soccer	0.5	
	St Johns No. 1	league/touch football	1	●
	Ferris Field	league/touch football	1	●
MOUNT HUTTON	John Peschar Park / Holford Oval	rugby league	1	
REDHEAD	Liles Ovals *	cricket/soccer	3	●
WHITEBRIDGE	Riawena Park	cricket	0.5	
WHITEBRIDGE	Lisle Carr Oval	soccer	1	
WINDALE	Bahloo Reserve	cricket/athletics	1	
WINDALE	Hunter/Barnett Fields	cricket/league	2	●
	Michael Bird Field	league	1	
TOTAL SPORTS FIELDS/OVALS (in catchment)			41.5	
CITY SPORTS FIELDS				
GLENDALÉ	Apportionment 6.5 fields / 6 catchments		1	
TOTAL SPORTS FIELDS/OVALS (attributed to catchment)			42.5	
*Liles Ovals, Redhead has 2 cricket & 3 soccer - providing summer & winter use, however the site is not fully utilised				

**Appendix 2** provides examples of a generic sports field and demonstrates the method of calculating fields in LM, and is based on the highest number of fields/ovals used at any period in time, either in



summer or in winter. A junior field is 0.5 of a generic field and can include a junior cricket oval, junior soccer field or a mini-rugby league field.

In addition to the existing council fields in this catchment, there are thirteen (13) school sports fields within the catchment. The Hunter Sports High School at Gateshead provides four (4) sports fields and two (2) cricket pitches, used by several local sporting clubs. Gateshead and Redhead Public Schools have fields, although available for community use, they are not suitable for competition sport. Conversely, there are a number of Council fields used by schools. A survey of sports ground use by public and private schools in the Charlestown CC highlighted the use of John Street No. 1, Hunter /Barnett Field, Alan Davis Field, Mick Middleton Field, Lumsdon Oval, Lenaghan Oval, and Bahloo Reserve for school sport.<sup>61</sup>

Some sports fields are located just outside the LM LGA boundary in Newcastle City Council LGA including Nesbitt Park, and the Lugar Street Reserve at Kotara South, and Hudson Park in Adamstown Heights. Residents of LM would use some of these facilities; as would residents NCC utilise some facilities in LM.

Only about half of the existing sports fields cater for summer and winter use. The most common dual use arrangement is cricket and football. Ernie Calland Field at Gateshead provides for cricket and league and the Neville Thompson Oval at Dora Creek provides for three uses including cricket, league, and athletics. Providing the most common dual use summer and winter arrangement i.e. cricket and football is often difficult due to site constraints and the availability of land. However, the ability to increase the capacity of existing grounds to provide dual/multiple use maybe possible with additional works, such as, filling, retaining walls/batters, relocating amenities building/access roads/car parking or acquisition of adjoining land.

The approach of maximising the existing capacity is preferable and more sustainable than the establishment of new sportsgrounds, which may need to be located a considerable distance from the population growth areas, on sites that are heavily constrained, and these identified new sites may only ever accommodate one field.

## **6.2 Identified**

The following survey strategies and plans and demonstrate the identified need.

- **ERASS**

The Exercise, Recreation, and Sport Survey (ERASS) was a joint initiative of the Australian Sports Commission and State and Territory Departments of Sport and Recreation, conducted on an annual basis between 2001 and 2010.

The ERASS collected information on the frequency, duration, nature and type of activities participated in by persons aged 15 years and over for exercise, recreation or sport during the 12 months prior to interview. This survey included active 'playing' participation, and does not include coaching, refereeing, being a spectator or activities related to work, household chores or gardening duties. It was conducted quarterly in 2010, with an annual total of 21,603 respondents across Australia.

According to the ERASS 2010 annual report, the participation rates for NSW for Australian rules football is 1.7%, athletics/track & field is 0.7%, baseball is 0.3%, cricket (outdoor) is 3.4%, football (outdoor) is 6.5%, horse riding/equestrian is 0.8%, rugby league 2.1%, rugby union is 1.2%, softball is 0.4%, and touch football is 4.4%.<sup>62</sup>

These participation rates would be higher if the survey included children under 15 years of age.

- **Sports Strategy**

Council prepared the Lake Macquarie City Council Sports Facility Strategy 2009-2014 (Sports Strategy) to provide direction on the future of sports fields in LM. The strategy identifies 29 sporting clubs in the Glendale CC (27% of sporting clubs in the LGA) with facilities catering for AFL, athletics, baseball, cricket, equestrian, football/soccer, netball, rugby league, rugby union, softball and touch football. Tennis was not included in the strategy.

As part of that strategy, Council has undertaken consultation with sporting clubs and associations in the LGA. Issues raised include the need to improve amenities buildings, seating, shade, storage, and car

<sup>61</sup> LMCC (2010) *Sports Facility Strategy 2009-2014*

<sup>62</sup> ASC (2010) *Participation in Exercise, Recreation and Sport Survey 2010 Annual Report: State and Territory Tables for NSW*

parking. Several clubs identified the need for improved playing surfaces. Refer to the Sports Strategy for more details on key facility issues, player numbers, and levels of use.

The Sports Strategy has identified the following capital works improvements within the Glendale CC up to 2014. Some of which have been completed.

Table 9. Charlestown CC – Sports Facility Strategy Capital Works

Years 1 - 5	Years 5 - 10	Years 10 - 15
Redhead (Liles Oval) Floodlighting	Charlestown (Kahibah Oval) Playing Surface	Charlestown (Andy Bird Field) Floodlighting
Redhead (Liles Oval) Playing Surface & Carparking	Croudace Bay (Rugby League Field - Floodlighting	Gateshead (Ernie Calland Field) Floodlighting
	Belmont North (Leneghan Oval) - Floodlighting	Gateshead (Harold Knight Oval) Amenities Building
	Gateshead (Mick Middleton Oval) Supporting Infrastructure, such as, car parking, fencing	Dudley (Lydon Field) Amenities Building
	New facility at land adjacent to Allen Davis & Mick Middleton Fields, Gateshead or Kaleen St Res, Charlestown	

Source: LMCC (2010) *Sports Facility Strategy 2009-2014*

The scheduled short-term review of the strategy will further refine the provision of sports facilities.

#### • Liveable Communities Assessment

During December 2009 and February 2010, Lake Macquarie Liveable Communities Assessment (LM LCA) undertook a community survey of people residing in the Charlestown area. Respondents provided comments regarding the future of their communities, detailed in **Appendix 3** and one particular comment:

*Need more sporting fields and open spaces for children and teens to play in Charlestown*<sup>63</sup>

#### • Delivery Program

The Delivery Program defines the actions Council will take towards achieving our community's vision for our City. The community told council to: 'plan sports grounds and facilities to cater for the growing communities in or near urban release areas'.<sup>64</sup>

Objectives of the program include:

- Planning complete for Hunter Sports Centre upgrades that will ensure a sustainable service<sup>65</sup>
- Review and amend strategy for provision of new and rehabilitates sports facilities and involved extensive community engagement<sup>66</sup>

#### • Open Space Strategy

The strategy recommends the upgrading of existing sports fields and recreation facilities to increase their capacity to provide for more intensive and multiple uses.<sup>67</sup>

The Recreation Plan recommends and identifies certain actions including:

- Encourage multiple use<sup>68</sup>
- Except in population growth areas, do not create any additional sports grounds<sup>69</sup>
- Plan a hierarchy of sports facilities<sup>70</sup>
- Upgrade Liles Oval precinct and assess opportunities for building a further playing field<sup>71</sup>
- Upgrade entrance, parking and paths at Lenaghan Park and provide more plantings<sup>72</sup>
- Harold Knight Oval and Mick Middleton Field and redesign site as a major outdoor sports venue with additional fields<sup>73</sup>

<sup>63</sup> Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health, p. 278.

<sup>64</sup> LMCC (2013) *City of Lake Macquarie Delivery Program 2013-2017*, p. 48.

<sup>65</sup> *Ibid.*, Priority 3.2, p. 49.

<sup>66</sup> *Ibid.*, Priority 3.3, p. 50.

<sup>67</sup> LMCC (2001) *Lake Macquarie Open Space Strategy*, p. 6-1.

<sup>68</sup> LMCC (1998) *LMCC Recreation Plan Volume 2: The Research Findings*, p. 33.

<sup>69</sup> *Ibid.*

<sup>70</sup> *Ibid.*

<sup>71</sup> LMCC (1998) *LMCC Recreation Plan Volume 1: The Recreation Plan*, p. 46.

<sup>72</sup> *Ibid.*

<sup>73</sup> *Ibid.*, p. 48.

- Frank Watkins Park, Dudley: assess opportunities for enlarging to provide a cricket field<sup>74</sup>
- John Preschar Park: enhance entrance and site security, lighting<sup>75</sup>

The Recreation Plan identifies certain weaknesses in relation to sports fields. Including the inadequate development of a hierarchy, inadequate provision of car parking, duplication of infrastructure such as clubrooms rather than integrating these facilities, lack of pedestrian and cycle links to sporting venues, and a tendency for council to permit single group use and to not manage the effective and efficient timetabling of facilities.

## 6.3 Comparative

Department of Planning (DoP) in the Draft LDCG has not specified an indicative population threshold for generic sports fields, but rather it specifies an indicative population threshold for each individual sport. Based on the assumption that each field has a summer and a winter sporting use, and not including hockey, the indicative population threshold for a generic field is one field for every 1,400 persons.

**Appendix 4** provides details of the analysis in which this population threshold has been derived.

The actual provision in the Charlestown CC is similar to the actual citywide provision (LM LGA) and similar to the assumed indicative standard (guidelines). Refer to **Appendix 4**.

Table 10. Charlestown CC – Sports Fields - Comparative

COMPARATIVE	POPULATION	NO. OF SPORTS FIELDS	PERSONS PER FACILITY
Charlestown CC	59,520	42.5	1,400
LM LGA	200,849	138.5	1,450
Guidelines <sup>76</sup>			1,400
<b>RECOMMENDED STANDARD</b>			<b>1,500</b>

The recommended standard of provision of one field for every 1,500 persons is considered reasonable and achievable for the future provision.

## 6.4 Best Practice

The Draft LDCG recommends the following best practice guidelines:

*Ovals, sports grounds – consideration should be given to co-location of facilities to maximise usage e.g. cricket and AFL<sup>77</sup>*

*Recreation amenities buildings – should service more than one field and different sports<sup>78</sup>*

Wherever possible, sports fields should accommodate all year use (a summer and winter sport). Dual use arrangements can include, cricket and football, athletics and AFL; rugby union and rugby league; rugby league and touch football, which occur in the catchment. One most common arrangement is two full sized soccer fields with sufficient area for a cricket wicket in between, and sufficient space to provide an oval to accommodate cricket use.

## 6.5 Analysis

Charlestown is a highly developed catchment and 50% of the additional growth is infill development in and around the Charlestown centre. Since a large number of the existing fields/ovals are sole use facilities, additional fields are to be provided by expanding the existing facilities to provide summer and winter use of grounds. This best practice approach provides a more sustainable outcome and is preferred rather than providing an entirely new facility.

Amenities buildings have a 50-year life span. As population densities increase, the demand for access to sporting fields will also increase. Since land in or near urban growth areas is scarce, there will be an increased pressure for existing sporting facilities to provide for the increased use. Industry benchmarks suggest that 20 hours per week usage per field is the maximum field capacity. This will vary depending on the quality of the playing surfaces, weather conditions, type of sport, and age of participants.

<sup>74</sup> *Ibid.*, p. 50.

<sup>75</sup> *Ibid.*, p. 51.

<sup>76</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*, Indicative Population Thresholds for Ovals and Sportsgrounds, p.92.

<sup>77</sup> *Ibid.*

<sup>78</sup> *Ibid.*, p. 93.

The need for good soil profiles, irrigation, drainage, and pest and weed management will be required to increase capacity. Synthetic playing surfaces, or a hybrid system or natural grass and synthetic turf, may be considered in the future to provide for the increased use where turf fields fail to accommodate demand. It is reasonable for any new buildings to be designed to accommodate the multiple uses of sports fields.

Based on the recommended standard of provision of one field every 1,500 persons; there is a slight over provision in the catchment. For the projected population of 12,540 and based on the recommended standard, 8.4 sports fields are required. Considering the existing over-provision of 2.8 fields, an additional five and a half (5.5) fields or field equivalents are attributable to the new development.

## 6.6 Recommendations

The assessment of the need for sports fields has been undertaken according to a generic sports field's model, rather than assessing the needs of each individual sporting code. Council can reallocate fields to different sporting codes depending on demand/participation rates, which provides greater flexibility as community needs change over time. The development of multipurpose sports fields, catering for a range of sporting codes, provides a more efficient use of open space.

Table 11. Charlestown CC – Sports Fields – Proposed Locations

SUBURB	FACILITY NAME	DESCRIPTION	NO. OF FIELDS	PRIORITY
CROUDACE BAY	Parklea Ave	Reconfiguration to provide an additional dual use field by relocating netball courts to the east, car parking, and access	1	Medium
DUDLEY	John Balcomb Field	Reconfiguration to provide 1 new field west of existing field for dual use, cricket wicket, amenities building, fencing, and car park	1	Low
FLORAVILLE	Marks Oval	Reconfiguration to provide 1 new field north, drainage, retaining wall, and car parking	1	Low
GATESHEAD	Allen Davis Field	New field west of existing field to provide dual use, cricket wicket, fencing, and car park	1	High
GATESHEAD	Harold Knight Complex	Reconfiguration to provide dual use, cricket wicket, amenities building, car parking	1	Medium
KAHIBAH	Kahibah Oval & Andy Bird Field	Upgrade facility with additional car parking	0.5	Low
<b>TOTAL SPORTING FIELDS</b>			<b>5.5</b>	

In addition to the above works, the following proposed works are to be funded by another source:

**Windale** – Hunter Barnett and Michael Bird Fields, upgrading of the fields, access road, car parking and a combined amenities building and new skate park funded from the sale of the adjoining community land (reclassified and rezoned). Council report on 19 March 2007 stated that 'funds generated from the sale of the land will be used to upgrade community facilities in the area'.

## 7. Tennis Courts

*The sport (tennis) contributes strongly to the social cohesiveness of our community and provides a safe and healthy sport and social environment for Australians of all ages and abilities. Tennis is truly a sport for life and a sport for all.*<sup>79</sup>

### 7.1 Existing Provision

Typically, tennis courts are facilities located within sports grounds. Charlestown CC has a good distribution of tennis courts throughout the catchment with 26.5 courts available at the following nine (9) locations. The following table lists the number of full sized tennis courts and the 0.5 indicates there is one-half (mini) court at Whitebridge.

Table 12. Charlestown CC – Tennis Courts - Existing

SUBURB	FACILITY NAME	NO. OF TENNIS COURTS
<b>SMALL</b>		
DUDLEY	Reay Park	1
ELEEBANA	Eleebana Oval	3
FLORAVILLE	Marks Oval	2
HILLSBOROUGH	Hillsborough Tennis	3
WHITEBRIDGE	Riawena Park	2.5
WINDALE	Michael Bird Field	2
<b>MEDIUM</b>		
CROUDACE BAY	Valentine Tennis	4
MOUNT HUTTON	Mount Hutton Tennis	5
REDHEAD	Redhead Tennis	4
<b>TOTAL TENNIS COURTS</b>		<b>26.5</b>

In addition, there are three tennis courts located at the Hunter Sports High School, at Gateshead. These courts are only available for school use and have not been included in the existing provision. Given the reasonable distribution within the catchment, there is no need for players to travel outside the catchment except for competition.

The existing provision has been collated according to the following hierarchy. Existing provision includes one and two tennis courts; however, a **three-court** centre is the minimum for future provision.

Table 13. Charlestown CC – Tennis Courts - Hierarchy

DESCRIPTION	SIZE	CATCHMENT	NO. OF COURTS
Small Tennis Centre	0.5 ha	1 km	1 - 3 courts
Medium Tennis Centre	1.2 ha	2 km	4 - 7 courts
Major Tennis Centre	1.5 + ha	5 + km	8 courts +

### 7.2 Identified

The following surveys and strategy demonstrate the identified need.

- **ERASS**

According to the ERASS 2010 annual report, tennis has a 6.8% total participation rate. This survey includes persons aged 15 years and over who participated in physical activity for exercise, recreation, and sport over a 12-month period prior to interview in 2010.<sup>80</sup>

- **Tennis Australia**

In 2010, Tennis Australia undertook the largest national study ever conducted by a sport to gain a clear understanding of the tennis consumer. The sample size was over 8,300 people, covering all capital cities and regional areas within each state and territory from people aged from five to 75 years. Key insights include:

*Tennis has the highest participation rate of any traditional sport in Australia  
12% of the population currently play tennis at least once a year*

<sup>79</sup> Tennis Australia (2011) *Tennis 2020: Facility Development and Management Framework for Australian Tennis*, p. 1.

<sup>80</sup> ASC (2010) *Participation in Exercise Recreation and Sport Survey 2010 Annual Report*

*The highest participation rates are in the 5-9 and 10-15 year age groups<sup>81</sup>*

- **Liveable Communities Assessment**

One specific comment from a survey of residents in Charlestown includes the following. Refer to **Appendix 3** for further comments.

*Would love to see tennis courts replaced in Charlestown<sup>82</sup>*

- **Draft Tennis Strategy**

LMCC is in the process of preparing a Tennis Strategy and this strategy when complete will guide the future development of tennis throughout the City.

## 7.3 Comparative

The actual level of provision of tennis courts within the Charlestown CC is lower than the actual citywide provision (LM LGA) and both are lower than the indicative standard specified by DoP in the Draft LDCG referred to as 'guidelines' in the following table.

Table 14. Charlestown CC – Tennis Courts - Comparative

COMPARATIVE	POPULATION	NO. OF TENNIS COURTS	PERSONS PER FACILITY
Charlestown CC	59,520	26.5	2,246
LM LGA	200,849	100	2,008
Guidelines <sup>83</sup>			1,800
<b>RECOMMENDED STANDARD</b>			<b>2,200</b>

The recommended standard of provision of one tennis court for every 2,200 persons is consistent with the actual citywide provision and considered reasonable and achievable for the future provision.

## 7.4 Best Practice

At some tennis centres, some councils are now building purpose built modified courts specifically for children. This is in accordance with MLC Hot Shots, a strategy by Tennis Australia aimed to increase participation of primary school aged children.<sup>84</sup> Modified courts can be provided on existing or new courts and can be various sizes to suit different ages and skill levels. One full sized tennis court can accommodate four red courts (11 m x 5 m - 5.5 m) and two full sized tennis courts can accommodate five orange courts (18.5 m x 6.5 m).

Some Councils are adopting a multi-purpose approach where tennis courts and netball courts utilise the same court space. This approach is common for indoor facilities and provided the practical and management issues are resolved they may be suitable for some outdoor training facilities. A detailed design is required to demonstrate how both sports will play on the same court given the differences in court sizes, surfacing, the best approach to pole removal, and the management arrangements need to be determined.

## 7.5 Analysis

Tennis is a sport for all ages and many older people are playing social and competitive tennis with growing interest in veterans and masters events. Some 30% of residents in the Charlestown CC are aged 55 years and over with this age group expected to increase. Since the Charlestown CC is ageing, it is likely that tennis facilities will become a more desirable recreational activity.

Tennis courts are scattered at ten locations throughout the catchment; and no tennis courts are currently located at Charlestown. The largest tennis centre comprising five courts is at Mount Hutton. The demand for tennis courts is expected to increase in Charlestown due to the large projected population (approximately 7,500 persons) in Charlestown. Locating a new four court tennis centre in or close to Charlestown would serve this growth area.

Based on the recommended standard of one tennis court for every 2,200 persons, there is a slight under provision of half a court in the catchment. An additional six (6) courts are recommended which are attributable to the new population.

<sup>81</sup> Tennis Australia (2011) *Tennis 2020: Facility Development and Management Framework for Australian Tennis*, p. 8.

<sup>82</sup> Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health, p. 277.

<sup>83</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*, indicative population threshold for tennis, p. 93.

<sup>84</sup> Tennis Australia (2011) *Tennis 2020: Facility Development and Management Framework for Australian Tennis*, p. 5.



## 7.6 Recommendations

The recommendations for the Charlestown CC are:

Table 15. Charlestown CC – Tennis Courts – Proposed Locations

SUBURB	LOCATION	DESCRIPTION	NO. OF EQUIVALENT TENNIS COURTS	PRIORITY
CHARLESTOWN	10 Mulbinga Street and adjoining lands or alternate site	Four new multi-purpose sports courts & associated fac.	4	Low
CROUDACE BAY	Valentine Tennis	One new tennis court, car parking	1	Medium
MOUNT HUTTON	Mount Hutton Tennis	One new tennis court	1	Low
<b>TOTAL TENNIS COURTS</b>			<b>6</b>	

**Charlestown** - A new four-court multi-purpose sports centre is proposed for Charlestown. Multi-purpose courts can provide for a range of uses including tennis, netball, basketball, volleyball, badminton, soccer. The specific use/s will be determined at the design phase of the facility. Potential sites include:

- South of Charlestown Swimming Pool - 10 Mulbinga Street – subject to successful negotiations, a possible future development of this site may incorporate the crown land at 14 & 16 Mulbinga Street (Charlestown Girl Guides hall), acquisition of residential property at 4 Mulbinga Street and a partial road closure of Mulbinga Street.
- Old Charlestown School Site - 33 Smith Street now LMCC owned land - possibly a roof top complex within the redevelopment of this site.
- Charlestown Library – 13 Smith & 42 Ridley Street– consider the provision of tennis courts in with any future development of this community land site.
- Charlestown Carpark – Corner Smart and Smith Streets – consider the provision of tennis courts if this community land site is redeveloped.
- Carl Close, Charlestown – LMCC is in the process of acquiring properties beside the Charlestown Lions Park for a future park, a result of the Charlestown Square redevelopment. Council could acquire two additional properties to accommodate the courts.

The preferred site is 10 Mulbinga Street, Charlestown and the adjoining lands either site.



Photo of a multi-purpose sports court at John Bosco School, Engadine NSW

## 8. Netball Courts

Typically, netball courts are facilities located within sports grounds. Netball is the second highest participated sport in Lake Macquarie and the majority of participants are female. Netball is gaining in popularity. In NSW, the total membership for 2011 was 111,474, an increase of 3% on the previous year's total membership.<sup>85</sup> The State Government has provided \$27 million for a Netball Centre of Excellence to be constructed at Sydney Olympic Park in time for Sydney to host the 2015 World Netball Championships. Australia has claimed the World Championship title in nine of the 12 World Netball Championships held since 1963, including the 2007 World Netball Championships.

### 8.1 Existing Provision

The Charlestown CC has 34 netball courts provided at four (4) locations including a competition netball venue at Charlestown. Approximately half or twelve (12) courts at the competition venue are used for training. The competition venue also draws players outside the catchment residing at Garden Suburb and Hillsborough. About 80% of the 12 competition only courts are attributable to the Charlestown CC. Refer to Table 22. The other two competition only courts have been included in the Glendale CC.

Table 16. Charlestown CC – Netball Courts – Existing

SUBURB	FACILITY NAME / LOCATION	NO. OF NETBALL COURTS FOR TRAINING	NO. OF NETBALL COURTS FOR COMPETITION	TOTAL NO. OF NETBALL COURTS FOR CC
<b>TRAINING</b>				
BELMONT NORTH	Lenaghan Park	3		3
CROUDACE BAY	Pat Owen Netball	5		5
WINDALE	Adjoining the PCYC	2		2
<b>COMPETITION</b>				
CHARLESTOWN	Jack Stewart Netball	12	24	22
<b>TOTAL NETBALL COURTS FOR CC</b>				<b>32</b>

The existing provision has been collated according to the following hierarchy, which has been considered appropriate for LM LGA. An existing training centre may include one netball court, however, **two courts** is the minimum for future provision.

Table 17. Charlestown CC – Netball Courts - Hierarchy

DESCRIPTION	SIZE	CATCHMENT	NO. OF COURTS
Netball Training Centre	1.5 ha	2 km	1 - 6 courts
Netball Competition Centre	4 + ha	10 + kms	12 + courts

### 8.2 Identified

The following survey, strategy, and plan demonstrate the identified need.

#### • ERASS

According to the ERASS 2010 annual report, netball has a 3.0% total participation rate. This survey includes persons aged 15 years and over who participated in physical activity for exercise, recreation, and sport over a 12-month period prior to interview in 2010.<sup>86</sup>

#### • Sports Strategy

The Sports Strategy indicates that junior netball participation rates are double the participation rates of senior, as the participation of females in organised sport decreases particularly into the teen years. The Sports Facility Audit (2008) captured participation rates from 2003 to 2007 and netball had the highest participation increase of 138%, which informed the Sports Strategy. Below is a summary of the survey responses for netball:

- Belmont North Netball Club – 179 players - need for improved amenities building, storage, seating, shade, car parking, and fencing

<sup>85</sup> NSW Netball Association Ltd (2011) *Netball NSW: 2011 Annual Report*

<sup>86</sup> ASC (2010) *Participation in Exercise, Recreation and Sport Survey: Annual Report 2010*

- Belmont Netball Club and Lakeside Netball Association – 170 players and 1,588 players respectively using the Molly Smith Netball Courts - additional courts, improved storage, seating, shade and car parking
- Valentine Eleebana Netball Club – 452 players – need an expanded amenities facility.

The netball association highlighted the need for additional courts at Jack Stewart Netball (Charlestown).

### • Recreation Plan

The Recreation Plan identifies certain actions under 4.13 and 4.26, and strategies include:

- Assess opportunities for the provision of netball courts in order to provide local opportunities which support the overly 'top heavy' competition centres<sup>87</sup>
- Provide additional netball courts adjacent to St Johns Field, Kahibah<sup>88</sup>

## 8.3 Competition Venues

Competition netball is played at three venues in the LM LGA, at Belmont (within the Belmont CC), Charlestown (within the Charlestown CC), and Wangi Wangi (within the Toronto CC). The boundaries of the catchment are not contiguous with where people live and where they play sport. Competition venues are also used for local training as outlined in the following table. Players also travel across catchments to participate in competition.

Table 18. Charlestown CC – Netball Courts – Competition Courts

SUBURB	FACILITY NAME / LOCATION	NO. OF COURTS FOR COMPETITION	NO. OF COURTS FOR TRAINING	REMAINING COMPETITION ONLY COURTS	TOTAL COURTS CHARLESTOWN CC
<b>COMPETITION</b>					
CHARLESTOWN	Jack Stewart Netball	24	12	12	
<b>TOTAL NETBALL COURTS</b>			<b>12</b>	<b>10</b>	<b>22</b>

Since there are three competition netball venues within the LGA and five contribution catchments, the location of a competition netball venue increases the level of provision within the catchment. Netball NSW requires a minimum of 26 courts to host a state competition. The existing car park at Jack Stewart Netball is utilised to provide the two additional courts required to host a state competition. Outside the LGA, the competition venues in Newcastle and Maitland both contain 32 courts.

## 8.4 Comparative

The indicative population threshold of one (1) netball court for every 3,000 persons is low when compared to the actual local provision and the actual citywide provision. However, these standards are 'indicative only' and 'only provided as a guide for analysis – they are not intended to be a finite definition of need' and are not Government Policy.<sup>89</sup>

Table 19. Charlestown CC – Netball Courts - Comparative

COMPARATIVE	POPULATION	NO. OF NETBALL COURTS	PERSONS PER FACILITY
Charlestown CC	59,520	32	1,860
LM LGA	200,849	98	2,049
Guidelines <sup>90</sup>			3,000
<b>RECOMMENDED STANDARD</b>			<b>2,000</b>

The recommended standard of provision of one netball court for every 2,000 persons is similar to the actual provision within the city and considered reasonable and achievable for the future provision.

## 8.5 Best Practice

Netball courts can be used for multiple uses including tennis, netball, soccer, or basketball. There may be some practical and management issues to resolve however, this multi-purpose approach maybe suitable for training courts. Council has installed a movable basketball pole on the new netball court at

<sup>87</sup> LMCC (1998) *LMCC Recreation Plan: Volume 1*, p. 35.

<sup>88</sup> *Ibid.*, p. 49.

<sup>89</sup> NSW DoP (2009) *Draft Local Development Contribution Guidelines*

<sup>90</sup> *Ibid.*, Indicative population threshold for netball, p. 93.

Gregory Park, West Wallsend and another at Cardiff. This enables informal use of the court for basketball when the court is not in use for netball.



Photo of movable basketball netball pole installed at the new netball court Gregory Park, West Wallsend

## 8.6 Analysis

There are 34 netball courts within the Charlestown CC. Based on the recommended standard of one court every 2,000 persons there is an overprovision of four (4) courts in the catchment. Considering the Jack Stewart Netball facility is a competition venue and used by players in the adjoining catchment, this over provision is reduced by two courts. These two courts will be considered in the existing provision in the Glendale catchment.

Based on the recommended standard of one netball court for every 2,000 persons, six (6) netball courts are required. Considering the over-provision of four courts, discounted to two courts, an additional four netball courts are recommended which are attributable to the new development. Providing two (2) additional courts at Charlestown locates additional courts close to the expected population growth in and around Charlestown and it ensures that the competition venue at Charlestown will continue to host large-scale events, consistent with Netball NSW requirements.

## 8.7 Recommendations

The recommendations for the Charlestown CC are:

Table 20. Charlestown CC – Netball – Proposed Locations

SUBURB	LOCATION	DESCRIPTION	NO. OF EQUIVALENT NETBALL COURTS	PRIORITY
CHARLESTOWN	Jack Stewart Netball	2 new courts & associated facilities	2	High
REDHEAD	Liles Oval	2 new courts & associated facilities	2	Medium
<b>TOTAL NETBALL COURTS</b>			<b>4</b>	

**Charlestown** – Provide two (2) new netball courts with additional car parking, seating, fencing, and some shade provision at Jack Stewart Netball.

**Croudace Bay/Valentine** – Pat Owen Netball – In conjunction with the reconfiguration of this sports ground, the existing netball courts are proposed to be relocated to the east of the Parklea Ave complex to provide for an additional sporting field.

**Redhead** – A new two-court facility is proposed for the south of Liles Oval. Land acquisition is required and an access road and car park and some clearing and levelling. One of the courts is to be a multipurpose court containing a movable basketball pole to be installed to enable informal use. The second court could be designed to be a multi-purpose court enabling play of netball or tennis.

## 9. Multi-purpose half-courts

Multi-purpose half-courts are informal recreation facilities that contain basketball hoops, and netball rings and/or tennis hit up wall. In Lake Macquarie, these facilities are usually a half basketball court, however, they may be a full sized outdoor basketball court or a smaller half circle. These facilities are usually provided in conjunction with a playground, skate park, or a sporting area. In Hornsby these facilities are called ball sports courts and provide the major opportunities for young people for 'unstructured' play and are the 'playground equivalent' for children over 9 years of age.<sup>91</sup>

LMCC has provided some multi-purpose half-courts, used for informal basketball but Council has not provided for competition basketball, which is played at indoor centres. Refer also to **Section 24** Indoor Sport Recreation Centres.

Netball courts can also accommodate these informal uses as demonstrated by installation of a movable basketball/netball pole on the newly constructed netball court at Gregory Park, West Wallsend. This enables informal use of the court for basketball when the court is not in use for netball training. Council has tested this approach at Cardiff where it has also been successful.

### 9.1 Existing Provision

The Charlestown CC has four (4) multi-purpose courts all of which are half-courts provided at the following locations:

Table 21. Charlestown CC – Multi-purpose half-courts - Existing

SUBURB	LOCATION	NO. OF MULTI-PURPOSE HALF-COURTS
BELMONT NORTH	Somerset Street	1
GATESHEAD	Carbeen Street Reserve	1
REDHEAD	Liles Oval	1
WINDALE	Bahloo Reserve	1
<b>TOTAL MULTI-PURPOSE HALF-COURTS</b>		<b>4</b>

### 9.2 Identified

The following plan demonstrates the identified need.

- Recreation Plan**

The Recreation Plan identifies certain actions under 4.17 and one strategy identified is:

*A variety of play venue sizes is achieved and a greater diversity of age groups and abilities are served including provision of skate facilities, multi-use courts, graffiti walls, 'rage cages', outdoor music performance areas<sup>92</sup>*

### 9.3 Comparative

The LDCG does not specify an indicative population threshold for multi-purpose half-courts, however a population threshold is provided for basketball courts, which is one court for every 1,800 persons. The guidelines mentions that 'not all facilities for basketball will need to be provided to a competition standard' and 'it may be possible to meet some of the demand through the provision of half courts'<sup>93</sup>

The actual provision of multi-purpose half-courts within the Charlestown CC is higher than the actual citywide provision and both are lower than the guidelines for basketball specified by DoP in the Draft LDCG referred to as 'guidelines' in the following table.

If the DoP guidelines for basketball were applied to the current population in the Charlestown CC then 33 basketball courts would be required. For the LM LGA, this standard is considered excessive and not achievable.

<sup>91</sup> Hornsby Shire Council (ND) *Unstructured Recreation Strategy: Volume 1*, p. 29.

<sup>92</sup> LMCC (1998) *LMCC Recreation Plan: Volume 1*, p. 38.

<sup>93</sup> NSW DoP (2009) *Draft Local Development Contribution Guidelines*, p. 93.



Table 22. Charlestown CC – Multi-purpose half-courts - Comparative

COMPARATIVE	POPULATION	NO. OF OUTDOOR BASKETBALL / MULTI-COURTS	PERSONS PER FACILITY
Charlestown CC	59,520	4	14,880
LM LGA	200,849	10	20,085
Guidelines <sup>94</sup>			1,800
<b>RECOMMENDED STANDARD</b>			<b>15,000</b>

The recommended standard of provision is one multi-purpose half-court for every 15,000 persons, which is similar to the actual provision within the catchment and considered reasonable for the future provision.

## 9.4 Analysis

Based on the recommended standard of one multi-purpose half-court for every 15,000 persons one new multi-court is required which is attributable to the new development.

## 9.5 Recommendations

The recommendations for the Charlestown CC are:

Table 23. Charlestown CC – Multi-purpose half-courts – Proposed Location

SUBURB	LOCATION	DESCRIPTION	NO. OF MULTI-PURPOSE HALF-COURTS	PRIORITY
CHARLESTOWN	Charlestown Carl Close	1 new multi-purpose half-court	1	High
<b>TOTAL MULTI-PURPOSE HALF-COURTS</b>			<b>1</b>	

**Charlestown** - Provide one (1) multi-purpose half-court at the Charlestown Carl Close site in conjunction with the proposed skate park.

<sup>94</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*, Indicative population threshold for basketball, p. 93

## 10. Parks

*Parks near and in our cities breathe peace and tranquillity, sustain fun, family time, exercise*<sup>95</sup>

Parks are: 'Reserves which have had their physical character and/or vegetation modified to support community recreation, community development and wellbeing uses. They include ornamental gardens, play facilities, community gardens, and informal lawns'<sup>96</sup>

Parks are for people. Everyone will use a park at some time in his or her lives, whether for picnic or BBQ, playground, attending larger celebrations or festivals, walking, jogging, kite flying, informal games, or just sitting observing as older adults tend to do. Parks are referred to as the green lungs of our cities and towns. Strategies that accommodate urban growth and the long-term survival of humanity must also include urban parks. Parks are inspiring and pleasant places to exercise and improve physical and mental wellbeing for today's sedentary society. Parks are places to meet and celebrate with family and friends.

'Parks play an essential role in public health, as they are the most readily available source of nature for the majority of people who live in urban areas'<sup>1</sup>. Parks offer people the opportunity to be in, or look at greenery.



For the purposes of this section, a park is a grassed area embellished with trees and/or gardens and containing some park facilities. LMCC has numerous areas of land categorised as park, detailed in the *LMCC Plan of Management for Community Land* (adopted 2011). Refer to **Part D** Open Space. They include small and irregular shaped parcels behind houses, buffers to roads, and they include land used for detention/retention/wet ponds/silt traps. These however, are not included as a park in this section.

The park size listed in the table below includes the area categorised as and used as a park. The park may adjoin a natural area or contain land used/leased for another purpose, such as a bowling club or swimming centre, or contain drainage structures. Those other areas are not included in the park size. Within the Charlestown CC, there are other small or fragmented areas categorised as park, but containing no park facilities and they have not been included in the existing provision on the previous page.

The existing parks have been collated according to local, neighbourhood, major / accessible and city park as detailed in the following table and in **Appendix 6**. The DoP guideline identifies a local park as between 0.5 and 2 ha. Since LMCC tends to identify local parks as 0.5 ha, the following hierarchy is recommended for LM.<sup>97</sup>

Table 24. Charlestown CC – Park – Hierarchy

DESCRIPTION	APPROXIMATE SIZE HA	CATCHMENT
Local Park	0.5 to 1 ha	400 to 800 m
Neighbourhood Park	1 to 5 ha	2 km
Major Park	5 to 10 ha	5 km
City Park	10 + ha	10 km

The park hierarchy also considers aspects such as size, location, its use, its catchment (i.e. how far people will travel to use the park), the facilities it contains, configuration, and aesthetic features.

<sup>95</sup> Parks Forum (2008) *The Value of Parks*, p. 1.

<sup>96</sup> NSW DoP (2010) *Recreation and Open Space Planning Guidelines for Local Government*, p. 16.

<sup>97</sup> NSW DoP (2010) *Recreation and Open Space Planning Guidelines for Local Government*

## 10.1 Existing Provision

The following parks are located in the Charlestown CC and collated according to a locally appropriate park hierarchy, which takes into consideration community needs, local circumstances and the asset.

Table 25. Charlestown CC – Park – Existing

SUBURB	FACILITY NAME	STREET	PARK SIZE HA	NO. OF PARKS	TOTAL
<b>LOCAL</b>					<b>33</b>
ADAMSTOWN HTS	Raspberry Gully Reserve	1A Princeton Ave	0.82	1	
ADAMSTOWN HTS	Russell Reserve (off Astor St)	14A Russell Ave	0.13	1	
BELMONT NORTH	Somerset Street Reserve	8A Somerset St	0.41	1	
BELMONT NORTH	Luskin Way Playground	49 Luskin Way	0.52	1	
CHARLESTOWN	Hooper Street Reserve	1A Hooper St	0.12	1	
CHARLESTOWN	Attunga Park	17 Frederick St	0.82	1	
CHARLESTOWN	Tallowood Ct Reserve	35 & 35A Tallowood Circuit	0.23	1	
CHARLESTOWN	Mahrahkah Park	72A Patricia Ave	0.23	1	
CHARLESTOWN	Charlestown Lions Park	126A Pacific Hwy	0.30	1	
DUDLEY	Frank Watkins Memorial Park	96 Ocean St	0.52	1	
DUDLEY	Reay Park	15A Ocean St	0.03	1	
ELEEBANA	Eleebana Oval	43 Linden Ave	0.37	1	
FLORAVILLE	Marks Oval	73A Floraville Rd	0.22	1	
GATESHEAD	Sylvia Grozdanovski Park	91A Cadaga, 12A Hickory Rds	0.44	1	
HIGHFIELDS	Highfields Reserve	67 & 69 Highfields Pde	0.30	1	
HIGHFIELDS	George Street-Highfields Res	14B George St	0.23	1	
HILLSBOROUGH	Hillsborough Oval	25 Percy St	0.05	1	
JEWELLS	Jewells Parade Reserve	15 Jewells Pde	0.37	1	
KAHIBAH	(Pit Horse Park)	25A Waratah St	0.27	1	
KOTARA SOUTH	Carramar Park	62A Deborah St	0.78	1	
MOUNT HUTTON	Kestrel Avenue Reserve	25 Kestrel Ave, 2A Willow Rd	0.45	1	
MOUNT HUTTON	Mullington Park	2A Progress Rd	0.36	1	
REDHEAD	Bicentennial Park	44A Cowlshaw St	0.19	1	
REDHEAD	O'Connor Park	57A Elsdon St	1.31	1	
REDHEAD	Winderhouse Playground	1 Geraldton Dr	0.07	1	
TINGIRA HEIGHTS	St Johns Memorial Park	68A Violet Town Rd	0.22	1	
VALENTINE	Gatts Farm Reserve	108 Regal Way	0.49	1	
VALENTINE	Excalibur Parade Reserve	19 & 15 Excalibur Pde	0.52	1	
WARNERS BAY	Butler Crescent Reserve	6A Butler Cres	0.08	1	
WARNERS BAY	Richard Allen Park	45 Jonathan St	0.39	1	
WHITEBRIDGE	Heywood Wilkinson Park	5A Paterson Cl	0.48	1	
WHITEBRIDGE	Riawena/Harold Wesley Knight Pk	65 Lonus Ave	0.17	1	
WINDALE	Bahloo Reserve	10 Merrigum St	0.45	1	
<b>NEIGHBOURHOOD</b>					<b>7</b>
ELEEBANA	Bunya Park	2A Macquarie Dr	1.57	1	
ELEEBANA	Eleebana Lions Park	1A Bareki Rd	1.9	1	
KAHIBAH	Kahibah Memorial Park	40 & 46 Hexham St	0.83	1	
REDHEAD	Webb Park	2A Beach Rd	1.52	1	
VALENTINE	Allambee Park	1A Allambee Pl	0.62	1	
VALENTINE	Bennett Park	139A Dilkera Ave	2.86	1	
VALENTINE	Valentine Foreshore Reserve	19A Valentine Cres, 5A Bareki Rd	1.98	1	
<b>MAJOR</b>					<b>0</b>
WARNERS BAY	Warners Bay Foreshore (small part) <sup>98</sup>	465 The Esplanade	0		
<b>CITY</b>					<b>1</b>
ELEEBANA	Thomas Halton Park	5A Bareki Rd	13.12	1	
<b>TOTAL PARKS</b>			<b>36.74</b>		<b>41</b>

<sup>98</sup> Only a small part of Warners Bay Foreshore, between South Creek to Warners Bay Road is in this catchment, the majority is in Glendale CC

## 10.2 Identified

The following survey, plan, and guidelines demonstrate the identified need.

### • Liveable Communities Assessment

Comments from a survey of residents in Charlestown in 2010 listed in **Appendix 2** include:

*Need more parks in Charlestown as there are so many units being put up everywhere*<sup>99</sup>

*More parkland developed even if have to buy private land and conserve what we have now*<sup>100</sup>

The report also identified that; 'allowing/enabling the development of centrally located, multi-use, flexible spaces and places that encourage social interaction, are usable for a wide range of ages' <sup>101</sup>

### • NSW State Plan

The NSW Government is committed to planning for towns and cities that are not only accessible and viable, but are great places to live and work. The State Plan identifies certain priorities. Priority E8 and one of its respective targets is:

- Build liveable cities<sup>102</sup>
- Enhance cultural, creative, sporting and recreation opportunities, and
- Increase participation in sport, recreational, arts and cultural activities in rural and regional NSW from 2010 to 2016 by 10%<sup>103</sup>

### • Draft Centres Design Guidelines

DoP has prepared design principles to guide the future development of centres. Principles include:

- Analyse the opportunities to make new public spaces in the form of parks and squares when planning the renewal or revitalisation of an existing centre <sup>104</sup>
- Parks and squares can give relief from urban environments; provide places for recreation and entertainment, places for meeting people but also places of solitude<sup>105</sup>
- Ensure buildings front onto and overlook parks and squares with openings, balconies and terraces to allow passive surveillance and improve internal outlook<sup>106</sup>

### • Delivery Program

The community told council to: 'plan and develop playgrounds and parklands'<sup>107</sup>

### • Recreation Plan

The Recreation Plan identifies actions in 4.24, 4.26, and 4.27 and relevant strategies include:

- Develop teenage play and appropriate support amenities and services in Croudace Bay Park<sup>108</sup>
- Proceed with the redevelopment of the Charlestown Swimming Pool and consolidate the overall site through site acquisitions, amalgamation and road closures<sup>109</sup>

### • Open Space Strategy

The results of the open space recreation participation survey indicated that in relation to:

- Hours per week the activity picnic/barbeque was sixth highest, having a participation rate higher than most sports such as soccer, tennis, cricket football, netball and athletics.<sup>110</sup>
- *Picnic/Barbeque – Charlestown Planning District had a relatively low participation rate that is about half the level of Belmont PD even through their total populations are similar*<sup>111</sup>

This is possibly due to the lack of major parks in the Charlestown. Refer to **Figure 7** for a plan showing the land categories in Charlestown and the pink shaded areas indicate the parks.

<sup>99</sup> Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health, p. 277.

<sup>100</sup> *Ibid.*

<sup>101</sup> *Ibid.*, p. 313.

<sup>102</sup> NSW DoP (2011) NSW 2021: A plan to make NSW number one, Goal 20, p.40.

<sup>103</sup> *Ibid.*, Goal 27, p. 51.

<sup>104</sup> NSW DoP (2011) *Draft Centre Design Guidelines*, Department of Planning Sydney, p. 48

<sup>105</sup> *Ibid.*

<sup>106</sup> *Ibid.*, p. 49.

<sup>107</sup> LMCC (2013) *City of Lake Macquarie Delivery Program 2013-2017*, Priority 3.3, page 50.

<sup>108</sup> LMCC (1998) *LMCC Recreation Plan: Volume 1*, p. 47.

<sup>109</sup> *Ibid.*, p. 49.

<sup>110</sup> LMCC (2001) *Lake Macquarie Open Space Strategy*, prepared by URS, refer to Graph 4.2 Summary of Participation by Activity 4.4.

<sup>111</sup> LMCC (2001) *Lake Macquarie Open Space Strategy*, prepared by URS, p. 4-8. and refer to Graph 4.4 Picnic/Barbeque.

## • Open Space Strategy

The survey undertaken as part of the open space plan prepared by Clouston identified that:

- The most popular open space settings were foreshore parks (25%), natural bushland (19%) and beaches (16%)
- Parks with a large range of facilities (65.3%) were preferred to few large parks (33.2%)
- Lake oriented recreation areas (62.1%) were preferred to beach oriented recreation areas (29.4%)<sup>112</sup>

## 10.3 Comparative

The LDCG has not specified an indicative population threshold for the provision of parks; however, the guidelines provide a standard of one playground for every 500 dwellings or a distance of 400 metres from a dwelling.<sup>113</sup> If the population threshold for a park is the same for a playground, then one park per 1,250 persons is the assumed population threshold based on an average occupancy of 2.5 persons/dwelling<sup>114</sup>. Refer to **Appendix 5** for an expanded list and discussion on various standards and guidelines.

Table 26. Charlestown CC – Park - Comparative

COMPARATIVE	POPULATION	NO. OF PARKS	PERSONS PER FACILITY
Charlestown CC	59,520	41	1,452
LM LGA	200,849	137	1,466
Guidelines <sup>115</sup>			1,250
<b>RECOMMENDED STANDARD</b>			<b>1,400</b>

The recommended standard of one park for every 1,500 persons is the same as the actual provision within the catchment but lower than the assumed standard of 1,250. Considering that dog exercise areas, dog parks and community gardens are uses within parks or as mentioned later in the plan, the recommended local park standard is considered reasonable for the future population.

## 10.4 Best Practice

The guidelines prepared by DoP are a best practice guide to assist Councils in planning their investments in open space and recreation.<sup>116</sup> The guideline identifies opportunities and options such as:

- *Acquiring larger sites for multiple and changing uses over time-larger sites can support multiple uses*<sup>117</sup>
- *Reserving areas for expansion will provide flexibility as new needs emerge. Maintenance costs are minimised where there are fewer but larger open space areas*<sup>118</sup>

This plan generally supports the future provision of fewer local parks but the additional provision of larger neighbourhood and catchment parks as reflected in the park hierarchy.

## 10.5 Analysis

This catchment has no major parks. Charlestown will experience significant growth with over 50 % of the total projected growth for the entire catchment in Charlestown. Charlestown is to be the regional centre for the LMCC LGA and Charlestown has no large town park. Based on the projected growth in and around this city centre, one new major park is required in close proximity to Charlestown.

Based on the recommended general park standard of one (1) park per 1,400 persons, twelve (12) new parks or park upgrades are recommended, nine (9) of which are attributable to the new development.

## 10.6 Recommendations

The recommendations for the Charlestown CC are:

<sup>112</sup> LMCC (1996) *Lake Macquarie Open Space Plan: Volume 1*, prepared by Clouston, p. 14.

<sup>113</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*, p. 93.

<sup>114</sup> LMCC (2010) *Residential Population and Non-Residential Development Growth Forecasts: Development Contributions Plan Charlestown Contributions Catchment*, prepared by Don Fox Planning Consultants, Table 3, Extract from 2006 Census Basic Community Profile, LM LGA average occupancy 2.56 persons/dwelling, p. 13

<sup>115</sup> Ibid., Indicative population threshold for playgrounds, p. 93.

<sup>116</sup> NSW DoP (2010) *Recreation and Open Space Planning Guidelines for Local Government*, p. 8.

<sup>117</sup> Ibid., p. 36.

<sup>118</sup> Ibid.



Table 27. Charlestown CC – Park – Proposed Locations

SUBURB	LOCATION	DESCRIPTION	TOTAL PARKS	PRIORITY
CHARLESTOWN	Kaleen Street Reserve	New park, picnic/BBQ facilities, seating, pathways, landscaping	1	Medium
DUDLEY	150 Ocean St, directly adjoining Fernleigh Track	New local park within proposed development area	1	Low
CROUDACE BAY/ELEEBANA	Thomas H Halton Park	Major park upgrade, amenities, shelters, power & water, outdoor gym equipment	1	High
ELEEBANA	Bunya Park	Upgrade park	1	Medium
KAHIBAH	Park/s in Kahibah	Upgrade parks	1	Medium
MOUNT HUTTON	Mullington Park	Upgrade park	1	High
REDHEAD	O'Connor	Upgrade park	1	Medium
REDHEAD	Webb Park	Upgrade park	1	High
SPEERS POINT	Speers Point Park	Major park upgrade in accordance with adopted PoM and Masterplan	1	High
WARNERS BAY	Warners Bay Foreshore (southern portion)	Upgrade park in accordance with adopted PoM and masterplan	1	High
WINDALE	1 & 1A Wakool St	Neighbourhood park upgrade	1	Low
<b>TOTAL PARKS</b>			<b>11</b>	

The following parks are recommended:

- **Charlestown**, Kaleen Street Reserve (R.88828 reserved for public recreation) – This reserve is located in close proximity of the Charlestown city centre, the area of highest growth in the catchment. Refer to **Figure 4**. A major park is proposed close to this major regional centre. The reserve is to contain a park, major adventure/nature playground, dog park, BMX track and access to the Great North Walk linking the Fernleigh Track to Charlestown, subject to design. The proposal requires the acquisition of residential lots along Cowper Street.
- **Dudley**, 150 Ocean St – A local park proposed new development area west of Dudley. Refer to the orange area 621 identified in **Figure 5**. The site is centrally located within the development area, on flat land directly adjoining the Fernleigh Track. Refer to **Appendix 9** for a plan of the proposed site and details of the land requirements.
- **Eleebana/Croudace Bay**, Thomas H Halton Park – This major foreshore park in accordance with a prepared master plan is proposed. New public toilets, wheelchair accessible tables, covered seating area with pathway linkages from the car park to the toilets are some of the proposed new work.
- **Kahibah**, upgrade of parks in Kahibah at 25A Waratah Street – Pit Horse Park (name proposed by local residents) and Kahibah Park. **Mount Hutton**, Mullington Park – this local park is located opposite the town centre and is proposed to be upgraded to a neighbourhood park to provide for the future growth in the area.
- **Redhead**, Webb Park – this existing neighbourhood park beside Redhead beach is proposed to be upgraded. In 2001, Council adopted a master plan and the development of Webb Park is in accordance with the adopted master plan.
- **Redhead**, O'Connor Park – this park currently used as a dog exercise area. The park is located adjacent and north of the proposed new development area off Kalaroo Road. Refer to the yellow area identified as 411 in **Figure 4**. This site is situated very close to the proposed new residential home parks (manufactured home villages or caravan parks). This park is to be upgraded and the park is identified for a future community garden, subject to demand.
- **Speers Point** Park is centrally located for the entire population of the city. In 2008, LMCC adopted a plan of management and masterplan to guide the future development of this park. This major park is to be upgraded in accordance with the master plan.
- **Warners Bay Foreshore** - Council adopted the *Warners Bay Foreshore Master Plan Report* and *Plan of Management* in May 2012. The proposed upgrade in accordance with these plans for the southern portion of the reserve, located within the catchment boundary.

- **Whitebridge**, development area between Dudley Rd & Kopa St - This is a major entry point for the Fernleigh Track. The site, located opposite the shops at Whitebridge, will provide a town/urban park and a rest area for cyclists and walkers. Council has discussions with the developer of this land, however, these discussions has not resulted in the provision of a park in this location.
- **Windale**, 1 & 1A Wakool Street – proposed neighbourhood park site with a playground, fenced dog exercise area and a community garden. A skate park may also be considered as the land upon which the skate park is currently located, is to be sold. This site is centrally located to the residential area of Windale and of high importance since Council does not have secure tenure of Bahloo Reserve.

In addition, future parks outside the funding of this plan include:

- **Charlestown Carl Close & Lions Park** – In association with the Charlestown Square Redevelopment and Expansion Proposal, Council resolved on 12 December 2005 to establish a Charlestown Open Space Endowment Fund, which quarantines funds generated by the sale of Council land to fund the purchase and embellishment of open space in the locality of the Charlestown Commercial Centre. Council has acquired five properties and funding is available to acquire the remaining properties. The Charlestown Lions Park will be expanded to provide a neighbourhood park for the residents west of the Pacific Highway and a skate park.
- **Redhead**, disused tip site - comprises a substantial area of land with access to the adjoining Fernleigh Track. The LMCC S94 CP No. 1/2004 identified this site for the future development of a park. Since there is no residential development around this site within the life of this plan, this site will not be developed within the next 10 years. Refer to **Figure 4**. The development of a new park in this location may be required and funded in a subsequent plan. Future uses of this site could include a park, BMX track, mountain bike track, or other recreation facility such as a golf driving range or disc golf.

# 11. Playgrounds

Playgrounds are facilities located in parks or sportsgrounds. Primarily playgrounds are designed to be fun and they expose children to different (physical, social, and educational) challenges and help them to develop new skills. Local playgrounds have minimal equipment and are usually designed for young children. Neighbourhood playgrounds provide more play opportunities and cater for a wider age range. A major playground has a greater range of equipment from young children to adults, provides various levels of risk and includes some accessible components. By providing a variety of playgrounds that cater for different age ranges, themes, different settings, and progressive level of risk, provides for children through all the stages of their development.

## 11.1 Existing Provision

There are 35 playgrounds within the Charlestown CC including one (1) playground located on community title land within the Green Point Estate.

Table 28. Charlestown CC – Playground - Existing

SUBURB	LOCATION	NO. OF PLAYGROUNDS	TOTAL
<b>LOCAL</b>			<b>28</b>
ADAMSTOWN HEIGHTS	Russell Reserve (off Astor St)	1	
BELMONT NORTH	Somerset Street Reserve	1	
BELMONT NORTH	Luskin Way Playground	1	
CHARLESTOWN	Hooper Street Reserve	1	
CHARLESTOWN	Attunga Park	1	
CHARLESTOWN	Tallowood Ct Reserve	1	
DUDLEY	Frank Watkins Memorial Park	1	
DUDLEY	Reay Park	1	
ELEEBANA	Eleebana Oval	1	
FLORAVILLE	Marks Oval	1	
GATESHEAD	Sylvia Grozdanovski Park	1	
HIGHFIELDS	Highfields Reserve	1	
HIGHFIELDS	George Street-Highfields Reserve	1	
HILLSBOROUGH	Hillsborough Oval	1	
JEWELLS	Jewells Parade Reserve	1	
KOTARA SOUTH	Carramar Park	1	
MOUNT HUTTON	Kestral Avenue Reserve	1	
MOUNT HUTTON	Mullington Park	1	
REDHEAD	Bicentennial Park	1	
REDHEAD	Webb Park	1	
REDHEAD	Winderhouse Playground	1	
TINGIRA HEIGHTS	St Johns Memorial Park	1	
VALENTINE *	<i>The Park Chase</i>	1	
VALENTINE	Gatts Farm Reserve	1	
VALENTINE	Excalibur Parade Reserve	1	
WARNERS BAY	Butler Crescent Reserve	1	
WARNERS BAY	Richard Allen Park	1	
WHITEBRIDGE	Heywood Wilkinson Park	1	
<b>NEIGHBOURHOOD</b>			<b>6</b>
ELEEBANA	Bunya Park	1	
KAHIBAH	Kahibah Memorial Park	1	
VALENTINE	Allambee Park	1	
VALENTINE	Bennett Park	1	
WHITEBRIDGE	Riawena/Harold Wesley Knight Park	1	
WINDALE	Bahloo Reserve	1	
<b>MAJOR</b>			<b>1</b>
ELEEBANA	Thomas H Halton Park	1	
<b>TOTAL PLAYGROUNDS</b>			<b>35</b>

\* Community Title Park

Playgrounds are also located at the Charlestown Square shopping centre, at McDonalds in Charlestown and at the six childcare centres/preschools within the catchment. The hierarchy for playgrounds would generally be in accordance with the following. However, in the longer term there may be a need to provide a major playground specifically designed for the 0-5 year age group such as the Ivey Watson Playground in Kings Park Perth. A future playground strategy will identify need and possible location.

Table 29. Charlestown CC – Playground – Hierarchy

DESCRIPTION	GENERAL AGE RANGE	CATCHMENT
Local Playground	2 to 8 yrs	400 m - 800 m
Neighbourhood Playground	2 to 12 yrs	2 km
Major Playground	2 to 15 yrs	10 km
City Playground	2 yrs to adult	LM LGA

## 11.2 Identified

The following surveys, strategy and plans demonstrate this identify need.

### • Liveable Communities Assessment

Comments from a survey of residents in Charlestown are listed in **Appendix 3** and include.

*Local parks have nothing in it, make them more kid friendly, playground equipment<sup>119</sup>*

*Bigger playgrounds, more trees<sup>120</sup>*

### • Cycling Strategy

As part of the *LMCC Cycling Strategy*, a community survey was undertaken in 2011, and results revealed that there had been two accidents on a shared path with children learning to ride their bicycle and that “children learning to ride on the Fernleigh track [may be] unwise as they wobble everywhere”, particularly if “unsupervised by a parent.<sup>121</sup> The Cycling Strategy recommends that Council:

*Investigate the provision of a dedicated public facility for training young children to cycle<sup>122</sup>*

### • Community Plan

The community plan identifies directions and progress indicators such as a:

- Plan and develop playgrounds and parklands<sup>123</sup>

### • Recreation Plan

The plan recommends to:

- Develop more imaginative and exciting playgrounds and provide safe bike access<sup>124</sup>
- Initiate a program of works designed to overcome the playground deficiencies and to build on the strengths giving priority to shade, amenities, fencing, age-specific facilities and defining a hierarchy of provision across the City<sup>125</sup>
- Undertake a program of works to expand the range of equipment provided at selected playgrounds in each catchment such that a variety of play venue sizes is achieved and a greater diversity of age groups, abilities, skills are served<sup>126</sup>
- Develop a multi-use venue for youth activities including skate facilities, teenage play in Croudace Bay Park<sup>127</sup>
- Develop a junior bike circuit in Thomas H Halton Park, Eleebana and redevelop the disabled play facilities so they effectively serve this user group<sup>128</sup>
- Relocate play facilities to the Charlestown Swimming Pool site<sup>129</sup>

<sup>119</sup> Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health, p. 277.

<sup>120</sup> *Ibid.*, p. 278.

<sup>121</sup> LMCC (2012) *LMCC Cycling Strategy 2021: A place for all residents to enjoy the pleasure of cycling for all journeys*, prepared by GHD, p. 16.

<sup>122</sup> *Ibid.*, p. 67.

<sup>123</sup> LMCC (2008) *Lake Macquarie Community Plan 2008-2018*, p. 45.

<sup>124</sup> LMCC(1998) *LMCC Recreation Plan: Volume 2*, p. 33.

<sup>125</sup> LMCC (1998) *LMCC Recreation Plan: Volume 1*, p. 37.

<sup>126</sup> *Ibid.*, p. 38.

<sup>127</sup> *Ibid.*, p. 47.

<sup>128</sup> *Ibid.*, p. 48.

<sup>129</sup> *Ibid.*, p. 49.

### 11.3 Comparative

The LDCG specifies an indicative population threshold of one (1) playground for every 500 dwellings or 400 metres from a dwelling. Assuming an occupancy rate of 2.5 persons per dwelling the guideline standard is therefore one playground for every 1,250 persons. This is a slightly higher level of provision than the local standard of provision. Refer also to **Appendix 5** for further analysis on standards and guidelines.

Table 30. Charlestown CC – Playground - Comparative

COMPARATIVE	POPULATION	NO. OF PLAYGROUNDS	PERSONS PER FACILITY
Charlestown CC	59,520	35	1,701
LMCC LGA	200,849	120	1,674
Guidelines <sup>130</sup>			1,250
<b>RECOMMENDED STANDARD</b>			<b>1,500</b>

The recommended standard of one playground for every 1,500 persons is considered reasonable and achievable for the future population.

### 11.4 Best Practice

The NSW government's, *Recreation and Open Space Planning Guidelines for Local Government*, is a best practice guide to assist Councils in planning their investments in open space and recreation. Key elements of the guidelines include:

- Local park, size of 0.5 – 2 ha, within 400 m distance from most dwellings<sup>131</sup>

A local park would usually include children's play equipment. The *Recreation and Open Space Planning Guidelines for Local Government* provide a general direction for recreational planning and the guidelines recommend the development of locally appropriate standards that reflect expressed needs.<sup>132</sup>

### 11.5 Analysis

There are 35 playgrounds within the Charlestown CC and based on the recommended general standard of one playground for every 1,500 persons the existing level of provision in the catchment is adequate. Thirteen new playgrounds or playground upgrades are recommended, eight (8) of which are attributable to the new development.

### 11.6 Recommendations

The recommendations for the Charlestown CC are one (1) playground for every 1,500 persons. Based on the projected growth, the following new playgrounds and playground upgrades are required to be provided. In a developed catchment, the identification of suitable sites for the provision of new parks and playgrounds is problematic so some existing playgrounds are to be upgraded.

Table 31. Charlestown CC – Playground – Proposed Locations

SUBURB	LOCATION	DESCRIPTION	TOTAL PLAY	PRIORITY
CHARLESTOWN	Kaleen Street Reserve	Major adventure playground	1	High
CHARLESTOWN	Attunga Park	Upgrade existing playground	1	Low
CROUDACE BAY/ ELEEBANA	Thomas H Halton Park	Major themed playground, outdoor gym <sup>133</sup> and learner cyclist circuit <sup>134</sup>	1	High
DUDLEY	150 Ocean St, site directly adjoining Fernleigh Track in new development area	New local playground	1	Low
FLORAVILLE	Marks Oval	New local playground	1	Low
KAHIBAH	Kahibah Memorial Park, Hexham St	Upgrade existing playground	1	Low

<sup>130</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*, Indicative population threshold for playgrounds, p. 93

<sup>131</sup> NSW DoP (2010) *Recreation and Open Space Planning Guidelines for Local Government*, p. 29.

<sup>132</sup> *Ibid.*, p. 39.

<sup>133</sup> An outdoor gym is not playground designed for children but for fitness equipment for adults and is it included in the cost to upgrade the park

<sup>134</sup> LMCC(2012) *LMCC Cycling Strategy 2021*, P143 and P144 on page 67.



SUBURB	LOCATION	DESCRIPTION	TOTAL PLAY	PRIORITY
MOUNT HUTTON	Mullington Park	Upgrade existing playground	1	Medium
REDHEAD	Webb Park	Upgrade existing playground	1	High
TINGIRA HEIGHTS	St Johns Memorial Park	Upgrade existing playground	1	Low
VALENTINE	Bennett Park	Upgrade existing playground	1	Medium
VALENTINE	Valentine Tennis	New tots playground	1	Low
WHITEBRIDGE	Riawena Park	Upgrade existing playground	1	Medium
WINDALE	Wakool & Corona Sts	New local playground	1	Low
<b>TOTAL PLAYGROUNDS</b>			<b>13</b>	

All playgrounds are to have good footpath connections, and preferably be located on or near shared pathways providing easy walking and cycling access.

**Kaleen St Reserve** – provision of an adventure playground, components may include items similar to:



ADVENTURE PLAYGROUNDS – Photos of playground components, at playgrounds in Kings Park, Perth



ADVENTURE PLAYGROUNDS – Photos of an adventure playground in Germany, of which there are thousands



THEMED PLAYGROUND – Ship at a foreshore reserve in Palm Beach, Northern NSW



Photo Left -  
Playground in  
Berlin



## 12. Community Gardens

*A community garden is a valued asset of the local community where residents come together to share knowledge and skills, socialise and grow food<sup>135</sup>*

Gardens are often an integral component of a park and they can include ornamental gardens, annuals or rose gardens, native gardens, edible gardens, bush tucker or food forests. Community groups can obtain approval to manage areas of community land for use as a community garden.

Community gardens provide an avenue for the community to learn, connect, and be inspired and to replicate in one's own backyard. They provide a range of social, physical, psychological benefits and they teach people how to grow food, thus reducing a person's food miles. Community gardens build communities. They provide a mechanism for people to interact, eat locally grown produce, recommended in LMCC's Sustainable Eating Guide.

Community gardens can be located in a park, road reserve, or beside a neighbourhood/community centre or Men's Shed. In terms of scale, they range from a few garden beds in a cul-de-sac to a large City Farm comprising several hectares. Small community gardens are not included in the existing provision below.

Community gardens can be part of a large existing park or they can be an edible landscaped public park such as the Randwick Permaculture Interpretive Garden (PIG), referred to as a 'community park'. This garden together with two others in Mosman and Riverwood won Keep Australia Beautiful Awards in July 2012. Community gardens are now an accepted feature in the urban landscape with many Councils Australia wide developing policies to assist in their development.

### 12.1 Existing Provision

In the Charlestown CC, there are five community gardens including:

Table 32. Charlestown CC – Community Gardens - Existing

SUBURB	FACILITY NAME	NO. OF COMMUNITY GARDENS
BELMONT NORTH	Habitat & Harmony Community Garden	1
WINDALE	Windale Community Garden	1
CHARLESTOWN	St Albans Community Garden	1
CHARLESTOWN EAST	Charlestown East Community Garden	1
REDHEAD	Redhead Community Garden	1
<b>TOTAL COMMUNITY GARDENS</b>		<b>5</b>

In addition, Council has received numerous requests to establish community gardens in suburbs within the catchment including Adamstown Heights, Charlestown, Dudley, Eleebana, Highfields, and Redhead.

### 12.2 Identified

The community garden at Belmont North was established 18 years ago and the second community garden at Morisset was established in 2010. Since then, there has been a growing demand for community gardens, and the City now has 12 community gardens with many more underway. The following demonstrates the need.

- Liveable Communities Assessment**

Comments from a survey of residents in Charlestown in 2010 are listed in **Appendix 3** and include: *Community garden is a great idea if council could help set it up<sup>136</sup>*

- Sustainable Neighbourhood Groups**

LMCC has established a Sustainable Neighbourhood Program with 14 groups currently operating in the City and approximately 80-90 groups planned for the whole LM LGA. These groups develop sustainable neighbourhood action plans (SNAPs) and 18 action plans have been developed throughout the City. The plans and actions within the Charlestown catchment include:

<sup>135</sup> Woodrising, Booragul and Marmong Point Sustainable Neighbourhood Group (2011) *Woodrising, Booragul and Marmong Point Sustainable Neighbourhood Action Plan*, Objective 3.1, p. 9.

<sup>136</sup> Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health, p. 324.

- **Greater Charlestown Sustainable Neighbourhood Action Plan**  
We will work together to create: Productive community gardens<sup>137</sup>
- **Dudley Sustainable Neighbourhood Action Plan**  
To create a shared community garden in Dudley<sup>138</sup>
- **Redhead Sustainable Neighbourhood Action Plan**  
Redhead Community Garden – Establish a Redhead Community Garden<sup>139</sup>
- **Windale Sustainable Neighbourhood Action Plan 2012-2022**  
Expand the community garden network – more gardens in different locations<sup>140</sup>
- **Valentine Sustainable Neighbourhood Action Plan**  
Community Garden – create a shared community space for growing and learning about edible gardening<sup>141</sup>

## • Recreation Plan

The Recreation Plan identifies certain actions and strategies including to:

- Promote opportunities for community group recreation development initiatives at appropriate site – specific strategies include community gardens for vegetable growing<sup>142</sup>
- Enhance the provision of opportunities for other leisure activities - *Initiate a program of facility development and provision to strengthen opportunities for informal leisure opportunities for all ages groups, including community gardens*<sup>143</sup>

## • Community Gardens Policy

LMCC has adopted a *Community Gardens Policy* in October 2009, and a procedure for assessing community gardens.

## • Draft Centres Design Guidelines

DoP has prepared design principles to guide the future development of centres. Principles include:

- Establish community gardens close to the residential areas of a centre for recreation, food source and education<sup>144</sup>
- Investigate the potential of underutilised public parks and spaces and community-owned land near higher – density housing for new community gardens<sup>145</sup>.
- Consider innovative ways to include community gardens and urban farming in public spaces and streets, such as 'edible streets', to provide greater connection between residents with food production<sup>146</sup>
- Promote access to fresh local and organic produce by supporting community gardens close to centres that could supply produce to local businesses and farmers' markets<sup>147</sup>
- Explore other innovative ways to include food production into daily life, such as 'productive roof gardens' and urban farms<sup>148</sup>

## 12.3 Comparative

The LDCG does not specify an indicative population threshold for community gardens. Frequently community gardens can occupy part of a park or they can occupy an entire site.

Table 33. Charlestown CC – Community Gardens - Comparative

COMPARATIVE	POPULATION	NO. OF COMMUNITY GARDENS	FACILITY PER PERSON
Charlestown CC - Existing	59,520	5	11,904
LMCC LGA - Existing (2012)	200,849	12	16,737
LMCC LGA - Proposed Future (2025)	250,000	97	2,577
Guidelines			None known
<b>RECOMMENDED STANDARD</b>			<b>5,000</b>

<sup>137</sup> Greater Charlestown Sustainable Neighbourhood Action Plan 2014-2024, p. 2.

<sup>138</sup> Dudley Neighbourhood Sustainable Neighbourhood Group (ND) *Dudley Sustainable Neighbourhood Action Plan*, p. 8.

<sup>139</sup> Redhead Neighbourhood Sustainable Neighbourhood Group (2010) *Redhead Sustainable Neighbourhood Action Plan 2010-2020*, Project 6, p. 10.

<sup>140</sup> Windale Sustainable Neighbourhood Group (2012) *Windale Sustainable Neighbourhood Action Plan*, Objective 6.4.2, p. 12.

<sup>141</sup> Valentine Sustainable Neighbourhood Group (2011) *Valentine Sustainable Neighbourhood Action Plan*, Action 2.6, p. 8.

<sup>142</sup> LMCC (1998) *LMCC Recreation Plan Volume 1*, Action 3.3, p. 28.

<sup>143</sup> *Ibid.*, Action 4.2.1, p. 42.

<sup>144</sup> NSW Government (2011) *Draft Centres Design Guidelines*, p. 60.

<sup>145</sup> *Ibid.*

<sup>146</sup> *Ibid.*

<sup>147</sup> *Ibid.*

<sup>148</sup> *Ibid.*

The current provision standard maybe considered adequate for some council's or some communities. However, LMCC is committed to sustainability and has implemented a sustainable neighbourhood program where communities develop sustainability action plans. An action commonly identified in these plans is to increase localised food production through the establishment of community gardens. Community gardens are an essential ingredient to the transition to a more sustainable society and both the community and council have indicated their support for these facilities, reflected in the recommended standard.

The recommended standard of one community garden for every 5,000 persons is higher than the actual provision within the catchment and within the city however, it is only half the proposed future citywide level of provision. The proposed recommended standard is considered reasonable for the future provision.

## 12.4 Best Practice

In 2012, the Green Building Council of Australia has developed a guideline for Green Star Communities and a pilot rating tool. The guideline and tool validates environmental and sustainable initiatives by rating development projects according to a 1-6 star rating. The provision of a community garden is included in the rating system.

City farms are popular for example Collingwood Children's Farm and CERES located in Melbourne; Northey Street City Farm in the heart of Brisbane on the banks of Breakfast Creek; Perth City Farm located in East Perth; and Canberra and Sydney City Council is in the process of planning a city farm.

## 12.5 Analysis

Community gardens are a recreational activity that are inclusive of the entire community but are particularly important for an ageing community, people living alone who may suffer from social isolation and people living in high-density vertical communities with limited or no private open space.

Some basic park infrastructure is required for the establishment of some community gardens. These park facilities could include a public toilet, the provision of water, shade structure, bubbler, seating, edging, car parking, and shared pathways to and through the site. All of which are considered to be park infrastructure used for the embellishment of any park. Operational requirements such as the provision of mulch, potting mix, pots, plant materials, or items used on a regular basis would not be funded.

There are five (5) community gardens within the Charlestown CC and 12 in the city. If each sustainable neighbourhood group has identified one community garden for their area, it will create a demand of approximately 85 additional community gardens within the LM LGA. Some SNAPS<sup>149</sup> have identified more than one community garden while other SNAPS may share an existing community garden. Assuming that these gardens are developed over the next 12 years and the estimated population in 2015 is 250,000 people, based on 12 existing gardens and 85 proposed new gardens the standard of provision would be one garden for every 2,500 persons. A conservative standard of one community garden for every 5,000 persons is proposed.

Based on the recommended standard of provision of one community garden every 5,000 persons there is an under-provision of community gardens in the catchment and 2.5 new community gardens are required for the additional population. Considering the under-provision of seven within the catchment, an additional nine (9) community gardens are recommended (subject to community demand), two of which are attributable to the new development.

## 12.6 Recommendations

Areas for community gardens are particularly important in medium/high density areas where private outdoor space is limited. Given that the Charlestown CC is expecting significant infill development and an increasing mix of singles, older couples and couples without children, the demand for community gardens will increase significantly over the next 13 years. The identification of areas for the establishment of community gardens is required to meet these needs. The following hierarchy is recommended for future provision:

---

<sup>149</sup> SNAPS – Sustainable Neighbourhood Action Plans



## LAKE MACQUARIE CITY COUNCIL

### Charlestown CC – Community Gardens - Hierarchy

DESCRIPTION	SIZE	CATCHMENT	POPULATION THRESHOLD
Local	up to 0.2 ha	1 km	1:5,000
Neighbourhood	0.2 - 0.5 ha	4 km	1:50,000
City Farm	over 10 ha	city wide	1:200,000

This plan identifies the following site and potential sites for the development of community gardens. However, they are dependent upon community demand and are subject to a site assessment.

Table 34. Charlestown CC – Community Gardens – Proposed Locations

SUBURB	LOCATION	DESCRIPTION	NO. OF COMMUNITY GARDENS	PRIORITY
ADAMSTOWN HTS	Raspberry Gully Reserve across from Pickering Oval	New community garden	1	Low
CHARLESTOWN	Charlestown	New community garden	1	Medium
DUDLEY	Frank Watkins Park (or north of)	New neighbourhood community garden	1	High
ELEEBANA	Bunya Park off Cherry Road	New neighbourhood community garden	1	High
KAHIBAH	Cnr Waratah & Redhead Sts	New community garden	1	High
REDHEAD	O'Connor Park	New community garden	1	Medium
VALENTINE	Narela Park, off Riawena Street	New community garden	1	Medium
WINDALE	1 and 1A Wakool St	New community garden	1	Medium
LM LGA	Site yet to be determined	New City Farm	1	Low
<b>TOTAL COMMUNITY GARDENS</b>			<b>9</b>	

Note: One City Farm is proposed for the entire LM LGA even though it will be included in each plan the proposal is for one City Farm for the City not five City Farms for the City.

The establishment of the some community gardens requires certain key infrastructure. Some locations may already have facilities such as public toilets, water, pathways, seating, whereas other sites may not.



Photo above  
Community Garden at Belmont Nth



Photo Right – Woolloomooloo Community Garden - Source: Australian City Farm & Community Gardens Network  
<http://communitygarden.org.au>

## 13. Dog exercise areas

A dog exercise area is an area sometimes part of a park or sportsground for dogs to exercise and socialise with other dogs off lead. These areas are also known as dog off-leash parks<sup>150</sup> or dog parks<sup>151</sup>. Australia has one of the highest rates of pet ownership in the world. For the vast majority, dogs and cats are friends and companions and they are much-loved members of our families. In response to a growing demand for off-leash dog exercise areas and in accordance with the Companion Animals Act (1998), LMCC adopted a Dog Exercise Areas Policy in 2005.

### 13.1 Existing Provision

LMCC currently has 28 off-leash dog exercise areas across the LGA and eight (8) off-leash dog exercise areas within the Charlestown CC as detailed below. Some dog exercise areas are available at all times, whereas others are only available for limited times and only on weekdays.

Table 35. Charlestown CC – Dog Exercise Area - Existing

SUBURB	FACILITY NAME	AVAILABLE TIMES	NO. OF DOG EXERCISE AREAS
BELMONT NORTH	Lenaghan Park (part of)	Sunrise to 10 am, weekdays	1
CHARLESTOWN	Reserve off Dudley Rd & Bula St	All times, except when netball in progress	1
CROUDACE BAY	Thomas H Halton Park	Part A - Sunrise to 10 am daily & 4:30 pm to sunset Mon - Fri excluding public holidays; Part B – all times	1
GATESHEAD	Allen Davis Field	Sunrise to 10 am weekdays	1
REDHEAD	Molly O'Connor Park	All times	1
REDHEAD	Redhead Beach (part of)	All times	1
VALENTINE	Ruston Avenue Reserve	All times	1
WINDALE	Bahloo Reserve	Sunrise to 10 am weekdays	1
<b>TOTAL DOG EXERCISE AREAS</b>			<b>8</b>

### 13.2 Identified

Around 63% of Australian homes have a pet, and almost 40% of Australians own a dog<sup>152</sup>. At end Feb 2012, there were 42,601 registered dogs and 58,046 dogs including unregistered dogs in the LM LGA. Over the past 10 years, 4,150 dogs (on average) newly registered in Lake Macquarie each year. An increased residential population means and increase in dog registrations and the need for designated dog exercise areas. The following survey and council policy demonstrate the identified need.

- Parks and Leisure Australia**

*I exercise more because I have a dog – 72%<sup>153</sup>*

The importance of dogs as companions is highlighted in the results of a recent online survey of 800 residents in a Melbourne municipality.

- Liveable Communities Assessment**

Comments from a survey of residents in Charlestown in 2010 are listed in **Appendix 3** and include:

*I don't like the dog exercise park being near the cemetery and dogs running loose on the graves<sup>154</sup>*

- Recreation Plan**

Action 2.9 of the Recreation Plan identifies:

*Improve dog management in parks – define and promote more dog use areas in parks<sup>155</sup>*

<sup>150</sup> National Heart Foundation of Australia (2011) *Neighbourhood Walkability Checklist: How walkable is your community?* P. 9.

<sup>151</sup> Queensland Government website [Parks 4 People](#)

<sup>152</sup> Petcare Information and Advisory Service (2006) *National People and its Pet Survey Socially Responsible Pet Ownership in Australia: A Decade of Progress*, prepared by Professor Bruce Headey. [http://www.petnet.com.au/sites/default/files/National\\_People\\_and\\_Pets\\_2006.pdf](http://www.petnet.com.au/sites/default/files/National_People_and_Pets_2006.pdf)

<sup>153</sup> Parks & Leisure Australia (2013) *Fenced Dog Parks: What you probably don't know but need to know!*, PLA Vic/Tas Region Seminar Series held in Melbourne on 19 March 2013.

<sup>154</sup> Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health, p. 278.

## • Open Space Strategy

The Recreation Participation Survey undertaken in 2001 indicated that 'walking the dog' was a popular recreation activity with high rates of participation. According to the survey, exercising the dog had more than double the participation rates of the most sports including soccer, tennis, cricket football, netball, and athletics.<sup>156</sup> The *LM Open Space Strategy* recommends the further development of a City-wide pathway network park will respond to the demand for suitable facilities for people to walk their dogs.<sup>157</sup>

## • Council Policy

LMCC has a Dog Exercise Area Policy, which states that 'Council will provide open space sites for the exercising of dogs off leads'. In accordance with the policy, the areas have disposal bins, water supply with watering basin, seating, and shade, and may have low mesh fencing.

## 13.3 Comparative

DoP has not specified a provision standard in its guidelines. Dog exercise areas can share a park and are available on a part-time basis or they can be fenced and occupy an area on a full-time basis. Most Councils are now providing specific dog exercise areas, e.g. Hornsby Shire Council has six fully fenced off-leash dog areas. As a comparison, Redland Council has 30 dog off leash areas<sup>158</sup> (19 of which are fully fenced and two have dog agility equipment) with an ERP in 2011 of 143,628 this equates to a provision standard of one dog off leash area per 4,787 persons. Gosford City Council has 40 off leash dog exercise areas with an ERP in 2011 of 166,875 this equates to a provision standard of one dog off leash area per 4,170 persons.

Table 36. Charlestown CC – Dog Exercise Area - Comparative

COMPARATIVE	POPULATION	NO. OF DOG EXERCISE AREAS	PERSONS PER FACILITY
Charlestown CC	59,520	8	7,440
LMCC LGA	200,849	29	6,926
Guidelines			None known
<b>RECOMMENDED STANDARD</b>			<b>7,000</b>

Whilst Redhead Beach may have some space capacity, other dog exercise areas may share with other uses, may have limited hours of use and have no space capacity. The recommended standard of one dog exercise area for every 7,000 persons is similar to the actual and the citywide provision and considered reasonable for the future provision.

## 13.4 Best Practice

Dog exercise areas are a standard provision for council's with some providing fenced areas and others providing dog agility equipment. Dog owners are also park users, and the need for fenced areas or fenced park boundaries allowing dog owners to exercise their dog's off-leash is a fundamental requirement. The Planning Institute of Australia (PIA) have a 2012 award for excellence for Pet Friendly Planning. The winner of the award announced on World Town Planning Day in November 2012 and will present their project at the 2013 PIA National Congress. This award by the peak planning body demonstrates the need to plan for these facilities.

## 13.5 Analysis

Dog exercise areas are important for residents living in medium/high density housing where private outdoor space is limited or non-existent. Given the Charlestown CC is expecting significant growth of infill development the demand for additional dog exercise areas close to population centres will increase.

There are eight (8) dog exercise areas within the Charlestown CC but since the existing dog exercise area at Charlestown will be impacted by the recommended two additional netball courts at this site, the existing dog exercise areas are taken to be seven.

<sup>155</sup> LMCC (1998) *LMCC Recreation Plan: Volume 1*, p. 26.

<sup>156</sup> LMCC (2001) *Lake Macquarie Open Space Strategy*, prepared by URS, Graph 4.2.

<sup>157</sup> *Ibid.*, p. 6-5.

<sup>158</sup> Redlands City Council (2012) *Redland Open Space Strategy 2012 – 2026*, p. 44.

Based on the recommended standard of provision of one dog exercise area for every 7,000 persons there is an under-provision of one and a half dog exercise areas in the catchment. Three new dog exercise areas are recommended, two of which are attributable to the new development.

The majority of the growth within the catchment is located in and around Charlestown, and the existing dog exercise area at Charlestown will be impacted by the provision of the two additional netball courts. To compensate, an additional dog exercise area may be provided at 170 Glad Gunson Drive, Eleebana – which is the site of a junior cricket oval (which is not used) and a detention basin.

## 13.6 Recommendations

The recommendations for the Charlestown CC are:

Table 37. Charlestown CC – Dog Exercise Area – Proposed Locations

SUBURB	LOCATION	DESCRIPTION	NO. OF DOG EXERCISE AREAS	PRIORITY
CHARLESTOWN	Kaleen Street or 291 Charlestown Rd, 34 & part of 40 Bradman St	New fenced dog exercise area	1	Low
CROUDACE BAY	Thomas H Halton Park	New fenced dog park with agility equipment	1	High
WINDALE	1 & 1A Wakool Street	New fenced dog exercise area	1	Low
<b>TOTAL DOG EXERCISE AREAS</b>			<b>3</b>	

**Charlestown** - 22 Kaleen Street, crown land reserved for public recreation. This is an ex-clay quarry, located close to Charlestown and the Yuelarbah Track Great North Walk, and a BMX track is proposed for this site. An alternative is at 291 Charlestown Rd, 34 Bradman St & part of 40 Bradman St – approximately 4,800 m<sup>2</sup>, community land, categorised park, cleared area west of Robert St. The gravel access road requires upgrading, and a small car park, as no on-street parking is available on the main road.

### Charlestown –

**Croudace Bay** – Thomas H Halton Park – is proposed to be upgraded which will result in increased visitation rates of the park. The existing dog exercise area is highly used and a designated fenced off-leash dog area is recommended as part of these works.

**Windale** – 1 Wakool Street – 15,508 m<sup>2</sup>, community land, categorised as park, close to Windale and Gateshead. The site is flat, rectangular, centrally located, and is proposed to also contain a neighbourhood park and community garden. It adjoins a girl guide's hall.

**Whitebridge** – Another site that maybe suitable is the community land at 1 and 12 Amy Close, Whitebridge that is set aside for the possible future development as a recreation area. If any of the above sites are not suitable this site, will be considered.

The general guide for the City is one fenced dog park for each catchment.

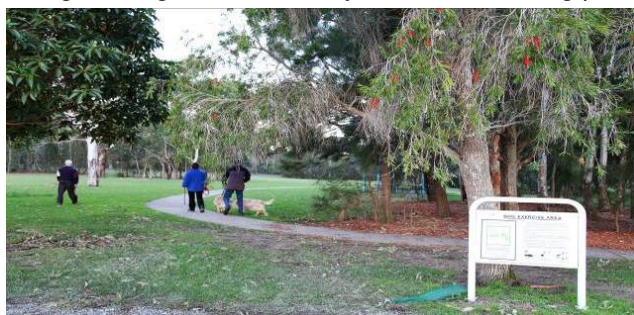


Photo above - dog exercise area at Croudace Bay

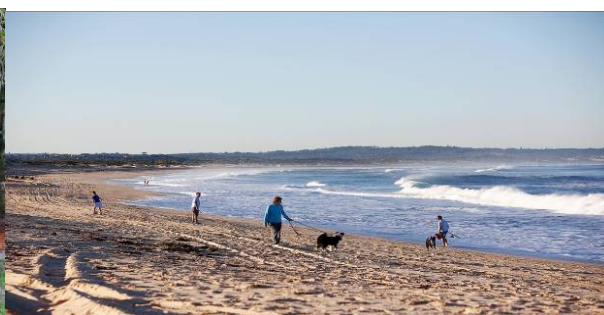


Photo above - dog exercise area at Redhead Beach



## 14. Skate Parks

Skate parks are a purpose built facility providing a relatively safe place for people to skate. Young people skate in shopping centres, on roads, malls and other public places, which is potentially dangerous to themselves and to others. Skate parks are generally used by young people particularly males of varying ages and abilities, however many adult males still use skate parks regularly. Skate parks can be located in parks, sportsgrounds, or public domain/plaza areas and may include bowls, street skate – ramps/rails/steps, or a hybrid form.

### 14.1 Existing Provision

The LM LGA has nine (9) skate parks with two (2) skate parks located in the Charlestown CC as detailed in the following table. Some facilities may be quite small in scale catering for only local users whilst other slightly larger facilities attract users from the catchment area.

Table 38. Charlestown CC – Skate Park - Existing

SUBURB	FACILITY NAME / LOCATION	NO. OF SKATE PARKS
CROUDACE BAY	Thomas H Halton Park	1
WINDALE	beside the Police Citizens Youth Club	1
<b>TOTAL SKATE PARKS</b>		<b>2</b>

Two skate parks are located close to the Police Citizens Youth Club (PCYC). An older skate park, located at the back of the PCYC and beside the netball courts, is located only 100 metres from the newer skate park, and so they are considered to be one skate park. The newer skate park is to be relocated due to the reclassification and sale of the land where it is located.

All the existing skate parks apart from Rathmines are street style skate parks.

### 14.2 Identified

Community demand for skate parks has not altered. The construction of a new skate park in the city triggers requests for skate parks in other neighbourhoods. Community members have been advocating for the provision of a skate park in Charlestown for many years, and a site is identified for that purpose. The following survey, plans, and Council resolution demonstrate the identified need.

- **Liveable Communities Assessment**

Comments from a survey of residents in Charlestown in 2010 are listed **Appendix 3** and include.

*Need to have some form of skate park or activity park for 8 to 17 yr olds to keep off streets<sup>159</sup>*

- **Community Plan**

The Community Plan identifies directions such as:

- Plan and develop skate facilities at suitable sites throughout the city<sup>160</sup>

- **Recreation Plan**

The Recreation Plan identifies certain actions under 4.26 and specific strategies include:

- Develop a multi-use venue with court, skate, social and other related facilities and amenities for young people in Charlestown Park or in conjunction with the redeveloped Charlestown Swimming Pool<sup>161</sup>

- **Council Resolution**

Council at its meeting of 27 April 1999 resolved to support the development of skate facilities throughout the City. Proposed facilities be located in the following suburbs: Charlestown, Croudace Bay, Cardiff, Bonnells Bay, Woodrising and Swansea/Caves Beach.

- **Sustainable Neighbourhood Groups**

The *Belmont Sustainable Neighbourhood Action Plan* identified certain actions for Belmont including:

<sup>159</sup> Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health, p. 277.

<sup>160</sup> LMCC (2008) *Lake Macquarie Community Plan 2008-2018*, p. 45.

<sup>161</sup> LMCC (1998) *Lake Macquarie City Council Recreation Plan: Volume 1*, p. 49.



Lobby and support initiatives to increase recreation facilities in Belmont e.g. skate park.<sup>162</sup>

## 14.3 Comparative

The LDCG specifies an indicative population threshold for a small and large skate park. This standard of provision is higher than the actual local or city standard in LM. However, the guidelines also mentions that there is usually only one large skate park provided per LGA. This plan recommends the provision of fewer but a higher quality facility be provided.

Table 39. Charlestown CC – Skate Park - Comparative

COMPARATIVE	POPULATION	NO. OF SKATE PARKS	PERSONS PER FACILITY
Charlestown CC	59,520	2	29,760
LMCC LGA	200,849	9	22,317
Guidelines <sup>163</sup> - small skate park			6,000
Guidelines <sup>164</sup> - large skate park			10,000
<b>RECOMMENDED STANDARD</b>			<b>20,000</b>

As a comparison, the City of Newcastle has 10 skate parks with an ERP in 2011 of 154,896 this equates to one skate park per 15,478 persons. Whereas Maitland City Council has five skate parks with an ERP in 2011 of 69,646 this equates to one skate park per 13,929 persons. For LM the recommended general standard of one skate park for every 20,000 persons is similar to the actual citywide provision, and considered reasonable and achievable for the future provision.

## 14.4 Best Practice

Skate parks are best co-located with youth/community/recreation centres, in public parks, sportsgrounds, and places with good passive surveillance. Important considerations for these facilities are ease of transport, access, and user safety. For suburbs with poor public transport, local facilities can be provided.

## 14.5 Analysis

Access to affordable youth recreation activities is important for young people. There are two skate parks within the Charlestown CC and based on the recommended standard of one skate park every 20,000 persons there is an under provision in the catchment. One and a half (1.5) skate parks are recommended, the upgrade is attributable to the new development.

## 14.6 Recommendations

The recommendations for the Charlestown CC are:

Table 40. Charlestown CC – Skate Park – Proposed Locations

SUBURB	LOCATION	DESCRIPTION	TOTAL SKATE PARKS	PRIORITY
CHARLESTOWN	Carl Close	New large skate park	1	High
CROUDAGE BAY	Thomas H Halton Park	Upgrade existing skate park	0.5	Medium
<b>TOTAL SKATE PARKS</b>			<b>1.5</b>	

The following hierarchy is recommended for future provision:

Table 41. Charlestown CC – Skate Park - Hierarchy

DESCRIPTION	SIZE	CATCHMENT	POPULATION THRESHOLD
Small Skate Park	500 m <sup>2</sup>	2 to 5 km	1:20,000
Large Skate Park <sup>165</sup>	2,500 m <sup>2</sup>	5 to 10 km	50,000/per catchment

<sup>162</sup> Belmont Sustainable Neighbourhood Group (2012) *Belmont Sustainable Action Plan*, Action 1.5, p. 7.

<sup>163</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*, Indicative population threshold for skate parks p. 94

<sup>164</sup> *Ibid.*

<sup>165</sup> Based on the size of Swansea Skate Park, which is 2,700 m<sup>2</sup> for the actual skating area of the park.

## LAKE MACQUARIE CITY COUNCIL

**Charlestown** - One large skate park is to be provided at the proposed new park at Carl Close, which is centrally located within the catchment. This skate park could incorporate a bowl in the design and perhaps some street elements. The Carl Close site is preferred however, other sites may be investigated should the site not be able to provide this facility. The skate park will be integrated in with the development of this site providing a central community hub.

**Croudace Bay** – The design of the existing skate park at Thomas H Halton Park planned a future stage 2. This plan recommends the expansion of the existing skate park to the value of half a skate park.

In addition, the following skate parks are proposed which will be funded from another source or plan.

**Belmont** – There has been community interest for a skate park in Belmont through requests, a petition, and as an action in the Belmont SNAP. Sites to be considered in the Belmont Recreation & Land Plan include: Lenaghan Park at Belmont North and the Belmont Sporting Complex.

**Windale** – The land upon which the skate park is located was reclassified rezoned and is to be sold. The Council report on 19 March 2007 stated that funds generated from the sale of the land will be used to upgrade community facilities in the area. Proceeds from the sale of the land will fund the construction of a new skate park in Windale. Possible site options for further investigation include:

- Hunter Barnett Fields – west of the existing fields and north of the tennis courts
- Hunter Barnett Fields – north of the existing fields and south of the netball courts
- Bahloo Reserve
- Wakol Street, Windale



Photo of skate park at Croudace Bay



Photo of skate park at Swansea

## 15. BMX Tracks

BMX (Bicycle Motocross) is fast becoming a recognised sport and has increased its profile since its introduction into the Beijing Olympic games in 2008. BMX can include racing or freestyle and freestyle BMX includes dirt, flatland, park/street and vert. BMX tracks can be located in parks, sportsgrounds, natural areas, or a community group may request land to build a facility that they then manage.

BMX is increasing in popularity and BMX Cycling is the most recent discipline to be added to the Olympic program having made its debut at the Beijing 2008 Games. Australia celebrated multiple podium finishes at the 2012 UCI BMX World Championships including a first in elite men. Sam Willoughby won Australia's first Olympic BMX medal at the 2012 London Olympic Games. BMX Australia is the National Sporting Organisation for freestyle BMX and BMX racing. There are a number of significant events for BMX riders such as King of Dirt, Be the Influence Boarder-X-series, Clipsal 500 BMX RAMPage, and Global X Games.

### 15.1 Existing Provision

Authorised BMX tracks in the City are located at Argenton and a recent facility constructed at Cameron Park. The facility at Argenton is a BMX racing track and leased by the Lake Macquarie BMX Club Inc. The track is fenced and you have to be a member of the club to use the facility. Whereas, the track at Cameron Park is fenced, open, and available to the public at all times but is located just outside the catchment boundary. A private BMX track is located within the Glendon School at Hillsborough, and is only available for school students. The Charlestown CC; has no other authorised BMX tracks but many unauthorised BMX tracks.

### 15.2 Identified

The need for BMX tracks is demonstrated by many unauthorised BMX tracks and by numerous requests for these facilities. Council has received requests for BMX tracks from residents in Kahibah, Whitebridge, and Warners Bay. The following survey, plan and another Council comparison demonstrates the identified need.

#### • Liveable Communities Assessment

Comments from a survey of residents in Charlestown in 2010 are listed in **Appendix 3** and include.

*Don't need to let the shopping areas take over, people need space to live and enjoy green space, park, bike areas – think more family not economy*<sup>166</sup>

*Need a bike track near our place on our side of the highway*<sup>167</sup>

#### • Recreation Plan

The Recreation Plan identifies certain actions under 4.20, 4.25 and 4.26, and strategies identified include:

- Ensuring consideration of the needs of minority sports<sup>168</sup>
- Evaluate opportunities for developing near or within urban sites for both BMX club activities and informal riding in the City<sup>169</sup>
- Provision of informal BMX facilities preferably in association with other recreation venues, which serve other activities and age groups so that infrastructure can be shared<sup>170</sup>
- Sites for small-scale informal non-club BMX activities should be developed in appropriate existing reserves at 6-10 locations throughout the City<sup>171</sup>
- Hesbon/Carbeen Sts, Gateshead: walking trails through bush and development of a local BMX trail in conjunction with locally developed facilities at end of Bean St<sup>172</sup>
- Assess informal reserves capable of supporting informal local mountain bike and BMX activities<sup>173</sup>

<sup>166</sup> Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health, p. 278.

<sup>167</sup> *Ibid.*, p. 292.

<sup>168</sup> LMCC (1998) *LMCC Recreation Plan: Volume 1*, p. 41.

<sup>169</sup> *Ibid.*

<sup>170</sup> *Ibid.*, p. 42.

<sup>171</sup> *Ibid.*

<sup>172</sup> *Ibid.*, p. 48.

## • Hornsby Shire Council

Hornsby Shire Council has funded the preparation of an *Unstructured Recreation Strategy*. The strategy has identified that:

- The expressed demand for BMX freestyle in Hornsby is estimated to be of a similar size to skateboarding
- BMX may have a greater growth potential than skateboarding, however this demand is dispersed across a number of different disciplines that require different facilities.
- BMX use is likely to continue to be as strong as skate parks<sup>174</sup>

## 15.3 Comparative

The LDCG does not specify an indicative population threshold for BMX tracks however; BMX tracks are included as key community infrastructure and the population threshold for a skate park is linked to BMX. The guideline acknowledges that: 'the need for BMX tracks can be reduced by shared facility with skate park'.<sup>175</sup> These uses, however, are quite different i.e. dirt tracks versus smooth sealed surfaces.

This plan recommends separating these facilities providing one BMX track for every 20,000 persons and one skate park for every 20,000 persons which is the same as the DoP's indicative standard for a one large skate park per 10,000 person (which includes BMX). The DoP also has a standard for a small skate park one for every 6,000 persons, however, this level of provision is considered excessive for LM.

Table 42. Charlestown CC – BMX Track - Comparative

COMPARATIVE	POPULATION	NO. OF AUTHORISED BMX TRACKS	PERSONS PER FACILITY
Charlestown CC	59,520	0	59,520
LMCC LGA	200,849	2	100,4250
Guidelines <sup>176</sup>			Combined with skate
<b>RECOMMENDED STANDARD</b>			<b>20,000</b>

For comparison, Cairns Regional Council with an ERP in 2011 of 162,740 has 11 skate parks and 18 Council authorised BMX tracks. In addition, Cairns have a large number of unauthorised BMX tracks and several private BMX tracks such as Cairns BMX. The Council BMX tracks equate to a provision standard of one BMX track every 9,041 persons. For LMCC the recommended standard of one BMX track for every 20,000 persons is reasonable for the future provision. It reflects the identified need for these facilities evidenced by the number of unauthorised facilities in the catchment and in the City.

## 15.4 Best Practice

NPWS in their *Sustainable Mountain Bike Strategy* identified that the provision of a small number of high quality mountain bike areas is a key strategy for reducing unauthorised mountain biking and track construction.<sup>177</sup> The same principle applies to BMX tracks.

## 15.5 Analysis

Even though there are no authorised BMX tracks in the catchment, the building of ten unauthorised tracks at different locations within the catchment, demonstrates a local need which is much high than the recommended standard. The recommended standard considers Council's on-going maintenance liability, and is considered an acceptable level of provision for the city.

Based on the recommended standard of one BMX track for every 20,000 persons, three (3) BMX tracks are recommended, one of which is attributable to the new development.

<sup>173</sup> *Ibid.*, p. 49.

<sup>174</sup> Hornsby Shire Council (ND) *Unstructured Recreation Strategy: Volume 1*, p. 39.

<sup>175</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*, p. 94.

<sup>176</sup> *Ibid.*, Indicative population threshold provided for skate (small skate – 6,000 people, large skate – 10,000 people) the department states that these facilities also include BMX

<sup>177</sup> NPWS (2011) *NPWS Sustainable Mountain Bike Strategy*



## 15.6 Recommendations

The recommendations for the Charlestown CC are:

Table 43. Charlestown CC – BMX Track – Proposed Locations

SUBURB	LOCATION	DESCRIPTION	NO. OF BMX TRACKS	PRIORITY
CHARLESTOWN	Kaleen Street Reserve	Large new BMX	1	High
ELEEBANA	Thomas H Halton Park	Small new BMX	1	High
HILLSBOROUGH	25A Percy St (North of Hillsborough Oval)	Small new BMX	1	Low
<b>TOTAL BMX TRACKS</b>			<b>3</b>	

The following hierarchy is recommended for future provision:

Table 44. Charlestown CC – BMX Track - Hierarchy

DESCRIPTION	SIZE	CATCHMENT	POPULATION THRESHOLD
Small BMX Track	2,000 m <sup>2</sup>	2 to 3 km	20,000
Large BMX Track	5,000 m <sup>2</sup>	5 to 10 km	50,000/per catchment

**Charlestown**, 22 Kaleen Street, is a disused clay quarry - The site is centrally located within the proposed new development area of Charlestown. Refer to the mauve area 1,554 in **Figure 4**. This large BMX track provides for the concentrated growth within the Charlestown sub-catchment.

Two smaller BMX tracks are proposed to be located at Thomas H Halton Park and Hillsborough Oval site.

**Another site** that maybe suitable if any of the above sites cannot proceed is the site at 1 and 12 Amy Close, Whitebridge.



Photo of BMX track at Cameron Park opened on 31 March 2012



Photo of BMX track at Argenton



## 16. Shared Pathways

Shared pathways are off-road sealed paths wider than footpaths and with a gentle gradient to provide equal access. They are usually located on community land in parks, sportsgrounds, or linkages through natural areas. Shared pathways cater for a variety of users including walkers/pedestrians, joggers, bicycles, roller blades, and people with strollers and/or mobility aids.

The most popular shared pathway is the Lake Macquarie foreshore route, 8.9 kilometres extending from Booragul to Eleebana, and the Fernleigh Track 15.5 kilometres extending from Adamstown to Belmont. The Fernleigh Track transits north/south through the full length of the Charlestown CC. As the use of shared pathways increase, separated or segregated pathways (pathways where bicycles are separated from other recreational users), will be required. The term 'shared pathways' as used in this plan, includes separated/segregated pathways.

### 16.1 Existing Provision

This catchment enjoys portions of the most popular shared pathway routes in the City. The provision of additional linkages to major routes improves access to these facilities for the new population. There are 15,935 metres of shared pathways in the Charlestown CC as detailed in the table below.

Table 45. Charlestown CC – Shared Pathway - Existing

SUBURB	LOCATION	LENGTH IN METRES
CROUDACE BAY	Thomas H Halton Park	2,000
CROUDACE BAY	St Johns Dr to Excalibur Pde	670
ELEEBANA	Bunya Park	235
ELEEBANA	Lake Foreshore - catchment boundary south to boat ramp	1,270
ELEEBANA	Thomas H Halton Park car park to Toonibal Ave	700
GATESHEAD	Fernleigh Track Spur - Oakdale Road	230
GATESHEAD	Goundry St Oval - Redwood Cres along Willow Rd	305
GATESHEAD	Pacific Hwy, Oakdale Rd to Hunter Sports High	680
HIGHFIELDS TO BELMONT	Fernleigh Track - Valaud Cres to catchment boundary	9,930
HILLSBOROUGH	Leroy Cl to Waratah Ave	560
HILLSBOROUGH	Moody St	110
KOTARA SOUTH	Raspberry Gully - catchment boundary to lights at top of Hillsborough Rd	1,865
REDHEAD	The Durham Mine Walkway	360
REDHEAD	The Lambton Colliery Walkway	650
VALENTINE	Green Point - end Dilkera Ave to Frederick St	330
VALENTINE	Green Point - end Leichhardt St to catchment boundary	400
WARNERS BAY	Lake Foreshore - catchment boundary to Red Bluff	600
WINDALE	end of Lake St to Pacific Hwy	550
WINDALE - MOUNT HUTTON	Lake St (end of) to Warners Bay Road	1,900
<b>TOTAL SHARED PATHWAYS</b>		<b>23,345</b>

### 16.2 Identified

*Walking is still Australia's favourite physical activity<sup>178</sup>*

The following survey, strategy, plans, guidelines, and policy demonstrate the identified need.

- ERASS**

According to the ERASS Report 2010 State Tables for NSW<sup>179</sup> the participation rates for 'walking (other)' was 34%; (which does not include bushwalking which accounts for 4.8%); cycling was 10.6% and running was 9.1 %. The combined participation rates of walking (other), cycling and running is 53.7%, and shared pathways provide for all these activities. Over the 10 years the surveys were conducted, walking (other) consistently had the highest participation rate far exceeding any of the 165 activities identified. Walking has the highest participation rates for both males and females and people continue this activity well into their older age.

<sup>178</sup> ABS (?) *Participation in Sport and Physical Recreation 2009-10* (cat no. 41770.0)

<sup>179</sup> ASC (2009) *Participation in Exercise, Recreation and Sport Survey 2010 Annual Report*

## • Delivery Program

The LMCC Delivery Program identifies what is important to the community including:

- Finalise the Implementation Plan for the whole length of the Fernleigh Track and its spur lines<sup>180</sup>

## • Open Space Strategy

A recreation participation survey was undertaken as part of the strategy and the survey results indicated that walking for exercise had by far the highest level of participation, a total of 32,000 hours, and the next highest 'swim/surf at beach', which had a total of 19,000 hours<sup>181</sup>. This can be compared to the total participation time for soccer, tennis, football (AFL, RL, RU) and cricket combined is less than half the total participation time spent 'walking for exercise'.<sup>182</sup> The results indicated that cycling has a much higher participation rate than any sport including: basketball, soccer, tennis, cricket, football, netball and athletics.<sup>183</sup>

## • Cycling Strategy

LMCC is committed to providing cycleways throughout the City has adopted the *LMCC Cycling Strategy 2021*, identifying the future provision of both on-road and off-road cycleways. Council has also committed significant funding for the next 10 years to the construction of cycleways identified in the strategy.

The Cycling Strategy identified a vision of more people cycling often, for all journey purposes.<sup>184</sup> The strategy aims to increase the number of cycling trips by residents from a 2012 base of 1% to 5% share of all travel trips by 2022.<sup>185</sup>

The strategy recommends that Council:

- Require future private development in Lake Macquarie to make adequate provision of cycling infrastructure and facilities<sup>186</sup>

As part of the Cycling Strategy, a community survey was undertaken and results included:

- Among all cyclists, regardless of cyclist type, gender and age, the most commonly reported trip purpose (78%, n=337) is cycling for leisure on off-road bicycle paths (e.g. the Fernleigh Track)<sup>187</sup>
- While 35% (n=119) of regular cyclists also cycle along mountain bicycle trails<sup>188</sup>
- "I'd like to ride on a dedicated path...away from cars – they are the biggest potential danger"<sup>189</sup>
- Of the regular and infrequent cyclists who said they didn't ride because available facilities aren't safe or comfortable enough, 70% said there aren't enough separated bicycle paths<sup>190</sup>

The Cycling Strategy lists a number of actions including the provision of appropriate short-term bicycle parking in all town centre and shopping strips across the LGA<sup>191</sup> and that Council require future private development to make adequate provision of cycling infrastructure and facilities<sup>192</sup>

## • Warners Bay Foreshore

Council engaged a consultant to prepare a master plan and plan of management for the Warners Bay foreshore, which is the area between The Esplanade and the lake extending from Fairfax Road to South Creek. The master plan identifies the proposed work undertaken on the foreshore over the next 20 years. The master plan identifies an integrated pedestrian and cycleway network, which has been planned along the foreshore comprising of a shared recreational pathway and a commuter pathway. The delineation of these users means that there will be less conflict and a greater separation of these different activities<sup>193</sup>. A typical section through foreshore at walkways clearly indicates a 3.5 m shared recreational pathway and a 3.5 m shared commuter pathway<sup>194</sup>

<sup>180</sup> LMCC (2013) *City of Lake Macquarie Delivery Program 2013-2017*, Priority 3.3, p. 50.

<sup>181</sup> LMCC (2001) *Lake Macquarie Open Space Strategy*, prepared by URS, Graph 4.2.

<sup>182</sup> *Ibid.*, p. 4-7

<sup>183</sup> *Ibid.*, Graph 4.2

<sup>184</sup> LMCC (2012) *LMCC Cycling Strategy 2021: A place for all residents to enjoy the pleasure of cycling for all journeys*, p. 3.

<sup>185</sup> *Ibid.*

<sup>186</sup> *Ibid.*, p. 74.

<sup>187</sup> *Ibid.*, p. 9.

<sup>188</sup> *Ibid.*, p. 10.

<sup>189</sup> *Ibid.*

<sup>190</sup> *Ibid.*, p. 18.

<sup>191</sup> *Ibid.*, p. 69.

<sup>192</sup> *Ibid.*, p. 74.

<sup>193</sup> LMCC (2012) *Warners Bay Foreshore Master Plan Report*, prepared by Jackson Teece, RPS, Mansfield Brodbeck p. 57.

<sup>194</sup> *Ibid.*, p. 55.

## • Fernleigh Track

Council in conjunction with NCC engaged a consultant to prepare an *Implementation Plan for the Fernleigh Track*.<sup>195</sup> The plan identifies the construction of the Dudley and the John Darling Branch as a shared cycleway/walkway and has provided cost estimates<sup>196</sup> (current at the time of writing the plan) to undertake the work. The plan details each section of the track and the specification and civil and structural engineering works for the two branch lines are detailed in Table 4.5 and Table 4.10.

## • Liveable Communities Assessment

Comments from a survey of residents in Charlestown in 2010 are listed in **Appendix 3** and include.

*Need connecting bike paths or lanes to the Fernleigh Track*<sup>197</sup>

*Large linked pathways are needed within the council area*<sup>198</sup>

## • Sustainable Neighbourhood Groups

Community groups have developed the following sustainable neighbourhood action plans and all have identified actions for the development of connections to the improve access to the Fernleigh Track.

- Belmont Sustainable Neighbourhood Action Plan<sup>199</sup>
- Charlestown East Sustainable Neighbourhood Action Plan<sup>200</sup>
- Dudley Sustainable Neighbourhood Action Plan<sup>201</sup>
- Valentine Sustainable Neighbourhood Action Plan<sup>202</sup>

## • Community Plan

The plan identifies directions, strategic objectives, and progress indicators such as:

- Fernleigh Track and its connector routes to Dudley and Belmont North are designed and constructed<sup>203</sup>

## • Recreation Plan

The plan identifies specific strategies including:

- Enhance parklands away from the lake, particularly through infrastructure and servicing and the developing of linear links<sup>204</sup>
- Improve the provision of on and off-road cycle and walkways in the catchment<sup>205</sup>
- Develop a walking / cycle path through Bennett Park and link to Green Point Foreshore Reserve<sup>206</sup>

## • Open Space Plan

The survey undertaken as part of the open space plan prepared by Clouston identified that:

- Cycleways (57.9%) were preferred to sportsgrounds and facilities (37.1%)<sup>207</sup>

## • Guidelines for Walking and Cycling

The NSW government strongly supports walking and cycling facilities through various documents including the *Planning Guidelines for Walking and Cycling*. Key elements of the guidelines include:

- Creating a walkable and cycleable city is an important element in creating a sustainable city<sup>208</sup>
- Redevelopment should aim to improve and expand the extent of public walking and cycling access<sup>209</sup>
- Development assessment processes improve consideration of walking and cycling, and improve the provision of bicycle parking and end-of-trip facilities<sup>210</sup>

<sup>195</sup> LMCC & NCC (1999) *Implementation Plan for the Fernleigh Track*, Table 4.5, and Table 6.1, Table 4.10, p. 49, 50 and 52.

<sup>196</sup> *Ibid.*, Table 5.6 and Table 5.7.

<sup>197</sup> Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health, p. 172.

<sup>198</sup> *Ibid.*, p. 173.

<sup>199</sup> Belmont Sustainable Neighbourhood Group (2012) *Belmont Sustainable Action Plan*, p. 10.

<sup>200</sup> Charlestown East Sustainable Neighbourhood Group (2011) *Charlestown East Sustainable Neighbourhood Action Plan*, p. 8.

<sup>201</sup> Dudley Sustainable Neighbourhood Group (ND) *Dudley Sustainable Neighbourhood Action Plan*, p. 10.

<sup>202</sup> Valentine Sustainable Neighbourhood Group (ND) *Valentine Sustainable Neighbourhood Action Plan*, p. 9.

<sup>203</sup> *Ibid.*

<sup>204</sup> LMCC (1998) *LMCC Recreation Plan Volume 1*, p. 34.

<sup>205</sup> *Ibid.*, p. 46.

<sup>206</sup> *Ibid.*, p. 47.

<sup>207</sup> LMCC (1006) *Lake Macquarie Open Space Plan*, prepared by Clouston, p. 14.

<sup>208</sup> NSW Government (2004) *Planning Guidelines for Walking and Cycling*, Sydney, p. 15.

<sup>209</sup> *Ibid.*, p. 33.

<sup>210</sup> *Ibid.*, p. 39.

## • NSW Bikeplan

The plan aims to encourage more and safer cycling specifically:

- Double the use of cycling to get to work across all of NSW, between 2006 and 2016<sup>211</sup>

## • Draft Centres Design Guidelines

DoP has prepared design principles to guide the future development of centres to improve liveability. Principles include:

- Include end-of-trip facilities in buildings to encourage walking and cycling. Locate secure bicycle storage in well-lit, visible locations close<sup>212</sup>
- Promote 'active living' within parks and squares by connection walkways and cycleways to local networks to improve health and well-being<sup>213</sup>
- Prioritise pedestrians and cyclists within centres<sup>214</sup>

## • Draft Centres Policy

DoP has prepared a policy to guide the future development of centres and includes:

- Provide attractive and direct pedestrian and cycling networks based on 'safer by design' principles to encourage physical activity<sup>215</sup>
- Provide permeability of designs that allow people to move freely between interiors and exteriors, between private and public spaces between shopping centres and the town centre with active street fronts instead of blank walls<sup>216</sup>

## 16.3 Comparative

The LDCG does not specify an indicative population threshold for shared pathways and cycleways however, shared pathways are included as key community infrastructure. The guideline lists matters for consideration and it questions if Council has prepared a Shared Pathways & Cycleways Plan. The *LMCC Cycling Strategy* has identified all the shared pathways proposed as off-road cycleways. The recommended standard of provision of shared pathway per person is similar to the actual provision within the catchment and considered reasonable for the future provision. As a comparison, Canberra with a population of 367,000 has 343 km<sup>217</sup> of off-road cycle paths throughout an area of 814.2 km<sup>2</sup> which equates to 0.93 metres per person. This is in addition to 403 km of on-road cycle lanes.

Table 46. Charlestown CC – Shared Pathway - Comparative

COMPARATIVE	POPULATION	METRES OF SHARED PATHWAYS	METRES OF SHARED PATHWAY PER PERSON
Charlestown CC	59,520	23,345	0.39
Guidelines <sup>218</sup>			Shared Pathways & Cycleways Plan
<b>LOCAL SHARED PATHWAY STANDARD</b>			<b>0.39</b>

Shared pathways are difficult to provide in some areas and locations due to land availability and steeply sloping sites. In these instances, such as the off-road connection from the Fernleigh Track to the Charlestown centre, a recreational trail is to be provided.

## 16.4 Best Practice

Shared use pathways are used in areas of low volumes of pedestrians and cyclists.<sup>219</sup> Once volumes exceed a certain capacity, a separated path or segregated paths is provided. According to the Austroads Standards, a separated path is where cyclists and pedestrians are required to use separate designated areas of the path. Separated paths are used where there are large numbers of pedestrians and cyclists using the same path, sites include promenades along a foreshore or river frontage.<sup>220</sup> A segregated path

<sup>211</sup> NSW Government (2010) *NSW Bikeplan*, p. 5

<sup>212</sup> NSW DoP (2011) *Draft Centre Design Guidelines*, Department of Planning, Sydney, p. 38.

<sup>213</sup> *Ibid.*, p. 49.

<sup>214</sup> *Ibid.*, p. 74.

<sup>215</sup> NSW Department of Planning (2009) *Draft Centres Policy: Planning for Retail and Commercial Development*, p. 22.

<sup>216</sup> *Ibid.*, p. 23.

<sup>217</sup> ACT Government (2012) *Territory & Municipal Services Annual Report 2011-2012 Volume 1*, p. 15.

<sup>218</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*, Indicative population threshold, p. 94.

<sup>219</sup> Department of Infrastructure and Transport (2012) *Walking, Riding and Access to Public Transport: Draft Report for Discussion*, P. 109.

<sup>220</sup> Austroads Standards Australia (1999) *Guide to Traffic Engineering Practice Part 14 Bicycles*, p. 86.

i.e. an exclusive bicycle path and a parallel exclusive pedestrian path, permits fast bicycle travel and is the most desirable of the off-carriageway alternatives, particularly for commuters.<sup>221</sup>

Austrroads has a model to provide guidance on when to provide on-road and off-road infrastructure for cyclists according to traffic volumes and traffic speed. A similar model could be developed for shared pathways to provide guidance on when an additional separated pathway is required to be provided.<sup>222</sup>

## 16.5 Analysis

Shared pathways are recreational facilities which are well utilised by a broad age range including parents/carers with strollers, family groups and other groups, young adults and older adults.

An additional 4,640 metres of shared pathways are recommended which are attributable to the new development. There is a slight over provision of shared pathways proposed which is in recognition of the increasing popularity of the shared pathways and the increasing aging population. This more than adequately compensates for the very modest open space component.

## 16.6 Recommendations

The recommendations are:

Table 47. Charlestown CC – Shared Pathway – Proposed Locations

SUBURB	LOCATION	DESCRIPTION	LENGTH METRES	PRIORITY
BELMONT NTH	Fernleigh Track to Lenaghan Park	John Darling Branch Line <sup>223</sup> - new shared pathway	790	Medium
CHARLESTOWN	Kaleen Street – (proposed) new Charlestown Urban Park	New shared pathway - connection to Fernleigh	460	Medium
DUDLEY	Fernleigh Track (access to) Stage 1 - Ocean St to Burwood Rd	Dudley Branch Line <sup>224</sup> - new shared pathway	900	High
DUDLEY	Fernleigh Track (access to) Stage 2 - Burwood Rd to Fernleigh Track	Dudley Branch Line <sup>225</sup> - new shared pathway	840	High
ELEEBANA	Eleebana Lions Park to Eleebana Rd	New shared pathway <sup>226</sup>	610	Medium
KAHIBAH	Fernleigh Track, NW side Burwood Rd	New shared pathway <sup>227</sup>	120	Medium
VALENTINE	Bennett Park, Dilker Ave to Thomas H Halton Park	New shared pathway <sup>228</sup>	890	Low
<b>TOTAL SHARED PATHWAYS</b>			<b>4,610</b>	

**Fernleigh Track** – Since the Fernleigh Track is now completed and in accordance with the actions in the *Fernleigh Track Implementation Plan* (Table 4.5, 4.10, 5.6 and 5.7), Council can now establish some key linkages that provide communities with safe off-road access onto this key recreational route.

LMCC's *Cycling Strategy 2021* identifies two (2) routes to provide a connection between Dudley and Whitebridge. The first is an off-road shared pathway along the 'old' rail corridor commonly known as the 'Dudley spur' or 'Dudley branch line'. The second is a cycleway, within the road reserve, along Ocean Street. The City of Lake Macquarie *Delivery Program 2013-2017*, identifies the spur lines of the Fernleigh Track as a priority (Priority 3.3), and this route is included in this plan. Stage 1 proposed is between Ocean Street to Burwood Road then from Burwood Road, access to the Fernleigh Track is via the low Hudson Street.

The popularity of off-road shared pathways has increased significantly and considering the level of use of the Fernleigh Track, the need to separate walkers and cyclists, is likely in the future. In some sections where the rail line has been retained this separated use could easily be achieved as identified in the *Fernleigh Track Implementation Plan*.

<sup>221</sup> *Ibid.*, p. 90.

<sup>222</sup> Austrroads 2009, *Guide to Traffic Management: Part 4: Network management*, report AGTM 0409, Austrroads, Sydney, NSW – Figure 4.7.

<sup>223</sup> LMCC (2012) *LMCC Cycling Strategy 2021*, referred to as Belmont 4B, rank 56 of 118 with East Ward

<sup>224</sup> *Ibid.*, referred to as Dudley 2, rank 108 of 127 in North Ward

<sup>225</sup> *Ibid.*, referred to as Dudley 1, rank 20 of 127 in North Ward

<sup>226</sup> *Ibid.*, referred to as Eleebana 1A, rank 78 of 122 in East Ward

<sup>227</sup> *Ibid.*, Charlestown 4, rank 70 of 121 in North Ward

<sup>228</sup> *Ibid.*, referred to as Valentine 1, rank 105 of 118 in East Ward





Photos above of the Fernleigh Track

**Lake Foreshore** – The planned continuation of this pathway from Eleebana to Croudace Bay is identified in the *LMCC Cycling Strategy 2021*. As its popularity of this route increases, the need to provide a second pathway to separate cyclists and walkers will be required. The *Warners Bay Foreshore Master Plan* has identified a separated off-road commuter cycleway, 3.5 m wide, to be provided<sup>229</sup>.

Other future pathways may include:

**Windale** – Tulootaba Reserve, new shared pathway over the desire line from South Street to the proposed new commercial area and bus stop, proposed to be funded from another source.

<sup>229</sup> LMCC (2012) *Warners Bay Foreshore Master Plan Report*, Section A, B, C and D on pages 44-47; Figure 20 p. 49; typical section p. 55; 57 and 61.

## 17. Tracks and Trails

Tracks and trails provide opportunities for people to access to open space, promoting physical activity to lower the incidence of obesity, depression and other illnesses related to sedentary lifestyles. Walking provides for young people, older people, and people without a car.<sup>230</sup>

A walking track is usually dirt or stabilised gravel track, sometimes containing boardwalks provided predominantly for walkers and located mostly through natural areas. A recreational trail is also located through a natural area and caters for walkers, joggers, and bicycles.

Tracks and trails are often located on varied terrain and sloping sites where access is limited or they may be narrow in width or utilise fire trails or unsealed roads. The frequency of use and volume of use are the major factors dictating the width of the trail.<sup>231</sup> Some tracks may require a more durable surface if use is expected to be high. Decomposed granite and other forms of fine crushed rock are often used in bushland areas, where the frequency and volume of use is low and a less visually dominant pathway construction is required.<sup>232</sup> Some tracks may require a more durable surface if use is expected to be high.

### 17.1 Existing Provision

The following table is a list of the more popular tracks and trails located on land managed by LMCC within the Charlestown CC. Even though some of the following routes are included as walking tracks, mountain bikes also use them. A specific tracks and trails strategy is needed to determine their current and preferred use as some of these routes.



Photo of Tracks and Trails at Glenrock SCA and Mount Sugarloaf

*Recreational trails can offer you an exhilarating experience.*<sup>233</sup>

Some other tracks and trails in the Charlestown area that are not include the existing provision as they are managed by others include:

- **Awabakal Nature Reserve** - Little Swamp trail, Redhead Lagoon trail, Lagoon Trail
- **Belmont Wetlands State Park** - (the northern part of the park)
- **Glenrock State Conservation Area** - (partly within LMCC and NCC LGA), including the Burwood track, Leggy Point loop, Dudley North Trail, Gardeners Link Firetrail, Banksia Firetrail, Bombala Track
- **Tingira Heights Nature Reserve** - Southern boundary fire trail, Burton Road fire trail, James Street link, East boundary fire trail, Powerline easement fire trail.

<sup>230</sup> NSW Government (2004) *Planning Guidelines for Walking and Cycling*.

<sup>231</sup> Department of Infrastructure, Planning and Natural Resources (2005) *Sydney Metropolitan – Regional Recreation Trails Framework Final Report*, prepared by Hassell Pty Ltd, section 2.2.

<sup>232</sup> *Ibid.*, section 2.3.

<sup>233</sup> Tails SA (ND) *South Australian Trails: Your Guide to Walking, Cycling, Horse Riding, Diving, Canoeing*, p. 2, [www.southaustraliantrails.com](http://www.southaustraliantrails.com)

**Table 48. Charlestown CC – Tracks and Trails - Existing**

SUBURB	LOCATION	LENGTH IN METRES
DUDLEY	Seacourt Avenue to Bombala St (Seacourt Ave Fire Trail)	1,050
DUDLEY	Dudley Branch Line 1	690
DUDLEY	Redhead Lagoon Trail - Ivy Street to Knoll Ave	650
CROUDACE BAY	Croudace Bay Sporting Complex to Macquarie Drive	630
ELEEBANA Lake Foreshore	Thomas H Halton Park – end of car park to Toonibal Ave	510
ELEEBANA	Wyndham Way to Cawood Close, Eleebana	950
ELEEBANA	Lenaghan Cres to Bareki Road opposite Thomas H Halton Park	935
ELEEBANA	Moani St to Yerambala Close, Eleebana	250
GATESHEAD	Hughes St behind Hunter Sports High School to Pacific Hwy	880
GATESHEAD	Fred Wright to Ernie Calland Fields	450
HILLSBOROUGH / MT HUTTON	Hillsborough Rd to Warners Bay Rd, Mt Hutton	2,030
REDHEAD	Bentley Street Trail	924
REDHEAD	Allard St to Alison St	105
TINGIRA HEIGHTS / ELEEBANA	Voilet Town Rd to Wyndham Way, Eleebana	1,900
VALENTINE	Linnekar Close to Croudace Bay Sporting Complex	440
VALENTINE	Tingira Drive near Connaught Rd to Suffolk Dr	790
<b>Great North Walk</b>		
KAHIBAH – WARNERS BAY	Yuelarbah Track	5,600
<b>Jewells Wetland<sup>234</sup></b>		
JEWELLS	Bangalay Reserve Track	1,700
GATESHEAD – REDHEAD	Oakdale Rd to Redhead – Fernleigh Track, Cowlishaw St	1,940
GATESHEAD – JEWELLS	Fencott Drive to Bennetts Green Track	2,100
GATESHEAD	Wetland Linking Track	1,300
GATESHEAD – BENNETTS GREEN	Gateshead to Bennetts Breen Link Track	1,220
REDHEAD	Redhead Road to Fernleigh Track	650
JEWELLS	Eagles Nest to Bangalay Reserve Link Track	1,700
REDHEAD	Kallaroo Road to Wetland Linking Track	1,140
JEWELLS	Bangalay Reserve to Jewells Track	950
GATESHEAD – REDHEAD	Wetland to Fernleigh Track (linking at old Redhead tip site)	1,000
<b>Green Point Foreshore Res</b>		
VALENTINE	Lake Foreshore track – Dilkera Ave to catchment boundary	830
VALENTINE	Lake foreshore track to Roma Rd	300
VALENTINE	Lake foreshore track to northern shared pathway	230
VALENTINE	From northern shared pathway to Roma Rd	160
VALENTINE	Mid slopes to Roma Rd	450
VALENTINE	Mid slopes Roma to shared pathway to Leichhardt St – track 1	210
VALENTINE	Mid slopes Roma to shared pathway to Leichhardt St – track 2	300
VALENTINE	East West Connection – Japonica Place to shared pathway	1,050
<b>Ken &amp; Audrey Owens Walk</b>		
REDHEAD	Webb Park, Beach to Elsdon Sts	1,200
REDHEAD	Elsdon Street to Redhead Beach	600
<b>TOTAL TRACKS AND TRAILS</b>		<b>35,424</b>

## 17.2 Identified

The following surveys, strategy, plans, and policy demonstrate the identified need for tracks and trails.

- ABS**

*Walking still Australia's favourite physical activity<sup>235</sup>*

According to the ABS, 'the most popular facilities used for participating in sport and physical recreational activities were other outdoor facility such as parks, beaches and walking trails, with 58% of participants using these facilities'.<sup>236</sup>

<sup>234</sup> LMCC (1999) *Jewells Wetlands Catchment Management Strategy Proposed Plan of Management*, tracks are included in Figure 5.4 of the strategy.

<sup>235</sup> ABS (2009) *Participation in Sport and Physical Recreation, Australia 2009-10* (cat. No. 4177.0)

<http://www.abs.gov.au/ausstats/abs@.nsf/Products/65410DBE00E90D19CA2578DC0001EBEF?opendocument>

<sup>236</sup> *Ibid.*

## • ERASS

According to the ERASS 2010 annual report, bush walking has a 4.8% total participation rate. Persons aged 15 years and over who participated in physical activity for exercise, recreation, and sport over a 12-month period prior to interview in 2010.<sup>237</sup>

## • Planning Guidelines for Walking and Cycling

The NSW Government's *Planning Guidelines for Walking and Cycling* includes:

The value of open space corridors can be enhanced through the provision of walking and cycling paths<sup>238</sup>  
Paths and trails are increasingly popular and their use is growing<sup>239</sup>

## • Liveable Communities Assessment

The LM LCA recommended that: enabling cycling to Charlestown Square through good connections and end of use facilities and provision of bike storage facilities at destinations and public transport interchanges<sup>240</sup> Comments from a survey of residents in Charlestown in 2010 are listed in **Appendix 3** and include:

*Bushland to be made more available to the public*<sup>241</sup>

## • Cycling Strategy

As part of the Cycling Strategy, a community survey was undertaken in October 2011 and results of respondents when questioned about the reasons why people ride their bikes, several cyclists said that they ride for recreational and leisure to '*spend time with the kids*' because it was "*a good family excursion*".<sup>242</sup>

The results of the community survey are:

- a significant proportion of regular cyclists (52%) and almost all infrequent cyclists (95%) said that they *only* used their bicycles for sport, recreation or leisure<sup>243</sup>
- Regular and infrequent cyclists were also asked to indicate what journeys they usually use for cycling
  - 82% of infrequent cyclists and 78% of regular cyclists use cycling for leisure on off-road paths<sup>244</sup>
  - while 35% of regular cyclists and 15% of infrequent cyclists cycle on mountain bicycle trails<sup>245</sup>

## • Open Space Plan

The Open Space Plan identifies city walkways<sup>246</sup> for acquisition or designation including:

- Catherine Hill Bay to Glenrock Lagoon
- Lake Macquarie Walk

The plan also identifies the creation of:

- Walkways: develop and extend short medium and long distance path systems with particular emphasis on establishing additional links: Lakeside path, The Great North Walk, and the Coastal Walk (p. vii)
- A proposed city walkway from Catherine Hill Bay to Glenrock Lagoon (p. 31)
- Integrate walks into the proposed Coastal Walk and the proposed Coastal Path (p. 41).

## • Recreation Plan

The Recreation Plan identifies certain actions under 4.10, 4.22, 4.23, 4.26, strategies identified include:

- Develop new and improve existing paths in bushland reserves<sup>247</sup>
- Develop a coastal trail<sup>248</sup>

<sup>237</sup> ASC (2010) *Participation in Exercise, Recreation and Sport Survey 2010 Annual Report*.

<sup>238</sup> NSW Government (2004) *Planning Guidelines for Walking and Cycling*, p. 32.

<sup>239</sup> *Ibid.*, p. 52.

<sup>240</sup> Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health, p. 10.

<sup>241</sup> *Ibid.*, p. 324.

<sup>242</sup> LMCC (2011) *LMCC Cycling Strategy October 2011*, p. 17.

<sup>243</sup> *Ibid.*, p. 9.

<sup>244</sup> *Ibid.*, p. 10.

<sup>245</sup> *Ibid.*

<sup>246</sup> LMCC (1996) *Lake Macquarie Open Space Plan: Volume 1*, Figure 1.7.

<sup>247</sup> LMCC (1998) *LMCC Recreation Plan: Volume 1*, p. 33.

<sup>248</sup> *Ibid.*, p. 44



- Continue the proposed coastal trail along Nine Mile Beach with branching trails through Belmont Lagoon, the lake foreshore, Fernleigh Track, Jewells Swamp and northward via the Redhead coast to Awabakal Nature Reserve<sup>249</sup>
- Provide additional cycling/walking track links to the east from central Charlestown to and along the proposed Fernleigh Track, Glenrock SRA and to the coast<sup>250</sup>

### • Council Policy

Council resolved to:

- Endorse the future development of trails within the city and within the region (resolution 13 December 2004)
- Support the principle of the establishment of a coastal walkway/cycleway system in the corridor broadly indicated on Attachment A to this report subject to further research and investigation.  
Attachment A details the route extending from the Glenrock SRA (now the SCA) in the north to CHB in the south. The report, adopted in December 1993, describes this as a council policy.

### • Growth Centres Development Code

The code provides the basis for the planning and design of precincts in the North West and South West Growth Centres in Sydney, which provides around 181,000 new homes. It identifies that:

For each precinct an open space system should be established as an integrated network, incorporating parks, squares, plazas, riparian corridors, playing fields, and recreational trails<sup>251</sup>

### • NSW Bikeplan

*NSW Bikeplan* aims to encourage more and safer cycling specifically:

- promote cycle access to and through designated NSW National Parks and Crown reserves, including the use of sustainable mountain bike tracks<sup>252</sup>

### • Regional Recreation Trails

The *Sydney Metropolitan – Regional Recreation Trails Framework* has identified regional trail priorities including:

- Coastal trails (incl. NSW Coastline Cycleway)<sup>253</sup>
- Line to Lake Macquarie Foreshores<sup>254</sup>
- The Great North Walk (investigation of bike route)<sup>255</sup>

## 17.3 Comparative

The LDCG identifies bushland tracks as key community infrastructure, but have not identified a population threshold. However, in the matters for consideration the LDCG indicate that bushland tracks should form part of an established recreational network.<sup>256</sup> The Charlestown CC has approximately 35,424 metres of tracks and trails managed by LMCC. The local tracks & trails standard of provision is 0.59 metres of tracks/trails per person.

Table 49. Charlestown CC – Tracks & Trails – Comparative

COMPARATIVE	POPULATION	TRACKS & TRAILS IN METRES	METRES PER PERSON OF TRACKS & TRAILS
Charlestown CC	59,520	35,424	0.59
LMCC LGA	200,849		
Guidelines*			Where part of an established recreational network
LOCAL TRACKS & TRAIL STANDARD			0.59

## 17.4 Best Practice

The NSW government's, *Planning Guidelines for Walking and Cycling*, strongly supports the provision of walking and cycling facilities. Key elements of the guidelines include:

<sup>249</sup> *Ibid.*, p. 45.

<sup>250</sup> *Ibid.*, p. 49.

<sup>251</sup> Growth Centres Commission (2006) *Growth Centres Development Code*, p. B-71.

<sup>252</sup> *Ibid.*, p. 23.

<sup>253</sup> Department of Infrastructure, Planning and Natural Resources (2005) *Sydney Metropolitan – Regional Recreation Trails Framework Final Report*, p. 24.

<sup>254</sup> *Ibid.*

<sup>255</sup> *Ibid.*, p. 25.

<sup>256</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*, p. 92.



- Walking and cycling access is provided to and along natural areas such as ridges and creeklines<sup>257</sup>

There is an Australian Standard classification system<sup>258</sup> of six different classes of walking tracks covering intended uses, degree of difficulty, skill level of intended users, facilities, appropriate signage, and infrastructure design<sup>259</sup>.

The South Australian Government has prepared a guideline for the planning, design, construction, and maintenance of recreational trails in South Australia<sup>260</sup>, which would also be applicable for NSW.

Where possible, facilities should cater for a dual or multiple uses. Providing walking only tracks provides for just walkers whereas recreational trails provides for walkers and bicycles.

## 17.5 Analysis

Based on the local standard of 0.58 metres of tracks and trails per person, an additional 7,620 metres of tracks and trails are recommended, all of which are attributable to the new population. This is in recognition of the increasing aging population, the popularity of walking and the modest open space requirement.

## 17.6 Recommendations

The recommendations below form part of an established recreational network and are included in the *LMCC Cycling Strategy* and the Redhead Beach Masterplan.

A major coastal trail is proposed providing linkages to Charlestown and the Fernleigh Track; and linkages to the lake foreshore route. The upgrading of an east/west route will provide better access to Charlestown and connect the Fernleigh Track to the lake foreshore route. The major routes include:

- Coastal Trail – the progressive establishment this coastal trail provides greater recreational opportunities
- Coast to the Lake – this east/west route provides a linkage from the Fernleigh Track to the lake foreshore
- Fernleigh Track – to the Charlestown City Centre along the Yuelarbah Track
- Lake Foreshore – provide linkages to the lake foreshore. Consider a recreational trail through the foreshore at Green Point Foreshore Reserve. The upgrading of the northern foreshore track would provide a missing link in the provision of the Lake Foreshore route.

The recommendations for tracks and trails in the Charlestown CC are:

Table 50. Charlestown CC – Tracks and Trails – Proposed Locations

SUBURB	LOCATION	DESCRIPTION	LENGTH IN METRES	PRIORITY
CHARLESTOWN <sup>261</sup>	Fernleigh Track to Milson St, Charlestown	Yuelarbah Track/Great North Walk – upgrade track for bicycles	2,240	High
CHARLESTOWN <sup>262</sup>	Charlestown to West Charlestown by-pass underpass	Yuelarbah Track/Great North Walk – upgrade track for bicycles	1,470	Medium
TINGIRA HEIGHTS /ELEEBANA <sup>263</sup>	Violet Town Rd to lake	Wyndham Fire Trail - upgrade track for bicycles	1,900	Low
REDHEAD <sup>264</sup>	Redhead Beach First (Freshwater) Creek	Coastal Trail - extend boardwalk to car park at beach, bridge over creek	140	Medium
REDHEAD <sup>265</sup>	Cain St – Second Creek through Belmont Wetlands State Park	Coastal Trail - upgrade track for bicycles, bridge over Third Creek	1,870	Medium
<b>TOTAL TRACKS AND TRAILS</b>			<b>7,620</b>	

<sup>257</sup> *Ibid.*, p. 23.

<sup>258</sup> Standards Australia (2001) *AS2156.1 – Walking Tracks Part 1: Classification and Signage*.

<sup>259</sup> Standards Australia (2001) *AS2156.2 – Walking Tracks Part 2: Infrastructure Design*

<sup>260</sup> Trails SA (N.D.) *Sustainable Recreation Trails: Guidelines for the Planning, Design, Construction and Maintenance of Recreational Trails in South Australia*.

<sup>261</sup> LMCC (2012) *LMCC Cycling Strategy 2021*, Figure 6 - route identified as a recreational trail and named Yuelarbah Track

<sup>262</sup> *Ibid.*, Figure 6 - route identified as a recreational trail

<sup>263</sup> *Ibid.*, Figure 6 – route identified as a recreational trail

<sup>264</sup> *Ibid.*, Figure 8 – route identified as a recreational trail

<sup>265</sup> *Ibid.*, Figure 8 – route identified as a recreational trail

## 18. Mountain Bike Areas

Mountain bike areas are usually bicycle only areas located in natural areas. Mountain biking can include a number of broad styles: cross-country, all-mountain, downhill, free riding, dirt jumping and trials.<sup>266</sup> Cross-country and all-mountain riding are the most popular styles of mountain biking. There may be short wide tracks for the beginner, longer single tracks for endurance, one-direction technically challenging tracks, or tracks designed for high-speed. Bike parks, also known as bike skills parks, and are purpose built playgrounds for bikes. They include natural and constructed features to build skills through progressive challenges. They cater for the whole family including tots/beginner tracks. Where bicycles and walkers share the track, these tracks are referred to as 'recreational trails'.

### 18.1 Existing Provision

Cycling is authorised in the northern zone of the Glenrock State Conservation Area (SCA). This area has designated bicycle only tracks indicating the level of difficulty and the direction of cycling. In addition, there are a number of areas within the Charlestown CC that are used by mountain bikes located in Hillsborough, Dudley, Whitebridge, and Gateshead. LMCC Cycling Strategy identifies these as informal mountain bike areas.

Other authorised mountain bike areas within the City include Awaba and Killingworth. The facility at Awaba includes a downhill racing track and a cross-country track and the facility at Killingworth is a cross-country racing track.

### 18.2 Identified

The following survey, plans and strategy demonstrate the identified need.

- **ERASS**

The number of people who participated in recreational cycling at least three times per week increased by 35% from 2001 to 2009 in NSW and by 43% from 2001 to 2008 in Sydney.<sup>267</sup>

- **NSW Bikeplan**

*NSW Bikeplan* aims to encourage more and safer cycling specifically:

Promote cycle access to and through designated NSW National Parks and Crown reserves, including the use of sustainable mountain bike tracks<sup>268</sup>

- **Sustainable Mountain Bike Strategy**

Mountain bike riding in Australia is becoming increasingly popular. In 2008, NSW residents said they had participated in cycling and mountain biking on an unsealed road or track a total of 26 million times in the preceding year. In Greater Sydney, 15% of residents had participated in the past year, while in the Southern Tablelands and South Coast 20% of residents had participated. There is evidence of unmet demand for opportunities for mountain bike riding on an unsealed road or track with between 9% and 30% of residents saying they were interested in participating more frequently but identifying a lack of local opportunities.<sup>269</sup> The *NPWS Sustainable Mountain Bike Strategy* (2011) has identified that the provision of a small number of high quality mountain bike experiences is a key strategy for reducing unauthorised mountain biking and track construction.

- **Recreation Plan**

The Recreation Plan identifies certain actions under 4.26, and one strategy identified is:

Assess informal reserves capable of supporting informal local mountain bike and BMX activities<sup>270</sup>

<sup>266</sup> NSW Government Department of Environment, Climate Change & Water (2010) *Discussion Paper: National Parks and Wildlife Service Cycling Policy Review and Sustainable Mountain Biking Strategy*, p. 7.

<sup>267</sup> Australian Sports Commission (2009) *Exercise, Recreation and Sport Survey, 2009*.

<sup>268</sup> NSW Government (2010) *NSW Bikeplan*, p. 23.

<sup>269</sup> NSW Department of Environment, Climate Change, and Water (2009) *Nature-based outdoor recreation demand and preferences quantitative research findings*, prepared by Ipsos-Eureka Social Research Institute.

<sup>270</sup> LMCC (1998) *LM Recreation Plan: Volume 1*, p. 49.

## • Cycling Strategy

The *LMCC Cycling Strategy 2021* identifies the following informal mountain bike areas and one planned mountain bike facility in the City:

- Holmesville, west of the Sydney/Newcastle freeway
- Highfields, Highfields Pde, (Lot 7343 DP 1159321) – crown land east of Fernleigh Track and south of the LGA boundary, tracks lead into the Glenrock SCA
- Hillsborough, (Lot 7393 DP 1164604, Lot 100 DP 1180001) – crown land west of the Charlestown Golf Course
- Dudley/Whitebridge, Ocean St (Lot 7389 & 7390 DP 1164264) – crown land north of Oakdale Rd, identified as a future development area 621 in Figure 4.
- Munibung Hill – planned mountain bike facility

In addition, the following are also used as informal mountain bike areas:

- Green Point Foreshore Reserve,
- Bushland between Catherine Hill Bay, Caves Beach and Cams Wharf.

## 18.3 Best Practice

Certain recreational uses are not compatible and require separation. For mountain biking it maybe the width of the track (i.e. a single track may only be 0.45 to 0.6 m), the uneven or rocky terrain, the tight bends of trails, or the speed and/or the high volume of users that require some trails to be designated as cyclist only trails. Trails SA has produced a guide *South Australian Trails: Your Guide to Walking, Cycling, Horse Riding, Diving, Canoeing* that identifies and specifies the use of each trail. Certain trails provide for multiple uses whilst other trails have sole use. For example Bike Direct Trails, the Mawson Trail, Toll Gate to Crafers and the Southern Veloway Darlington to Willunga, are cycle only trails.<sup>271</sup>

Mountain biking is a popular recreational activity that is undertaken all year round. The dual use model for sports fields providing summer and winter use does not apply to mountain biking.

## 18.4 Analysis

There are three authorised mountain bike areas in the City and many more areas, which are used informally. The high use of the Glenrock mountain bike area indicates that this recreation activity is growing in popularity. Since the informal mountain bike areas may be subject to residential development in the future, the authorisation of several mountain bike areas and security of land tenure is required.

## 18.5 Recommendations

Recommendations to be considered are:

**Belmont/Valentine** - The Green Point Foreshore Reserve is community land with secure tenure and currently has numerous tracks and trails. Currently bicycles are permitted only on the shared pathways in the reserve or the approved fire trail along the boundary of the reserve. In the short term, additional tracks could be authorised for bicycle use within this reserve and identified as 'recreational trails'.

Current standard of provision is one mountain bike area per ward, with a long-term provision of one mountain bike area per catchment.

<sup>271</sup> Trails SA (ND) *South Australian Trails: Your Guide to Walking, Cycling, Horse Riding, Diving, Canoeing*, under 'Trails in Region: An Overview Chart'. [http://www.southaustraliantrails.com/pdf/Trail%20Guide\\_Web%20PDF%205.pdf](http://www.southaustraliantrails.com/pdf/Trail%20Guide_Web%20PDF%205.pdf)

## 19. Surf Life Saving Facilities

LM is fortunate to have an extensive lake and beautiful beaches. Residents within the Charlestown CC are likely to access aquatic facilities within and outside the catchment. Access to Lake Macquarie is available at Eleebana, Croudace Bay and Valentine and good surfing beaches located at Redhead and Dudley.

### 19.1 Existing Provision

LMCC has four surf lifesaving facilities (SLSF) providing patrolled beaches and beach facilities at Blacksmiths, Caves Beach, Catherine Hill Bay, and Redhead. Within the Charlestown CC, there is one council beach at Redhead:

Table 51. Charlestown CC – Surf Life Saving Facility - Existing

SUBURB	FACILITY NAME	NO. OF SLSF
REDHEAD	Redhead Beach Surf Life Saving and beach facility	1
<b>TOTAL SLS FACILITIES</b>		<b>1</b>

Another beach is located within the catchment but managed by NPWS. Dudley Beach is located five kilometres east of Charlestown within the Glenrock State Conservation Area. It is a secluded beach with its access off Burwood Road via Dudley Road. This beach is not a patrolled beach and has no surf lifesaving facilities.

### 19.2 Identified

The following survey demonstrates the identified need.

- **Liveable Communities Assessment**

Comments from a survey of residents in Charlestown in 2010 are listed in **Appendix 3** and include:

*Don't need to go into Newcastle CBD – Charlestown has beaches, recreation, lake & good facilities*<sup>272</sup>

### 19.3 Comparative

The LDCG specifies an indicative population threshold of one SLSF for each patrolled beach. A SLSF exists at Redhead Beach. However, the additional population will place increased pressure on the existing SLSF and beach facilities. Additional SLS tower, public toilet, and car parking will be required.

Table 52. Charlestown CC – Surf Life Saving Facility - Comparative

COMPARATIVE	POPULATION	NO. OF SURF LIFE SAVING FACILITIES	PERSONS PER FACILITY
Charlestown CC	59,520	1	59,520
LMCC LGA	200,849	4	50,212
Guidelines <sup>273</sup>			A surf lifesaving facility for each patrolled beach
<b>RECOMMENDED STANDARD</b>			<b>60,000</b>

The recommended standard of provision of one SLSF for every 60,000 persons is the same as the actual provision within the catchment and considered reasonable for the future provision.

### 19.4 Analysis

Based on the recommended standard of one SLSF for every 60,000 persons, an upgrade of the existing facility is recommended. The cost of the upgrade is attributable to the new population.

<sup>272</sup> Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health, p. 278.

<sup>273</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*, Indicative population threshold, p. 96.

## 19.5 Recommendations

The recommendations for the Charlestown CC are:

Table 53. Charlestown CC – Surf Life Saving Facility – Proposed Location

SUBURB	LOCATION	DESCRIPTION	NO. OF SLSF	PRIORITY
REDHEAD	Redhead Beach SLSF	Upgrade SLSF (lifeguard tower)	0.2	High
REDHEAD	Redhead Beach SLSF	Additional car parking		Low
<b>TOTAL SLS FACILITIES</b>			<b>0.2</b>	

**Redhead Beach** - Upgrade the existing surf lifesaving and user facilities at Redhead Beach to cater for the future demand generated from the population growth. Facilities include upgrading of the beach amenities (currently underway), constructing a new lifeguard tower and providing additional car parking in accordance with the Redhead Beach Master Plan.



## 20. Boat Ramps and Jetties

LMCC has a large coastal salt-water lake providing a range of boating opportunities. Public boating facilities are important recreational infrastructure provided by LMCC. Boat ramps and jetties are used to gain access to Lake Macquarie for a range of aquatic activities, such as fishing, sailing, canoeing, water skiing, jet skiing and to gain access to vessels moored in Lake Macquarie. Aquatic activities on Lake Macquarie form an integral part of the City's lifestyle.

### 20.1 Existing Provision

Council has been progressively upgrading its boat ramps and jetties over the past 10 years with priorities for expenditure of funds determined by council in consultation with the Aquatic Services Committee.

LMCC has three (3) boat ramps in the catchment and one public boat ramp just outside the catchment at Creek Reserve Road, Speers Point and one jetty in the catchment at the Valentine Bowling Club.

Table 54. Charlestown CC – Boat Ramp - Existing

SUBURB	FACILITY NAME	NO. OF BOAT RAMPS
Croudace Bay	Thomas H Halton Park	1
Eleebana	Eleebana Lions Park	1
Valentine	Bennett Park	1
<b>TOTAL BOAT RAMPS</b>		<b>3</b>

Table 55. Charlestown CC – Jetty - Existing

SUBURB	FACILITY NAME	NO. OF PUBLIC JETTIES
ELEEBANA	Valentine Public Jetty (off Valentine Cres)	1
<b>TOTAL JETTIES</b>		<b>1</b>

### 20.2 Identified

Generated from an expressed community need, Council formed an Aquatic Services Committee, which includes community representatives from the boat owners association, various aquatic organisations, and officers from NSW DPI (Fisheries), NSW Roads & Maritime, and Department of Trade & Industry, crown lands division. This committee meets bimonthly to discuss priorities and future projects.

The following survey, plan, and Council resolution demonstrate the identified need.

- **Liveable Communities Assessment**

**Appendix 3** lists comments from a survey of residents in Charlestown in 2010 including:

*Boat ramps need to be updated in Lake Macquarie*<sup>274</sup>

- **Community Plan**

The plan provides direction such as:

Provide upgraded and new public jetties and wharves in line with Council's Jetty Rehabilitation Program and Jetty Construction Program<sup>275</sup>

- **Recreation Plan**

The Recreation Plan identifies actions in 4.19 and strategies include:

- Develop a program of works designed to achieve a hierarchy of jetty and ramp facilities through redevelopment of appropriate existing venues and the rationalisation of others<sup>276</sup>
- Regional boat ramps at no more than 10 sites, each with adequate car and trailer parking, toilets, lighting, picnic facilities and eventually, associated jetties<sup>277</sup>

<sup>274</sup> Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health, p. 329.

<sup>275</sup> LMCC (2008) *Lake Macquarie Community Plan 2008-2018*, p. 46.

<sup>276</sup> LMCC (1998) *LMCC Recreation Plan: Volume 1*, p. 40.

<sup>277</sup> *Ibid.*

- Regional and catchment venues should be provided with toilets, jetties where possible, lights, trailer parking and fish cleaning tables<sup>278</sup>

### • Council Resolution

Council's Aquatic Services Committee developed a Boat Ramp Rehabilitation Program and a Jetty Rehabilitation Program with input from its various user groups. Council adopted a Boat Ramp Rehabilitation Program in September 2010 and a Jetty Rehabilitation Program in March 1997.

## 20.3 Comparative

The LDCG does not specify an indicative population threshold for boat ramps or jetties; however, the guideline does identify boat ramps and public wharves as potential additional community infrastructure. The city standard of one boat ramp for every 6,500 persons and one jetty for every 6,000 persons is true however; these facilities by their very nature require access to water. Considering this catchment does not have a large lake foreshore, the opportunity to provide additional boat ramps is limited and the recommended standard increased accordingly.

Table 56. Charlestown CC – Boat Ramp - Comparative

COMPARATIVE	POPULATION	NO. OF BOAT RAMPS	PERSONS PER FACILITY
Charlestown CC	59,520	3	19,840
LMCC LGA	200,849	31	6,479
Guidelines (DoP 2009)			None specified
<b>RECOMMENDED STANDARD</b>			<b>20,000</b>

Table 57. Charlestown CC - Jetty - Comparative

COMPARATIVE	POPULATION	NO. OF JETTIES	PERSONS PER FACILITY
Charlestown CC	59,520	1	59,520
LMCC LGA	200,849	34	5,907
Guidelines (DoP 2009)			None specified
<b>RECOMMENDED STANDARD</b>			<b>20,000</b>

The recommended standard of provision of one boat ramp for every 20,000 persons and one jetty for every 20,000 persons is considered reasonable and achievable for the future provision.

## 20.4 Analysis

Boat-launching ramps and jetties are provided if suitable foreshore land with access to reasonably deep water is available to provide for boats. The catchment has three suburbs with lake frontage and each has a boat ramp. Considering there is no opportunity to provide additional boat ramps, the existing boat ramps are to be upgraded with additional user facilities, such as fish cleaning tables and car parking to cater for the increased capacity.

This catchment does not have any suitable foreshore area with water depth to provide all the additional jetties. One new jetty is proposed at the Croudace Bay boat ramp, and the expansion of the existing jetty at Valentine is proposed. The proportional cost to provide these facilities will be attributable to the new development.

<sup>278</sup> Ibid.

## 20.5 Recommendations

The following boat ramps are recommended in accordance with Council's Boat Ramp Rehabilitation Program and jetties in accordance with Council's Jetty Rehabilitation/Construction Program.

Table 58. Charlestown CC – Boat Ramp – Proposed Locations

SUBURB	LOCATION	DESCRIPTION	NO. OF BOAT RAMPS	PRIORITY
VALENTINE	Bennett Park	Upgrade existing boat ramp with additional user facilities	1	Medium
<b>TOTAL BOAT RAMPS</b>			<b>1</b>	

Table 59. Charlestown CC – Jetty – Proposed Locations

SUBURB	LOCATION	DESCRIPTION	NO. OF JETTIES	PRIORITY
VALENTINE	Valentine Public Jetty	Expand existing jetty	1	High
<b>TOTAL JETTIES</b>			<b>1</b>	

## 21. Swimming Pools

Swimming is an activity that is part of the Australian culture. This is partly attributable to our many beautiful beaches and waterways, our climate, and the continued successes of Australian swimmers. Swimming is part of our school curriculum and learn to swim classes are recommended for every Australian child.

Public swimming pools are part of Council's community service obligation. They continue to operate even though these services operate at a cost to Council. Many of the pools constructed are now ageing and have not kept pace with current demands. LMCC is planning to upgrade its swimming centres to provide a range of services and facilities to increase their year round use.

### 21.1 Existing Provision

LMCC currently has six (6) swimming centres across the LGA. The Charlestown Swim Centre is managed by Council and the Valentine Hydrotherapy Pools is located on Council owned land but leased to a community-based organisation. In the Charlestown CC, swimming pools provided include: Charlestown Swimming Centre located in Dickinson Street, comprises a 50m outdoor solar heated pool (summer only), a 25m outdoor heated pool (all year), a learn-to-swim pool and a toddler pool.

Valentine Hydrotherapy Pools, is a facility located on land owned by Council, within Thomas H Halton Park off St Johns Road. The Valentine Hydrotherapy Pools Inc. lease the land providing a 25 m indoor public pool; 15 m heated indoor pool, an indoor hydrotherapy pool, and a covered toddler pool.

The following table details the number of centres and pools within the catchment. Babies wading pools and spa pools are not included.

Table 60. Charlestown CC – Swimming Pool - Existing

SUBURB	FACILITY NAME	NO. OF SWIM CENTRES	NO. OF POOLS
CHARLESTOWN	Charlestown Swim Centre	1	2
VALENTINE	Valentine Hydrotherapy Pools	1	3
<b>TOTAL SWIM CENTRES/POOLS</b>		<b>2</b>	<b>5</b>

Other private swimming pools located in the Charlestown CC have not been included. They include:

- Jamie's Swim Centre located at 141 Floraville Road, Floraville - one indoor heated pool, and
- Glendon Special School – provide one hydrotherapy pool for students and for disability groups.

These facilities, together with the inclusion of several other private pools, provide a good distribution of swimming throughout the catchment.

### 21.2 Identified

Lake Macquarie has funded the preparation of a number of reports/studies that examine the development of its swimming centres and indoor sports centres. Refer to the references in **Appendix 14**.

The following surveys, plans, and model, demonstrates the identified need.

#### • ERASS

According to the ERASS 2010 annual report, swimming has a 13.6% total participation rate. Information was collected from persons aged 15 years and over who participated in physical activity for exercise, recreation and sport over a 12-month period prior to interview in 2010.<sup>279</sup>

#### • Liveable Communities Assessment

Comments from a survey of residents in Charlestown in 2010 are listed in **Appendix 3** and include:

*Like swimming pool to be covered in to be used all year round*<sup>280</sup>

<sup>279</sup> Australian Sports Commission (2010) *Participation in Exercise, Recreation and Sport Survey 2010 Annual Report*.

<sup>280</sup> Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health, p. 277.

### • Pool Service Delivery Model

The *LMCC Pool Service Delivery Model* (PSDM) was developed to provide a strategic direction to the future development of Council's community aquatic facilities providing for the needs for the next 10-20 years. It recommends the upgrading of the Charlestown Swim Centre into a leisure centre to reflect the market its future use and programs by providing:

- Outdoor lagoons and renovate the 50 m pool,
- 25m (10 lane) pool hall/enclosure
- Health and fitness centre, 1,000 m<sup>2</sup>, with amenities and links to new indoor pool
- Upgrade amenities and administration centre
- Car parking (new and refurbished)
- Linkages to the surrounding parklands and pathways to maximise community use

The PSDM has identified the current swim centres will serve an immediate catchment of five kilometres. It was adopted by Council in June 2009 and has funded the position of Special Projects Officer to develop the recommendations of the PSDM.

### • Recreation Plan

The Recreation Plan identifies certain actions under 4.26, one strategy identified includes:

- Proceed with the redevelopment of the Charlestown Swimming Pool and consolidate the overall site through site acquisitions, amalgamation and road closures<sup>281</sup>

### • Community Plan

The plan identifies directions and progress indicators such as:

- Implement recommendations of Pool Service Delivery Model (PSDM) for individual centres<sup>282</sup>

## 21.3 Comparative

The LDCG does specify an indicative population threshold of one swimming pool for every 17,500 persons. A swimming pool is considered different to a swimming centre as a swimming centre may comprise several pools.

Table 61. Charlestown CC – Swimming Pool - Comparative

COMPARATIVE	POPULATION	NO. OF SWIMMING POOLS	PERSONS PER FACILITY
Charlestown CC	59,520	5	11,904
LMCC LGA	200,849	15	12,553
Guidelines <sup>283</sup>			17,500
<b>RECOMMENDED STANDARD</b>			<b>12,000</b>

The recommended standard of one swimming pool for every 12,000 persons is similar to the actual provision within the catchment and within the city and considered reasonable for the future provision.

## 21.4 Best Practice

The design to upgrade the Charlestown Swim Centre into a leisure centre will consider the *Best Practice Guidelines for Water Management in Aquatic Leisure Centres* prepared by Sydney Water in 2011 or other guidelines and examples of other energy efficient models. The design will also provide for sustainable operational practices and be advised by peak bodies such as the Aquatic Recreation Institute and the Australian Leisure Facilities Association.

## 21.5 Analysis

Based on the recommended standard of one swimming pool for every 12,000 persons, one new swimming pool is required for the additional population.

<sup>281</sup> LMCC (1998) *LMCC Recreation Plan: Volume 1*, p. 49.

<sup>282</sup> LMCC (2008) *LM Community Plan 2008-2018*, p. 44.

<sup>283</sup> NSW DoP (2001) *Draft Local Development Contributions Guidelines*, Indicative population threshold for a swimming pool is 17,500 persons, whereas the threshold for a multi-purpose leisure/aquatic centre is 60,000 + people, p. 94.



## 21.6 Recommendations

The recommendations for the Charlestown CC are:

Council has one swimming centre, which is centrally located close to proposed high residential density of Charlestown. This increased population will place increased demands on the existing centre. LMCC PSDM recommends the expansion of this centre into a leisure centre providing additional facilities such as an indoor dry space, covering the pool providing year round use which will increase its capacity and 'promote 'active living' opportunities for the residents within the new high density Charlestown Residential hub'<sup>284</sup>

Table 62. Charlestown CC – Swimming Pool – Proposed Location

SUBURB	LOCATION	DESCRIPTION	NO. OF SWIMMING POOLS	PRIORITY
CHARLESTOWN	Charlestown Swim Centre	Redevelopment of existing centre including covering pool	1	Medium
<b>TOTAL SWIMMING POOLS</b>			<b>1</b>	

New development will contribute proportionally to the upgrade of the Charlestown Swim Centre.



Photos of Charlestown Swim Centre

<sup>284</sup> LMCC (2008) *LMCC Pool Service Delivery Model*, p. 34, in 2008, the estimated cost of the proposed works was valued at \$7.4M.

## 22. Indoor Sport and Recreation Centres

Indoor sport and recreation centres are centres that provide indoor multi-purpose facilities that can be used for a range of sports including basketball, netball, tennis, cricket, soccer, futsal, volleyball, touch football and hockey. The indoor space can also provide for gymnastics, boxing or indoor bowls depending on the need.

### 22.1 Existing Provision

The Charlestown CC is currently serviced by two indoor recreation centres, the Police Citizens Youth Club (PCYC) at Windale and a private indoor centre at Gateshead (neither of which are managed by Council). The PCYC is located in Lake Street, Windale on LMCC owned land but managed by PCYC NSW a not-for-profit charitable organisation. The Gateshead Indoor Sports World operates two indoor courts from a commercially leased premises at Oakdale Road, Gateshead.

The PCYC has one indoor multi-purpose court used for futsal, basketball, netball, volleyball, and badminton; a pool table; and a gymnasium. Current program activities include seniors aerobics, archery, pipe band, Lakers Basketball, boxing, boxing for fitness, futsal, recreational gymnastics (boys and girls), kindi gym, housie, samari judo academy, kickboxing and weights gym.

Table 63. Charlestown CC – Indoor Sports Centre – Existing

SUBURB	FACILITY NAME	NO. OF INDOOR CENTRES	NO. OF INDOOR COURTS
WINDALE	Lake Macquarie PCYC	1	1
<b>TOTAL INDOOR CENTRES / COURTS</b>		<b>1</b>	<b>1</b>

A private indoor centre providing indoor basketball courts was located at Oakdale Rd, Gateshead, however, this centre has since changed its use.

In addition, there are a number of schools that have indoor multi-purpose halls, which can be used for recreation purposes. These include:

- Hunter Sports High School at Gateshead
- Whitebridge High
- Belmont High – has a trampoline centre

### 22.2 Identified

The following survey, plan, and model, demonstrates the identified need.

#### • ERASS

According to the ERASS 2010 annual report, basketball is ranked 6<sup>th</sup> in relation to organised physical activities, and has a total participation rate of 3.5%.<sup>285</sup>

#### • Liveable Communities Assessment

Comments from a survey of residents in Charlestown in 2010 are listed in **Appendix 3** and include:

*Like to see more parkland and recreational centres and more access for wheelchairs*<sup>286</sup>

#### • Pool Service Delivery Model

A number of studies have identified the potential to further development the existing PCYC at Windale.

Onsite investigations and discussions with the management of the Windale PCYC served to highlight the potential of council Windale Site situated adjacent to the PCYC and across the main road from the Hunter Sports High School to create a major indoor and field sports precinct for Lake Macquarie<sup>287</sup>

<sup>285</sup> ASC (2010) *Participation in Exercise, Recreation and Sport Survey 2010 Annual Report*, p. 34 and 62.

<sup>286</sup> Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health, p. 278.

<sup>287</sup> LMCC (2008) *LMCC Pool Service Delivery Model*, p. 35.

## • Recreation Plan

The Recreation Plan identifies specific recommendations and actions including:

- Undertake the development of a Windale/Gateshead Sports Complex with 3 basketball courts at the PCYC<sup>288</sup>
- Assist the PCYC in upgrading to a multi-purpose indoor venue<sup>289</sup>

## 22.3 Comparative

The LDCG specifies an indicative population threshold of one indoor sports courts and recreation centre for every 100,000+ persons. This standard is low when compared to the existing city provision. The guideline also identifies an indicative population threshold of one (1) basketball court for every 1,800 persons.

Table 64. Charlestown CC – Indoor Sports Centre - Comparative

COMPARATIVE	POPULATION	NO. OF INDOOR CENTRES	PERSONS PER FACILITY
Charlestown CC	59,520	1	59,520
LMCC LGA	200,849	3	66,950
Guidelines <sup>290</sup>			100,000 +
<b>RECOMMENDED STANDARD</b>			<b>60,000</b>

The recommended standard of provision of one indoor sports centre for every 100,000 persons is the same as the guidelines and considered reasonable for the future provision.

## 22.4 Analysis

The level of provision in the Charlestown CC is considered reasonable, considering the level of provision throughout the LGA, including the privately managed facilities. In LM LGA, the private sector and schools provide indoor court space.

## 22.5 Recommendations

Considering the existing level of provision, there are no recommendations to provide any additional indoor sports centres within this catchment.

<sup>288</sup> LMCC (1998) *LM Recreation Plan: Volume 1*, p. 36.

<sup>289</sup> *Ibid.*, p. 48.

<sup>290</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*, Indicative population threshold, p. 93.

## 23. Other Recreation Facilities

In addition to the recreation facilities identified in the plan, a number of other recreation facilities and private recreation facilities are available in the catchment. They include private recreation facilities such as golf courses and bowling greens, many of which are located on crown land and other community-based facilities are located on public land, including the following. Golf and lawn bowls are sports enjoyed by all ages but particularly popular for older adults.

### 23.1 Existing Provision

**Golf Courses** - There are no golf courses located within the Charlestown CC, however the Belmont Golf Club is located close to the southern catchment boundary, and the Charlestown Golf Club is located close to the western catchment boundary.

- Belmont Golf Club, Pacific Hwy, Marks Point -18 hole golf course – privately owned by Belmont Golf Club Limited – approximately 56.8 ha – mostly zoned 6(2) Private Recreation and some zoned Residential 2(2).
- Charlestown Golf Club, 10 Barker Ave, Hillsborough - 18 hole golf course – crown land reserved for public recreation R. 88601 – approximately 57.6 ha – most of the land is zoned 6(2) Private Recreation.

A private golf driving range is also located just outside the catchment boundary:

- Cardiff Golf Driving Range, Macquarie Road, Cardiff – approximately 5.3 ha

**Bowling Clubs** – The following bowling clubs are located throughout the Charlestown CC:

- Charlestown Bowling Club – 3 bowling greens
- Kahibah Bowling Club – 2 bowling greens
- Redhead Bowling Club– 2 bowling greens
- Valentine Bowling Club – 2 bowling greens
- Whitebridge – Burwood Colliery Bowling Club – 2 bowling greens

### Caravan Parks and Camping Areas

There are no Council caravan parks or camping areas within the Charlestown CC.

**Other Recreation Facilities** - There are other recreation and leisure related facilities located on either community land or crown land include:

- Croudace Bay Sailing Club – 5A Bareki Road, Croudace Bay – LMCC land
- Girl Guides/ Scouts – 14 & 16 Mulbinga St, Charlestown – Crown Land
- Belmont North Girl Guides – Floraville Road, Belmont North – LMCC Land
- Girl Guides – 1 Corona Street, Windale – LMCC Land
- Greyhound Trial Track – 150 Cowlshaw St, Redhead – Crown Land, 9.5 ha
- Highfields/Azzuri Sports Club – 16 George Street, Highfields – LMCC land – 2 old bowling greens now used for bocce
- Valentine Scouts – 7D St Johns Drive, Croudace Bay – LMCC Land
- Belmont North Men's Shed, 359 Pacific Highway, Belmont North (on boundary of catchment)
- Redhead Men's Shed, Redhead Colliery Precinct, 1 Geraldton Drive, Redhead
- Windale Men's Shed, beside the PCYC, Lake Street Windale

### 23.2 Identified

The following survey demonstrates the identified need for these facilities.

#### • ERASS

According to the ERASS 2010 annual report, golf has a 7.6% total participation rate<sup>291</sup> and golf is ranked 9th in the ten most popular sports and physical activities for adults (survey undertaken of persons aged

<sup>291</sup> ASC (2010) *Participation in Exercise, Recreation and Sport Survey 2010 Annual Report*

15 years and over) in NSW in 2007.<sup>292</sup> Whereas lawn bowls has a 2.3% total participation rate and this participation rate has increased by 20% over the period 2001 to 2010.<sup>293</sup>

## 23.3 Comparative

**Golf** - The LDCG identifies a golf course as key community infrastructure and specifies an indicative population threshold for golf courses but not for golf driving ranges. Even though there are no golf courses within the Charlestown CC, there are two private golf courses located just outside the catchment boundary. These two golf courses adequately provide for the population within the Charlestown CC. The recommended standard of provision of one golf course for every 40,000 persons is close to the actual citywide provision and considered reasonable for the future provision.

Table 65. Charlestown CC – Golf Course - Comparative

COMPARATIVE	POPULATION	NO. OF GOLF COURSES	PERSONS PER FACILITY
Charlestown CC	59,520	0	59,520
LMCC LGA	200,849	6	33,475
Guidelines <sup>294</sup>			30,000
<b>RECOMMENDED STANDARD</b>			<b>40,000</b>

**Bowling Greens** - The LDCG does not include bowling greens as key community infrastructure and so no an indicative population threshold for bowling clubs or bowling greens specified.

Table 66. Charlestown CC – Bowling Club & Green - Comparative

COMPARATIVE	POPULATION	NO. OF BOWLING CLUBS	PERSONS PER FACILITY	NO. OF BOWLING GREENS	PERSONS PER GREEN
Charlestown CC	59,520	5	11,904	11	5,411
LMCC LGA	200,849	19	10,571	43	4,671
Guidelines (DoP 2009)			none identified		none identified
<b>RECOMMENDED STANDARD</b>			<b>11,000</b>		<b>5,000</b>

**Other Recreation Facilities** – The LDCG includes meeting halls as key community infrastructure and their indicative population threshold is one small meeting hall for every 10,000 people or a large meeting hall for every 20,000 – 30,000 people.

## 23.4 Analysis

**Golf** - LMCC does not provide any golf courses in its LGA. Whilst some council's do provide golf courses, such as Beresfield Golf Course in NCC LGA, in LM the private sector has provided these facilities so there is no need for Council to compete with these facilities. However, if any of the existing golf courses are redeveloped for another purpose, Council may reconsider the need to provide golf in the future. The Cardiff Golf Driving Range at Macquarie Road, Cardiff is located on land zoned Residential 2(1) and there are plans to redevelop the site and so this recreational facility may not exit in the future.

**Bowling Clubs** - are generally privately managed facilities. The Highfields-Azzurri Bowling Club with two bowling greens has folded. Only two of the five remaining bowling clubs are on crown or community land. Three of the bowling clubs were located on community land; Council has reclassified the land comprising the bowling clubs and sold the land to the respective bowling club.

**Other Recreation Facilities** – Council has provided land for various clubs/ community organisations such as scouts and girl guides. Currently, there is a high need for the provision of mens shed. Men's sheds are included in the *Charlestown Contributions Catchment – Community Facilities Study*. This study identifies a Men's shed to be provided in Charlestown due to the proposed high and medium density housing. The suggested location is at the swim centre site in Charlestown.

<sup>292</sup> NSW Sport and Recreation (2007) *Sport and Physical Activity in New South Wales*

<sup>293</sup> ASC (2010) *Participation in Exercise, Recreation and Sport Survey 2010 Annual Report*, p. 35.

<sup>294</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*, Indicative population threshold, p. 88.



## 23.5 Recommendations

**Golf** - Since there are two private golf courses located within close proximity to the catchment boundary there, no additional golf courses are recommended. However, Council may be able to consider how it might be able to assist in the future provision of a golf driving range. In the Charlestown CC, this is unlikely to be achievable considering the land requirements. The land required is approximately 6-7 ha with a length of not less than 280 m, and the land needs to be reasonably flat, cleared land and zoned appropriately. Council has no large areas of community land available for this purpose.

**Bowls** - Lawn bowls is a recreational activity that has a high participation rate of older adults and this rate is expected to increase with the increased aging population. There are no recommendations for council to provide lawn bowls within the catchment.

**Other Recreation Facilities** – Men's Sheds – are currently very popular with some facilities experiencing waiting lists and users have time limits to use the facility. The need for these facilities is likely to increase in the future considering the projected population density in and around the Charlestown centre. It is essential that suitable public land is set aside in order that future facilities can be provided. Specifically, a Men's shed in Charlestown will be required in the not too distant future.

## PART D – OPEN SPACE

*Public open space is important because it contributes to the physical health and social wellbeing of a community.<sup>295</sup>*

Open space is publicly owned land for leisure, recreation, and sporting activities and includes land for conservation, biodiversity and scenic values. Open space also includes public land managed by other organisations such as national parks, conservation areas, botanic gardens and zoological gardens. It can also include community title land, which is open and available to certain landholders within a subdivision. Whereas private open space is, land in private ownership and can include parks, gardens,<sup>296</sup> sporting areas, tennis courts, or golf courses.

*Open space areas have long been recognised as a basic requirement of human settlement planning. These areas are an important resource for social interaction, rest and recuperation and for pursuing healthy activities.<sup>297</sup>*

For LMCC, the nature of its LGA, its extensive existing natural resources, including the lake foreshore, coastal beaches, bushland hinterland, and steep terrain has resulted in a significant provision of open space. LMCC has undertaken several studies to assess the type and distribution of its open space and determine a strategic direction for the appropriate and effective provision of recreation facilities in its LGA.

### Community Land

*Community land is meant for public access and use and though it is a small share of the total, it is the open space that is 'closest to the community' and is fundamental to liveability and the quality of life in neighbourhoods.<sup>298</sup>*

Community land is the term used to describe the open space land owned and managed by Council. The Community Land Management Act was introduced in 1998, which required Council's to classify the land they owned or managed as community land or operational land.

Community land is land such as a public park owned by LMCC and classified as community land.<sup>299</sup> Community land is also crown land reserved for public recreation or for a public purpose, which permits public access. LMCC owned land classified as operational land,<sup>300</sup> crown land where LMCC is not the trust manager, or crown land reserved for other purposes, such as a garbage dump or quarry, is not community land, and not included in the PoM. LMCC adopted a Plan of Management for Community Land (PoM) in 2011, which lists and maps the City's community land.<sup>301</sup> The data from this PoM forms the basis of this section.

The purpose of this plan is to determine if the existing community land within the Charlestown CC is adequate to serve the needs of the existing and future community. A need-based assessment was undertaken to determine/predict the recreation needs of the community to 2025. The existing community land and recreation facilities were considered to determine if the land and facilities were able to meet the future demand. Since the projected growth in the Charlestown CC is comparable to an entire urban release area i.e. Cameron Park, and there was insufficient land to meet the future needs, additional recreation land was identified. Suitable land was identified for acquisition for the identified recreation purpose in an appropriate location.

<sup>295</sup> Growth Centres Commission (2006) *Growth Centres Development Code*, p. B-71.

<sup>296</sup> The Hunter Valley Gardens, in Pokolbin, is an example of a privately owned formal gardens comprising 25 ha.

<sup>297</sup> NSW DoP (2010) *Recreation and Open Space Planning Guidelines for Local Government*, p. 6.

<sup>298</sup> NSW DoP (2010) *Recreation and Open Space Planning Guidelines for Local Government*, p. 29.

<sup>299</sup> On the commencement of the Community Land Management Act 1998 the following land that is vested in or under the control of a council is taken to have been classified as community land: a) land comprising a public reserve; b) land subject to a trust for a public purpose; c) land dedicated as a condition of a development consent under s 94 of the EP&A Act 1979; d) land reserved, zoned or otherwise designated for use under an environmental planning instrument as open space; and e) land controlled by a council that is vested in the corporation constituted by s 8(1) of the EP&A Act 1979. Within 1 year after the relevant commencement, a council may, by resolution, classify, as community land or operation land, any public land that is vested in it or under its control and that is not classified by subclause (2). Any public land that maybe classified by resolution under subclause (3) and that is not classified within 1 year after the relevant commencement is taken to have been classified as community land.

<sup>300</sup> Operational land would ordinarily comprise land held as a temporary asset or as an investment, land which facilitates the carrying out by a council of its functions, or land which may not be open to the general public, such as a works depot or a council garage.

<sup>301</sup> Community land would ordinarily comprise land such as a public park or public reserve, land conveyed or transferred to council under s340A of the LGA 1919, or any land dedicated or taken to be dedicated as a public reserve s340C or s340D or the LGA 1919, or any land dedicated or taken to be dedicated under s49 and s50.

## 24. City Wide Provision

### Existing Provision of Community Land

LM LGA has approximately 4,098 ha of community land or 20 ha/1,000 population as detailed in the following table. The total area of the LM LGA is 758 km<sup>2</sup> and the community land represents 5.4% of the total area within the City.

The community land has been categorised generally according to the categories i.e. Natural Area, Park, Sportsground, or General Community Use, as specified in the LG Act 1993. The land has been categorised to reflect the dominant existing use of the land and the proposed future use of the land. For example, a playground located in a sportsground would be categorised sportsground as this is the dominant use of the land. Land may also be categorised as sportsground to inform the public of the intended future purpose to construct sports fields on the land.

Table 67. LM LGA – Community Land – Existing

COMMUNITY LAND CATEGORIES	AREA HA	% OF TOTAL COMMUNITY LAND	HA/1,000 POPULATION <sup>A</sup>
Natural Area	3,058	75	15.2
Park	489	12	2.4
Sportsground	379	9	1.9
General Community Use	172	4	0.9
<b>TOTAL</b>	<b>4,098</b>	<b>100</b>	<b>20</b>

Note: <sup>A</sup> Based on an existing population of 200,849

- **Natural Area**

Community land categorised natural area comprises 3,058 ha and **75%** of the total community land in the City, or 15.2 ha/1,000 population. Land categorised natural area includes bushland, wetland, escarpment, watercourse, and foreshore. Whilst there may be some permissible recreation uses within some of the natural areas, such as bush walking, and mountain bike riding, the majority of the land is steeply sloping, contains creeks, watercourses, or natural vegetation communities, some of which include wetlands that preclude most recreation uses. Council does not consider natural areas to be usable recreation land and as such, these lands are not considered as an offset for the requirement to provide land for open space under section 94 of the EPA Act.

- **Park**

Community land categorised park comprises 489 ha and **12%** of the total community land in the City, or 2.4 ha/1,000 population. However, many of the lands categorised park are not parks and include land such as road buffers, drainage reserves (detention/retention basins), small or irregular shaped parcels (residue lands from subdivisions), flood prone/low lying land, electricity easements, or other restrictions that render the land unusable for recreation purposes. Since there was no category to describe these lands, any mowed and maintained land including, land that appeared to be mowed and maintained, or any detention basins or wet ponds was categorised as park.

- **Sportsground**

Community land categorised sportsground comprises 379 ha and **9%** of the total community land in the City, or 1.9 ha /1,000 population. Land categorised sportsgrounds includes sports fields/ovals, netball and tennis courts and proposed future sportsgrounds. Small areas comprising a playground, skate park, or BMX track located within a sportsground is categorised according to the dominant use - sportsground.

- **General Community Use**

Community land categorised general community use comprises 172 ha and **4%** of the total community land in the City or 0.9 ha/1,000 population. Land categorised general community use includes land leased or licensed or land proposed to be leased or licensed and usually contains community buildings.

- **Usable Recreation Land**

Usable recreation land is land categorised park or sportsground. Of the community land in the City, 868 ha or **21%** of the land is categorised park or sportsground or 4.3 ha/1,000 population. However, it also includes land proposed to be developed as a park or sportsground and other miscellaneous land. Only a portion of this land is considered usable recreation land. Refer to the dot point 'park' above and the comments relating to areas that are not parks.

## 25. Charlestown CC

### Existing Provision of Community Land

The Charlestown CC has approximately 787 parcels of community land comprising 1,107 ha or 18.6 ha/1,000 population as detailed in the following table. The total area of the catchment is 56.85 km<sup>2</sup> and the community land represents 15% of the total area within the catchment.

Table 68. Charlestown CC – Community Land – Existing

COMMUNITY LAND CATEGORIES	AREA HA	% OF TOTAL COMMUNITY LAND	HA/1,000 POPULATION <sup>A</sup>
Natural Area	887	80	14.9
Park	98	9	1.7
Sportsground	111	10	1.9
General Community Use	10	1	0.2
<b>TOTAL</b>	<b>1,107</b>	<b>100</b>	<b>18.6</b>

Note: <sup>A</sup> Based on an existing population of 59,520

**Figure 5** indicates the Community land in the area. The community land within the Charlestown CC is located inside the red unbroken line indicating the catchment boundary.

- **Natural Area**

Community land categorised natural area includes 167 parcels in 887 ha comprising 80% of the total community land in the catchment or 14.9 ha/1,000 population. Refer to the green shaded areas in **Figure 5**. The northern part of a large natural area, the Green Point Foreshore Reserve, is located within this catchment.

Other significant natural areas extend along the coastline from Highfields to Redhead, the Glenrock State Conservation Area, and the Awabakal Nature Reserve. The NSW Office of Environment & Heritage controls this land and the responsibility for management rests with the NSW National Parks & Wildlife Service, Office of Environment and Heritage. These areas are not community land and not included in the table above.

- **Park**

Community Land categorised park includes 38 parcels in 98 ha comprising 9% of the total community land in the catchment or 1.7 ha/1,000 population. This is significantly less than the citywide level of provision, which is 2.4 ha/1,000 population. Refer to the pink shaded areas in **Figure 5**. Within the catchment is one large parkland area, the Thomas H Halton Park at Croudace Bay. A proposed new park on the disused Redhead tip site comprising 9.28 ha is also included within the catchment. If the Redhead tip site was subtracted from the above figures then about 89 ha of land in the Charlestown CC is categorised as park or 1.5 ha per 1,000 population.

Table 69. Charlestown CC – Community Land – Existing Land Categorised Park

PROPOSED FUTURE PARKS	TOTAL LAND CATEGORISED PARK HA	AREA HA	REMAINING LAND CATEGORISED PARK HA <sup>A</sup>	HA/1,000 POPULATION <sup>B</sup>
Redhead tip site (disused)		9.3		
<b>TOTAL</b>	<b>98</b>	<b>9.3</b>	<b>89</b>	<b>1.5</b>

Note <sup>A</sup> Includes land used for parks and other miscellaneous use lands  
<sup>B</sup> Based on an existing population of 59,520

However, many of the land parcels categorised park include miscellaneous lands and small irregular shaped parcels of land residue parcels left over from subdivisions.

- **Sportsground**

Land categorised sportsground includes 15 parcels in 112 ha comprising 10% of the total community land in the catchment or 1.9 ha/1,000 population. Refer to the yellow shaded areas in **Figure 5**. Some of the land categorised sportsground are not used/developed as sportsgrounds and these areas are detailed in the following table. The land categorised as sportsground are approximately 89 ha or 1.5 ha/1,000 population.

**Table 70. Charlestown CC – Community Land – Existing Land Categorised Sportsground**

PROPOSED FUTURE SPORTSGROUND AND OTHER LAND <sup>A</sup>	TOTAL LAND CATEGORISED SPORTSGROUND HA	AREA HA	REMAINING LAND CATEGORISED SPORTSGROUND HA <sup>B</sup>	HA/1,000 POPULATION <sup>C</sup>
Land between Harold Knight and Allen Davis/Ernie Callard Fields, Gateshead		8.3		
Land north of Hunter Barnett Fields, Windale		4		
Land between Goundry St Oval and Hunter Sports High, Gateshead		3.3		
Kaleen Street Reserve, Charlestown		4.4		
Amy Court, Whitebridge		2.2		
Glad Gunson Drive (detention basin/unusable sportsground)		1.2		
<b>TOTAL</b>	<b>112</b>	<b>23.3</b>	<b>89</b>	<b>1.5</b>
Note: <sup>A</sup> Includes land proposed for future sportsgrounds and other miscellaneous use lands				
<sup>B</sup> Land used for sportsgrounds				
<sup>C</sup> Based on an existing population of 59,520				

- General Community Use**

Land categorised general community use includes 12 parcels in 10 ha comprising **1%** of the total land in the catchment or 0.2 ha/1,000 population. Refer to the land shaded orange in **Figure 5**. This land includes: the Valentine Hydrotherapy Pools, Belmont Neighbourhood Centre, Windale Community Centre, Charlestown library and car park, Redhead community library, Redhead Surf Life Saving Club building and car park, Charlestown Swimming Centre, Croudace Bay Sailing Club, Highfields/Azurie Sports Club, several bowling clubs and car parks, child care centres, meals on wheels premises, council halls, scout halls, and a youth refuge. It also includes land that maybe leased or licensed, and land that maybe used to expand the Belmont golf course.

- Usable Recreation Land**

Of the 1,107 ha of community land in the Charlestown CC only a proportion of this land is usable recreation land. As previously discussed, much of the land categorised park is not developed as a park as it includes other miscellaneous parcels of land and land proposed for future development as a park. The actual existing usable recreation land includes the land detailed in Part C of this plan under 'existing provision'. Within the Charlestown CC the total usable recreation land is 142 ha or 2.4 ha/1,000 population, as detailed in the following table.

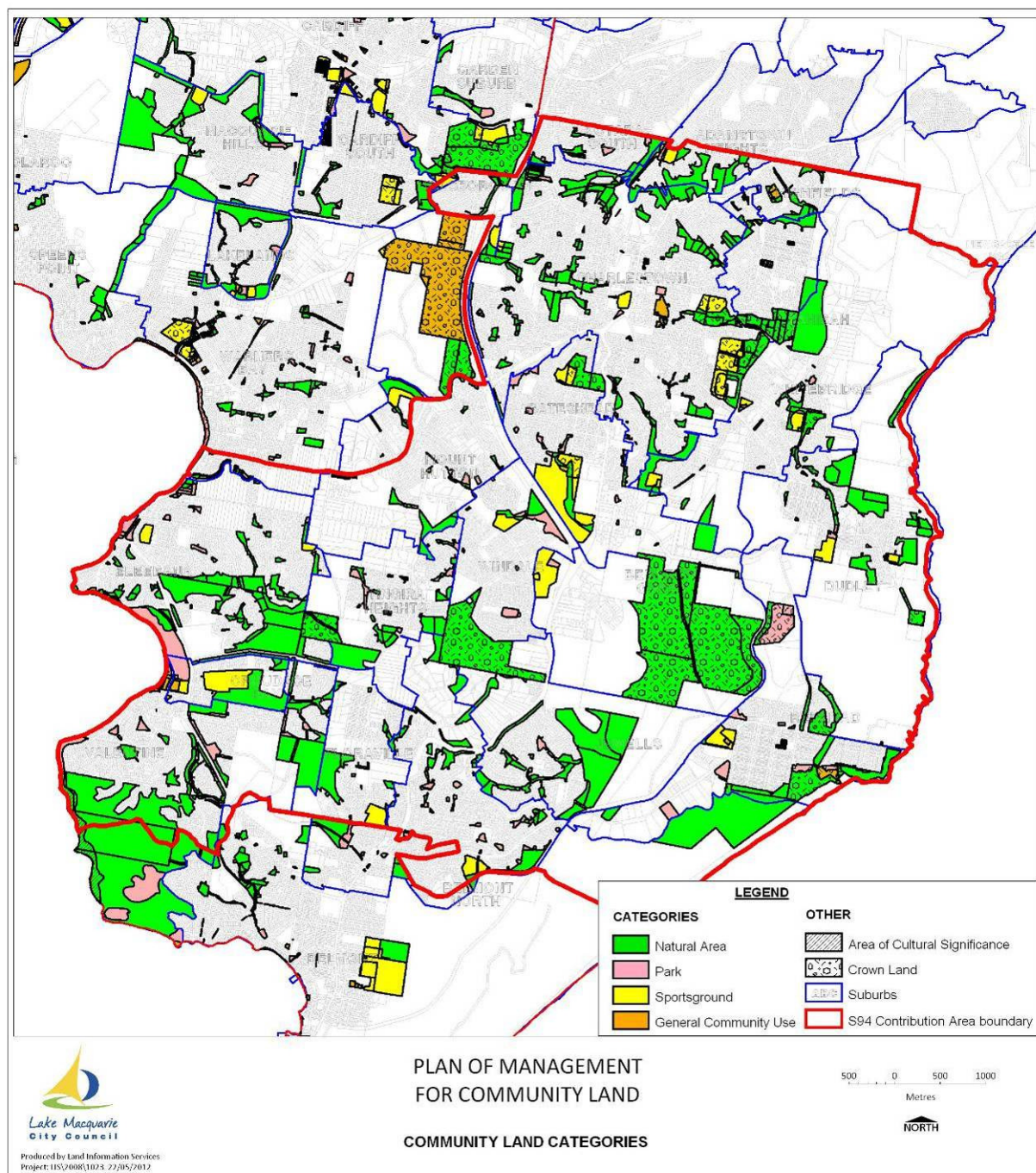
**Table 71. Charlestown CC – Recreation Land – Actual Existing**

EXISTING RECREATION LAND <sup>A</sup>	AREA HA		HA/1,000 POPULATION <sup>B</sup>		% OF URBAN RESIDENTIAL AREA <sup>C</sup>
Sportsground <sup>D</sup>	95.9		1.6		
Tennis <sup>E</sup>	0.3		0		
Netball <sup>F</sup>	0.8		0		
<b>TOTAL SPORT LAND</b>		<b>97.0</b>		<b>1.6</b>	<b>3.5%</b>
Parks <sup>F</sup>	36.5		0.6		
Multi-court <sup>G</sup>	0.5		0		
Skate <sup>H</sup>	0.8		0		
Dog Exercise <sup>I</sup>	7.9		0.1		
<b>TOTAL PARK LAND</b>		<b>45.6</b>		<b>0.8</b>	<b>1.7%</b>
<b>TOTAL RECREATION LAND</b>	<b>142.6</b>	<b>142.6</b>	<b>2.4</b>	<b>2.4</b>	<b>5.2%</b>
Note: <sup>A</sup> Recreation land is a subset of community land and operational land such as the Fernleigh Track is not included					
<sup>B</sup> Based on an existing population of 59,520					
<sup>C</sup> Urban residential area in the Charlestown CC = 2,734.7 ha and includes land zoned 1(2), 2(1), 2(2), and 7(5)					
<sup>D</sup> Total area of sportsgrounds as identified in Table 6, some small park areas i.e. at Eleebana Oval, maybe included as sportsground					
<sup>E</sup> Includes stand alone tennis facilities i.e. Redhead Tennis					
<sup>F</sup> Includes stand alone netball facilities i.e. Windale Netball					
<sup>G</sup> Total area of parks as identified in Table 33, does not include local mown areas with no park facilities					
<sup>H</sup> Includes multi-court at Liles Oval, Redhead on land reclassified and proposed to be sold					
<sup>I</sup> Includes the skate park at Windale					
<sup>J</sup> Includes stand alone dog exercise areas not included above i.e. Redhead Beach and Valentine					



The land used for sport, often described as organised or active recreation, is more than double the amount of land used for park, or unorganised or passive recreation. This indicates a historical dominance of sporting facilities over passive parks. This may be due to the fact that users of sporting or clubs are organised groups and can demonstrate their needs and usage easily through club registration whereas users of parks generally do not form organised groups and parks are generally left to Council to provide for the community as a whole.

Figure 6. Charlestown CC – Community Land



The above plan identifies the location of existing community land categories in the Charlestown CC, which is bounded by the red unbroken line. The scale of the above plan makes it difficult to distinguish the categorisation of some of the smaller land parcels. Refer to *the Plan of Management for Community Land 2011* for larger scale plans.<sup>302</sup>

<sup>302</sup> LMCC (2011) *Plan of Management for Community Land 2011*, plans 107, 108, 117 (part of), 118 (part of), 119, 120, 125 (part of), 126, 127, 128, 131, 132, and 133.

## Issues

The issues identified for community land include:

- Significant increase (6,230 persons - half of the projected growth) is in the 55 yrs + age group, requiring appropriate recreation facilities, to encourage physical activity
- Only a small proportion of the community land is available and usable for recreation, i.e. sportsgrounds (10%) and parklands (9%)
- Variable quality of many of existing community land parcels with limited embellishment potential
- Majority of existing community land is categorised as natural area (80% or 887 hectares) and has limited recreation opportunity

## Identified

The following survey, guidelines, and plans demonstrate the identified need.

### • NSW Sport & Recreation Industry Five Year Plan

The purpose of the plan is to guide the sport and recreation industry in addressing priority issues over the next five years. The relevant objectives are:

- To make it easier and affordable for people of all ages to be physically active and involved in their communities<sup>303</sup>
- To increase the availability of useable open space to ensure facilities are of a quality standard to meet community expectations<sup>304</sup>
- Success measure: Two percent increase in access of useable open space<sup>305</sup>

### • Liveable Communities Assessment

The survey identified that less than half of the respondents across all four-study areas were satisfied with the amount of open space in their neighbourhood.<sup>306</sup> Specific comments from a survey of residents in Charlestown in 2010 include the following. Refer to **Appendix 3** for further comments.

*More parkland developed even if (you) have to buy private land and conserve what we have now<sup>307</sup>*

### • Open Space Strategy

The strategy undertaken by URS revealed that the LM LGA has one of the highest allocations of open space. However, a substantial proportion of the undeveloped areas is covered by remnant vegetation with significant biodiversity conservation values. Consequently, the potential for development of new recreation facilities in the areas is more limited than the number of hectares per head of population implies.<sup>308</sup>

### • Open Space Plan

The open space plan undertaken by Clouston identified that:

- Half of the City's reserves are less than 0.5 ha accounting for only 3.5% of the total area of open space in the City. Many of these small reserves are dedications from developments over the years and are providing limited recreational opportunity, often being of poor quality, little used and difficult to maintain.<sup>309</sup>
- There are significant numbers of very small reserves in the City, some as small as 300 m<sup>2</sup>.<sup>310</sup>
- Reserves with a size less than 0.2 ha = 30% of the numbers of reserves but less than 1% of the total area of public open space in the City.<sup>311</sup>

### • Jewells Flood Study

The area has a flood history and Council engaged BMT WBM Pty Ltd to prepare a Jewells Wetland Flood Study<sup>312</sup>. A draft has been prepared April 2013 and the document will be finalised by the end of the year. Following the completion of the flood study the Jewells Flood Risk Management Study and Plan will be completed in the following year. Managing flood risk and implementing flood mitigation works is an important consideration when planning infrastructure works.

<sup>303</sup> NSW Sport and Recreation Advisory Council and NSW Sport and Recreation (20?) *Game Plan 2012 NSW Sport & Recreation Industry Five Year Plan: Shaping our Future for a Sustainable Community*, p. 8.

<sup>304</sup> *Ibid.*, p. 12.

<sup>305</sup> *Ibid.*

<sup>306</sup> Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health, p. 14.

<sup>307</sup> *Ibid.*, p. 277.

<sup>308</sup> LMCC (2001) *Lake Macquarie Open Space Strategy*, prepared by URS, Executive Summary.

<sup>309</sup> LMCC (1996) *Lake Macquarie Open Space Plan: Volume 1*, prepared by Clouston, p. 20.

<sup>310</sup> LMCC (1996) *Lake Macquarie Open Space Plan: Volume 2*, prepared by Clouston, p. 5.

<sup>311</sup> *Ibid.*, Table 2.4.

<sup>312</sup> LMCC (2013) *Jewells Wetland Flood Study Draft Report April 2013*, prepared by BMT WBM Pty Ltd.

## Comparative

DoP have provided two guidelines for local government. The development contributions guideline lists the key infrastructure type and provides an indicative population threshold for each recreation facility and the recreation & open space guidelines provides the area requirements for open space types. **Appendix 10** lists and combines these two standards and the land required to provide the recreation facilities identified for a population of 12,540 is 36.25 ha. This equates to 2.89 ha/1,000 people which is comparable to the British standard, however, the British standard did not include gardens and parks.

### • Area Standard – 2.83 ha /1,000 population

A common standard for the provision of open space is 2.83 ha/1,000 people. This is derived from a British standard of the early 1900s, required 7 acres/1,000 population or 2.83 ha/1,000 population to provide adequate playing space for children<sup>313</sup>. The standard excluded: school playing fields, verges, commons, golf courses, indoor facilities, woodlands, gardens and parks, large areas of water.<sup>314</sup> This standard came into general use in the Sydney Region during the 1960's although it had not been accepted and implemented everywhere.<sup>315</sup> The standard was developed from an earlier version where a total of 10 acres or 4 ha/1,000 population was made up of 'neighbourhood' or 'local' open spaces. The local component was 7 acres or 2.83 ha was endorsed by the NSW courts in the 1970's as the amount of open space to be contributed by developers at the time of subdivision.<sup>316</sup> The Growth Centres Development Code uses this standard to guide the precinct planning in the North West and South West of Sydney providing some 181,000 new homes.<sup>317</sup>

Table 72. Charlestown CC – Recreation Land – British Standard

COMPARATIVE	EXISTING POPULATION	ACTUAL RECREATION LAND HA <sup>A</sup>	RECREATION LAND HA/1,000 POPULATION
Charlestown CC	59,520	142.6	2.4 <sup>D</sup>
Guidelines <sup>B</sup>			2.89
Area Standard <sup>C</sup>			2.83
Notes: <sup>A</sup> Actual existing Recreation Land, refer to Table 106 <sup>B</sup> A combination of the two guidelines prepared NSW DoP. Refer to Appendix 10. <sup>C</sup> Area Standard commonly accepted in NSW <sup>D</sup> Includes gardens and parks which were not included in the British Standard			

According to this standard, the Charlestown CC has less than the fixed (British) standard of 2.83ha/1,000 population, which is widely accepted in NSW.

### • Catchment/Access Based Standard

A catchment/access based standard is the service area radius or maximum distance, which residents should have to travel to access recreation facilities.<sup>318</sup> The *Recreation & Open Space Planning Guidelines* provides the area requirements for open space and the distance of these types from most dwellings.<sup>319</sup>

- Local Parks – 0.5 ha – 2 ha, 400 m buffer
- District Parks – 2-5 ha, 2 km
- Local Linear and Linkage – up to 1 km
- District Linear and Linkage – 1-5 km
- Local Outdoor sport – 5 ha, 1 km buffer
- District Outdoor sport – 5-10 ha, 2 km buffer

The recommended standard for the Charlestown CC is outlined in **Appendix 7**. No analysis has been undertaken to determine the number of residents that have access to a park within the above distances.

### • Percentage of Residential Area

The *Recreation and Open Space Guidelines* identifies the recommended recreation area of land (excluding regional recreation areas) as a percentage of the residential area. The following table compares the percentage of community land in the catchment with the urban residential area to the actual

<sup>313</sup> Veal, A. J. (2008) *Open Space Planning Standards in Australia: in Search of Origins*, Playing space is defined as: space for outdoor sport and children's play, p. 14.

<sup>314</sup> *Ibid.*, p. 15.

<sup>315</sup> *Ibid.*, p. 11.

<sup>316</sup> *Ibid.*

<sup>317</sup> NSW Growth Centre Commission (2006) *Growth Centres Development Code*, Table A.4 p. A-11.

<sup>318</sup> NSW DoP (2010) *Recreation and Open Space Planning Guidelines for Local Government*, p. 28.

<sup>319</sup> *Ibid.*, p. 29.



levels of provision in the inner urban and suburban inner areas of Sydney. The actual level of provision in Sydney does not include regional recreation areas. The results indicate that the Charlestown CC has a similar level of provision to that of inner urban Sydney (5%) whereas the majority of the catchment is considered to be suburban inner Sydney (10%). According to this standard, the Charlestown CC should have around 10% of recreation land whereas it has 5.2%.

Table 73. Charlestown CC – Recreation Land – % of Urban Residential Area Standard

COMPARATIVE	PARKS, LINEAR & LINKAGE	OUTDOOR SPORT	TOTAL
	% OF URBAN RESIDENTIAL AREA <sup>A</sup>		
Charlestown CC <sup>B</sup>	1.7%	3.5%	5.2%
Guidelines <sup>C</sup>	4.2%	4.6%	8.8%
Sydney Metropolitan - Suburban Inner <sup>D</sup>			10%
Notes: <sup>A</sup> Urban residential area in the Charlestown CC = 2,734.7 ha and includes land zoned 1(2), 2(1), 2(2), and 7(5)			
<sup>B</sup> Refer to Table 71, existing sport land and existing park land			
<sup>C</sup> NSW DoP (2010) <i>Recreation &amp; Open Space Planning Guidelines for Local Government</i> , p. 29			
<sup>D</sup> Ibid.. p. 27. The average actual level of provision of non-regional recreation areas in different parts of metropolitan Sydney			

## Best Practice

The *Recreation & Open Space Planning Guidelines* provides the area requirements for local open space and the distance of these local open space types from dwellings:

- Local Parks – 0.5 ha – 2 ha, 400 m buffer
- Local Outdoor sport – 5 ha, 1 km buffer
- Local Linear and Linkage – up to 1 km

The guideline also identifies the proportion of open space as a percentage of the urban residential area for different open space types.<sup>320</sup>

- Parks/Linear and Linkage = 4.2%
- Outdoor Sport = 4.6%
- Total = 8.8%

In relation to community land, the guidelines advise:

*Larger sites can support multiple uses – a better use of space...Reserving areas for expansion will provide flexibility as new needs emerge.*<sup>321</sup>

*Open space of different types needs to be provided to accommodate different needs*<sup>322</sup>

## Analysis

Since the Charlestown CC is largely a developed catchment with many recreation facilities currently provided, the plan to a large extent recommends building and expanding on existing facilities, thereby, reducing the quantum of and needed to provide the additional recreation facilities.

## Recommendations

This plan has identified the recreation facilities according to a needs based approach and based on the projected population growth to 2025. The plan considers the existing facility provision (both public and private), the future trends and future needs, and attempts to provide a wide spectrum of recreation opportunities close to the identified growth areas. The additional community land to be acquired to provide the identified recreation facilities as detailed in the plan is only 3.07 ha, as listed in Appendix 11. This plan recommends the provision of quality recreation land to fulfil specific recreation needs in specific locations identified as opposed to a quantitative approach to open space provision.

<sup>320</sup> DoP (2010) *Recreation and Open Space Planning Guidelines for Local Government*, p. 18.

<sup>321</sup> Ibid., p. 36.

<sup>322</sup> Ibid., p. 27.

## 26. Charlestown Sub-Catchment

The Charlestown sub-catchment has approximately 310 parcels of community land comprising 251 ha or 15.1 ha/1,000 population as detailed in the following table. The total area of the catchment is 15.3 km<sup>2</sup> and the community land represents 16 % of the total area within the catchment. The Charlestown sub-catchment is made up of the suburbs of Adamstown Heights, Charlestown, (part of) Gateshead, Highfields, Hillsborough, Kahibah and (part of) Whitebridge and is illustrated by the thick back line in **Figure 1**.

Charlestown is an established suburb that has experienced significant growth over the past few years due to its redevelopment into residential flat buildings and office space. The suburb of Charlestown is identified by a blue line in **Figure 1**.

As at 2006 the sub-catchment had 15,746 people, and an estimated 16,580 people in 2011 which is a 5.3% growth, comparable to the NSW growth which is 5.6% according to the ABS. By 2025, Charlestown's population is expected to increase by 7,120 people to an estimated population of 23,700 which is to a 43% increase over 12 years. Since this sub-catchment will experience over half of the projected growth for the entire catchment, a detailed analysis of this sub-catchment was considered appropriate. The expected growth in this sub-catchment will be almost entirely infill development.

### Existing Provision of Community Land

Table 74. Charlestown Sub-Catchment – Community Land - Existing

COMMUNITY LAND CATEGORIES	AREA HA	% OF TOTAL COMMUNITY LAND	HA/1,000 POPULATION <sup>A</sup>
Natural Area	197	79	11.9
Park	18	7	1.1
Sportsground	31	13	1.9
General Community Use	5	2	0.3
<b>TOTAL</b>	<b>251</b>	<b>100</b>	<b>15.1</b>
Note: <sup>A</sup> Based on an existing population of 16,580			

- **Natural Area**

Community land categorised natural area includes 197 ha or **79%** of the total community land in the sub-catchment, and comprising 11.9 ha/1,000 population. Refer to the green shaded areas in **Figure 6**.

- **Park**

Land categorised park includes 18 ha or **7%** of the total community land in the sub-catchment, comprising 1.1 ha/1,000 population. This is less than the level of provision within the catchment, which is 1.7 ha/1,000 population and significantly less than the citywide level of provision, which is 2.4 ha/1,000 population. Refer to the pink shaded areas in **Figure 6**.

- **Sportsground**

Land categorised sportsground includes 31 ha or **13%** of the total community land in the sub-catchment comprising 1.9 ha/1,000 population. Refer to the yellow shaded areas in **Figure 6**. The level of provision of sportsgrounds in the sub-catchment is identical to the level of provision within the catchment and the City.

- **General Community Use**

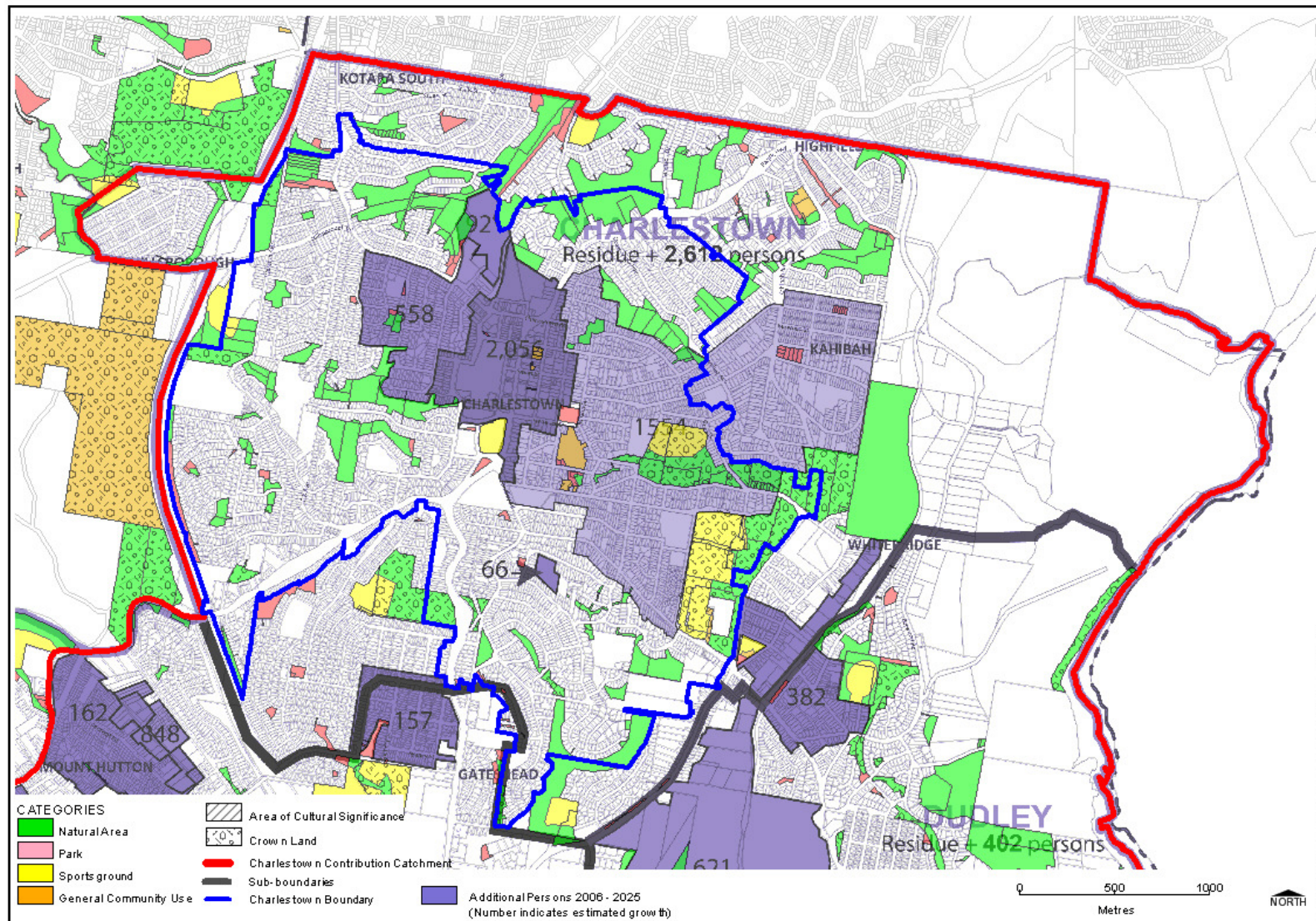
Community land categorised as general community use comprises 5 ha or **2%** of the total community land in the sub-catchment and comprising 0.3 ha/1,000 population. This level of provision similar to the catchment, which is 0.2 ha/1,000 population.

- **Usable Recreation Land**

Usable recreation land is land that is currently a park or sportsground or is capable of being developed as a park or sportsground. Of the community land in the sub-catchment, 49 ha or **20%** of the land is categorised park or sportsground or 3.0 ha/1,000 population. However, only a portion of this land is considered usable recreation land.



Figure 7. Charlestown Sub-Catchment – Community Land



## Recreation Needs

### • Sports Fields

There are 11 sports fields in the sub-catchment and about half of the field's have all year use (dual use). Based on the recommended standard, 11 sports fields are required for the existing population and 16 for the existing and additional population. One additional field is proposed at Pickering Oval Adamstown Heights, provided the site is able to accommodate the additional field. An upgrade of Kahibah Oval & Andy Bird Field is proposed to the value of half a field. There are limited opportunities to provide additional fields within the sub-catchment due to land and environmental constraints. The additional fields are proposed within the catchment at Belmont Nth, Dudley, Gateshead and Mount Hutton.

### • Tennis Courts

There are 5.5 tennis courts within the sub-catchment, all of which are small tennis centres. There is no medium tennis centre in the sub-catchment.

Based on the recommended standard 7.5 tennis courts are required for the existing population and 12 tennis courts for the existing and additional population. A four-court tennis centre within the centre of the sub-catchment and close to the City centre is required. However, a three-court centre maybe provided due to site constraints of existing community land and other larger community land sites have been identified for other development purposes.

### • Netball Courts

There are 24 netball courts within the sub-catchment, however, this is a competition facility, and 12 courts of these courts are used for training.

Based on the recommended standard 8.3 netball courts are required for the existing population and 12 netball courts for the existing and additional population. Since this competition venue is located within the Charlestown sub-catchment, an additional two courts are proposed at this location.

### • Parks

There are 13 local parks within the sub-catchment, and, most are small with an average size of 0.36 ha which is below the minimum standard of 0.5 ha for a local park. There is one neighbourhood park, comprising 0.8 ha, at Kahibah, which is located 1.7 km from the City centre (corner of Smart and Pearson Sts). There is no major park in Charlestown to serve the regional City centre, refer to **Figure 5** and no town park in Whitebridge to serve the local centre.

Based on the recommended standard, 11 parks are required for the existing population and 16 parks for the existing plus additional population. The acquisition of all the properties around the Charlestown pool site to provide a neighbourhood park is proposed together with the upgrade of the existing park at Kahibah.

### • Playgrounds

There are 10 local playgrounds and one neighbourhood playground within the sub-catchment. This playground located at Kahibah, which is a neighbourhood centre. There is no major playground in Charlestown to serve the regional city centre. Refer to **Figure 2**.

Based on the recommended standard, 10 playgrounds are required for the existing population and 14 playgrounds for the existing and additional population. One new adventure playground is proposed for the Charlestown Pool Site and an upgrade of the existing playground at Kahibah.

### • Dog Exercise Area

There is one dog exercise area beside the Jack Steward Netball courts at Charlestown, which is only available when the netball courts are not in use. The area is not fenced and is located 2.2 kms from the City centre.

Based on the recommended standard 2.4 dog exercise areas are required for the existing population and 3.4 dog exercise areas for the existing and additional population. One new fenced dog exercise area is proposed in Charlestown within the City centre and one new dog exercise area is proposed at Kaleen Street, Charlestown. Since this existing area will be significantly reduced by the construction of two new netball courts it is important that additional dog exercise areas in the sub-catchment are established.

### • Skate Park

There is no skate park within the Charlestown sub-catchment.

Based on the recommended standard, 0.8 of a skate park is required for the existing population and 1.2 skate parks required for the existing and additional population. One large new skate park is proposed to be located towards the northern end of the Charlestown Swim Centre site.



### • **BMX Track**

There is no BMX Track within the Charlestown sub-catchment.

Based on the recommended standard, 0.8 of a BMX track is required for the existing population and 1.2 BMX tracks required for the existing and additional population. One large new BMX track is proposed for the Kaleen Street (disused clay quarry) site.

### **Issues**

The issues identified in the sub-catchment are:

- Significant projected population growth in and around the Charlestown town centre
- Increase of people living in units and vertical communities with limited or no private open space
- Significant increase (approximately half of the expected growth) is in the 60 yrs + age group, requiring appropriate recreation facilities, to encourage physical activity
- No neighbourhood or major city park close within or adjoining the city centre
- No neighbourhood playground, no dog exercise area, no community garden, no shared pathways or parks in which to walk close to the unit development in the city centre.
- The City centre is not pedestrian or cycle friendly, there are no cycleways providing connections into the city centre, no connection to the major route the Fernleigh Track
- Lack of recreation facilities in the Charlestown area for young people, which is affordable and accessible

### **Analysis**

The Charlestown sub-catchment will experience a significant proportion of the growth within the catchment, about 7,000 people. This sub-catchment contains the City centre for the LM LGA and it does not have a neighbourhood sized park. The community land within the city centre is identified for other purposes and there is no other suitable land available.

### **Recommendations**

This plan recommends the acquisition of the residential lots surrounding the Charlestown pool site and the relocation of the childcare centre to expand the existing site to provide a new neighbourhood park. Facilities include an adventure playground, major skate park, 3 on 3 basketball court, community garden, and shared pathway providing a link with the proposed recreational trail and a connection to the Fernleigh Track.



Civic Park, King St, Newcastle - 2.2 ha

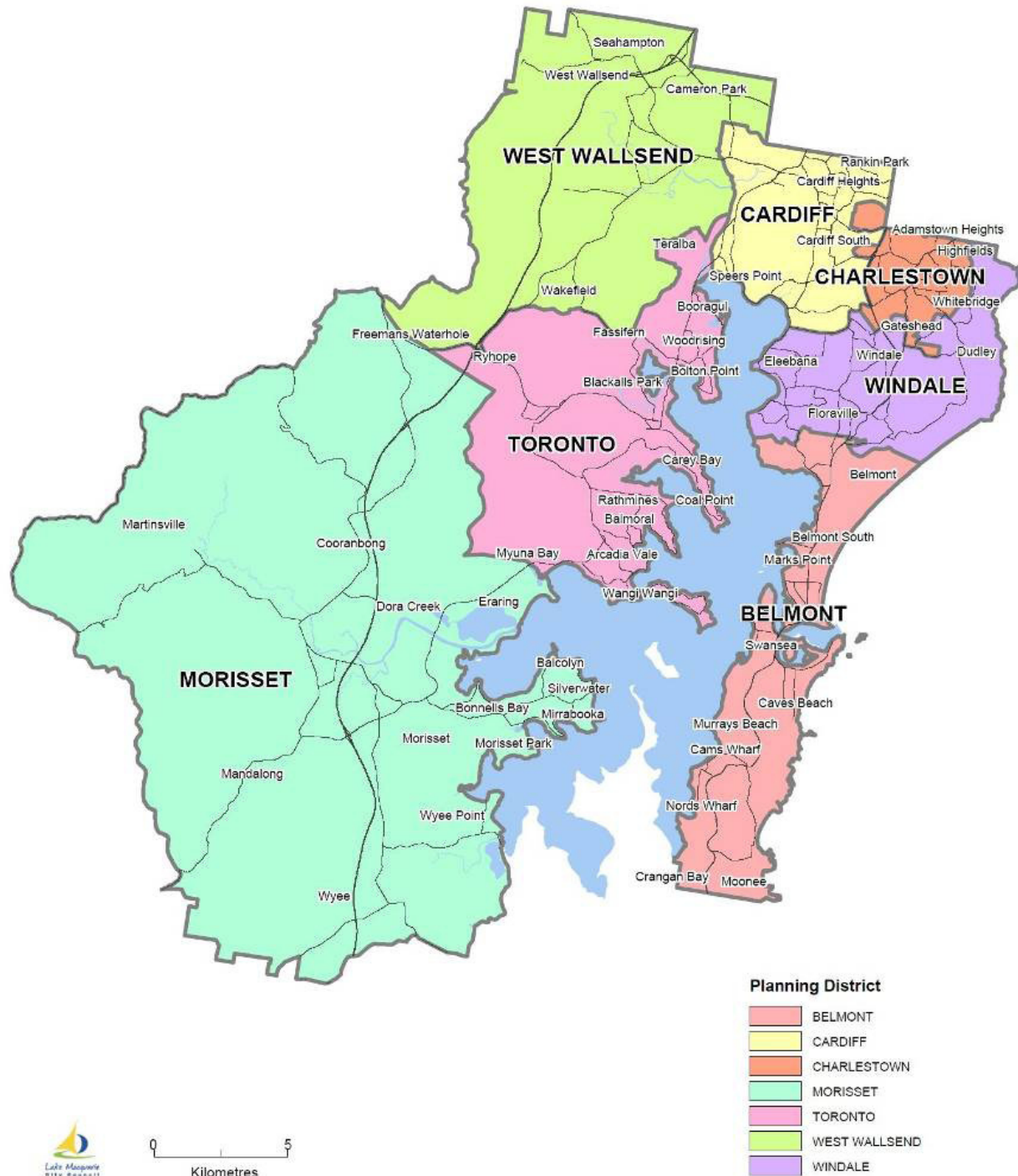
Gregson Park, Tudor Street, Hamilton - 3.88 ha

The following figure shows the land zoned open space and the open space land identified for acquisition. The majority of open space currently identified for acquisition is primarily bush fire prone and/or native vegetation corridors and it does not provide useable open space suitable for recreation/sporting activities.

# PART E – APPENDICES

## APPENDIX 1 – Planning Districts

Lake Macquarie LGA has been divided into seven Planning Districts (PD) to assist in census and planning analysis. The study area of this plan is a combination of the Charlestown and Windale Planning Districts.



Produced by Integrated Planning  
Project: 2009/1293 14/04/2009



## APPENDIX 2 – Sports Field Calculation

Council has used the following methodology to calculate the number of generic sports fields in the City. A generic field could be a soccer or rugby league field or it could be a larger area such as a cricket or AFL oval, or athletics track/field. If the cricket oval has two fields occupying the same space, the number of fields is calculated according to its highest number of fields i.e. two generic fields. If a cricket oval has an AFL oval or an athletics track overlayed, then it is one generic field. A junior field can include a cricket oval, junior soccer field or a mini-rugby league field and is 0.5 of a generic field.

**1 Field** - sole use and usually one season use, for example:



Wyee Oval, Wyee  
1 sole use cricket oval = 1 field



Michael Bird Field, Windale  
1 sole use league field = 1 field



Park Ave Res, Caves Beach  
1 sole use equestrian = 1 field



Neegulbah Pk, Macquarie Hills  
1 sole use athletics track = 1 field

**1 Field – dual use**, one field for summer and one field for winter use, for example:



Charlestown Oval  
1 cricket oval (summer), 1 soccer field (winter) = 1 field



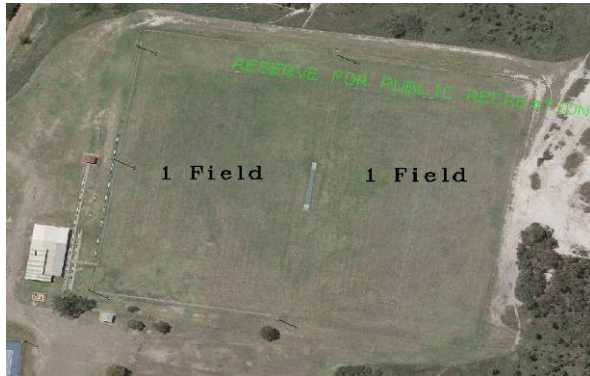
Hillsborough Oval  
1 cricket oval (summer), 1 AFL oval (winter) = 1 field

**1 Field – multiple uses**, one field for . athletics, cricket, league or soccer, for example:



Neville Thompson Oval, Dora Creek  
1 cricket oval (summer), 1 athletics track (summer), 1 league field (winter) = 1 field

**2 Fields** - one field/oval for summer use and two fields for winter use, for example:



Hunter Barnett Fields, Windale  
1 cricket oval (summer) and 2 League  
Fields (winter) = 2 fields

**0.5 Field** - junior fields can include a junior cricket oval, mini-rugby league field or junior soccer field:



Riawena Park, Whitebridge  
1 junior cricket oval = 0.5 field



Keith Barry, Toronto  
1 mini rugby league field = 0.5  
field

**A Sports Ground** is an area that may contain a number of fields /ovals and courts, example includes:



Croudace Bay Sportsground  
2 soccer fields (& cricket wicket); 2  
rugby league fields (& cricket wicket);  
1 junior soccer, 1 mini rugby league =  
5 fields, 4 tennis courts and 5 netball  
courts.

Based on this method of calculation, Charlestown CC has 41.5 generic sports fields (not including the proportion of City fields). Whereas, if the number of fields/ovals were added according to uses or sports played then the total number of sports fields/ovals would be 58 for the Charlestown CC. This alternative approach is the indicative population threshold for each sport as outlined in Appendix C of the *Draft Development Contributions Guidelines* (2009). These indicative population thresholds are also outlined in **Appendix 4**.

## APPENDIX 3 – Community Survey

As part of the Lake Macquarie Liveable Communities Assessment, computer assisted telephone interviews undertaken from December 2009 to February 2010 of people residing in the Charlestown area regarding the future of their community. Questions asked included access to community facilities and public spaces, social cohesion and participation, environmental sustainability, future development desires, the former Charlestown TAFE site, high-rise development in Charlestown, and the comments made relating to recreation and open space are listed in the table below.

<b>Respondents Comments Relating to Recreation &amp; Open Space</b>
<b>Open Space</b>
Need more open spaces, p. 278
Worried that public open spaces are disappearing at a rapid pace, p. 278
Bushland to be made more available to the public, p. 324
Generally the reserve we have need to be kept. The bushland between suburbs seems to be disappearing. Attraction was the bushland and its unfortunate that its going, p. 324
Think it important that we focus on our green spaces, p. 324
Would like to see any remaining open spaces and trees kept for the enjoyment of the community, p. 324
More open space needed. More street trees needed, p. 324
More bushland, parks and gardens, p. 324
Charlestown needs scenery, p. 332
No development near Fernleigh Track to conserve native animal population – more parks, p. 332
Need more open spaces in Charlestown, p. 333
Being a long time resident I have seen many changes but feel all the land taken by Charlestown Square is a real shame, p. 334
Charlestown Square extension has happened at the cost of open space public reserves, p. 334
Charlestown Square taking up too much public area, p. 334
Am concerned that open spaces and bushland will be built on and taken over by high rise, p. 335
Charlestown has not got enough space to accommodate the amount of people coming into the area, p. 337
<b>Sportsgrounds</b>
LM has put a stupid fee on the sporting ovals (pay as you play), it is costing the sporting clubs way too much, p. 277
Taken away lots of things that were the people's property. Ferris oval was the people's property, p. 277
More parking is needed for the soccer field which is on corner of Bula & James Sts - as they park in the street making it dangerous - kids running between cars, p. 277
Has been big improvement of oval opposite Charlestown East school, p. 277
Good job on Leagues Club - however soccer field seems to be rather dilapidated, p. 277
Need to ensure that we have enough sporting fields, p. 277
Leave the playing fields alone, p. 278
More funding grants for sporting clubs, p. 278
Need more sporting fields, p. 278
Bring back some sporting parks and let the people of the area have more meaningful input into the decisions before anyone puts them into plans, p. 278
Not enough playing fields, p. 278
Spent 2 weeks in Charlestown master plan, tried to stop oval from going which should have been used for community purposes, council has created community groups and I have not been invited for having an opinion, p. 333
Charlestown Square took away playing fields, p. 334
<b>Parks</b>
Feel that Charlestown should have more areas for passive recreation - should not be given up for more development - could be overcome by better design of the building, p. 277
Feel that park with scout hall at Whitebridge could be maintained better, p. 277
Like to see the park to be a bit better, p. 277
Local parks have nothing in it, p. 277
Attunga Park swings need to be updated, more variety would be great, p. 277
Concerned by disappearance of major park for extension of shopping centre - should not be allowed to continue, p. 277
Need more parks in Charlestown as there are so many units being put up everywhere, p. 277
One of the disappointments I've had is that public space is going to be a diminishing resource in the future and the council gave up a park which was public space to let a shopping centre expand, I think it will be a regrettable decision in the future, p. 277
Whatever parks and reserves are left should be preserved, p. 277
Make more recreation area available, p. 277
Develop more of the park areas. Continue with the public development around the lake, p. 277



<b>Respondents Comments Relating to Recreation &amp; Open Space</b>
More parkland developed, even have to buy private land and conserve what we have now, p. 277
Rotary Park at Charlestown appears to be gone - no notification of what is going to happen to it, p. 277
Good area to live. Charlestown needs more parks and public facilities, p. 277
More public toilets, p. 277
There is a block of land near the service station where the school was. It would be great to have an area for people to go as a park...also near the police station, p. 277
Lack of public parks, because the parks are controlled by the clubs there, nowhere to kick a footy and fly a kite as the clubs lock them up, p. 278
Need more parks in Charlestown as there are so many units being put up everywhere
More parks with public facilities, an area where the communities can get together for fetes etc, p. 278
No further encroachment on parkland and existing facilities, 278
Council not to lose more park space, more trees, p. 278
A few more parks would be good, p. 278
Like to see more park land and recreational centre and more access for wheelchairs, p. 278
Need more parks, p. 278
Need more open spaces for children and teens to play in the Charlestown area, p. 278
Thoughtfully and professionally designed open space to enhance a sense of community, p. 278
We need more parks, p. 278
Don't need to let the shopping areas takeover, people need space to live and enjoy green pace, parks, bike areas, think more family not economy, p. 278
Need more parks, p. 278
Not enough park areas, parks have disappeared. Too much area taken by Charlestown Square, p. 278
Not enough parks. Lake Macquarie has huge potential and council should get community interested in improvements, p. 278
Not many parks in Charlestown for the kids, p. 278
Shame that we lost our park. Didn't look into areas for older people to walk and sit, p. 278
The quality of the lake has improved & the park in the area could have a lot more done with it to make it more usable, p. 278
Unhappy about the loss of park for the current development - park more important than bowling club, p. 278
Need to cater for increase in aged population that will occur in next few years, p. 278
Need to preserve parkland to compensate for the size of Charlestown Square, p. 278
The commercial development of Charlestown - they should have created more open spaces, such as parks and sporting courts for young people, p. 278
Care should be taken to preserve existing parklands in the area, p. 278
Preserving parks when future development is considered, p. 278
More parks and gardens, p. 324
Need to preserve parkland to compensate for the size of Charlestown Square, p. 324
The commercial development of Charlestown – they should have created more open spaces, such as parks, also the rose garden on the Pacific Hwy should be retained and maintained, p. 324
Care should be taken to preserve existing parklands in the area p. 324
Preserving parks etc when future development is considered p. 324
Need to have a nice park in Charlestown with public toilets, p. 330
Charlestown needs scenery. The council has done great work at Warners Bay and why can't they do some work at Charlestown? p. 332
I feel too much public land has been given over to developers, p. 332
More parks, p. 332
Should build a park where the old TAFE school is, p. 333
Would like the old TAFE site made into a park, p. 333
I hope that the TAFE will turn into a park, p. 333
They shouldn't have taken away the football fields and parks to put up high rise buildings when they are telling all the kids they should be outdoors, p. 335
Charlestown has not enough space to accommodate the amount of people coming into the area, p. 337
<b>Events in Parks</b>
Need a committee to organise events and festivals in Charlestown, p. 311
Charlestown does not have any community events like, markets and things like that. I don't feel there are any community activities in Charlestown, there should even be a Christmas tree or something to make the community feel together, p. 311
I wish the community as a whole could be more community minded not ruled by money, p. 311
<b>Playgrounds</b>
More playgrounds needed and passive recreation areas p. 277
More kid friendly, more playground equipment, p. 277

<b>Respondents Comments Relating to Recreation &amp; Open Space</b>
More play equipment in more parks for kids p. 278
Need more children's playing areas, p. 278
Bigger playgrounds, more trees around, p. 278
More play areas for young children, p. 278
More playgrounds in this neighbourhood, no public toilets for travellers, p. 278
Try to find more activity and play areas for children to encourage fitness, p. 278
<b>Tennis Courts</b>
Have ripped up the tennis court, p. 277
Happy living in the area. Would love to see the tennis courts replaced in Charlestown, p. 277
Do not like the idea of taking the tennis courts away, p. 277
Need a tennis court to replace one now gone, p. 277
Tennis courts have disappeared, p. 278
Tennis court - had one that the kids used all the time that has now been taken away, p. 278
<b>Skate Park / BMX / Facilities for Young People</b>
Needs a skateboard park in the area, p. 277
Needs to have some form of skate park or activity park for 8 to 17 yr olds to keep off streets, p. 277
More facilities for young people, p. 277
Would love to see more facilities for young people, p. 277
There is a block of land near the service station where the school was. It would be great to have an area for people to go as a park, and do something about the safety, also near the police station. Graffiti should be cleaned off straight away and the person punished, p. 277
Lack of facilities for older kids, p. 277
Skating parks with lights with input from the community, p. 278
Need to provide some active areas in particular for the youth age group, they may have youth centre, but no active areas for this age group, 278
A skate park would be great, p. 278
Need more facilities for young people, p. 278
Activities for young people, p. 278
Need more parks and activities for young people, p. 278
Need to provide some active areas in particular for the youth age group, they may have youth centre etc but no active areas for this age group, p. 278
More facilities for 12 - 18 age group, p. 311
Need more activities for young teens instead of hanging out at Charlestown Square, p. 334
<b>Walkways</b>
Need to build our cities to suit people not cars, p. 330
Good job with the walkways going around the lake keep going., p. 330
Pedestrian access to the new shopping centre is terrible
The Council has done great work at Warners Bay and why can't they do some work at Charlestown? p. 332
<b>Footpaths</b>
Smith and Smart St intersection is very dangerous - congested at the moment, but it's very dangerous for pedestrians especially elderly, p. 330
On the corner of the street there is dense shrubbery about 20 feet high which has formed into a tunnel full of spiders and this makes people have to walk on the road which is dangerous. Laneway from Janes St to Tyrell St is gravel and needs work done. Would like to walk up to Charlestown and it is a problem getting over the busy road, p. 330
Back of Whitebridge High - there is no lighting and no footpath, p. 330
The walk sign changes too quickly for people that are unable to walk quickly, p. 330
Lights change too quickly for pedestrians walking across highway, p. 333
Shopping centres are not pedestrian friendly and can be quite dangerous, they don't seem to plan these for people on foot, p. 333
<b>Cycleways &amp; Shared Pathways</b>
More cycleways that connect up, biggest problem is accessing places around the lake, cycling from Croudace Bay park to Eleebana, p. 172
Large linked pathways are needed within the council area, p. 173
Spend serious money on making a serious effort on redesigning pedestrian and cycleways access separate from motorcar access, p. 173
<b>Swimming Pool</b>
Charlestown pool should have free entry, p. 277
Like swimming pools covered in to be used all year round, p. 277
Upgrade swimming pool, p.277
Need to retain pool where it is - perhaps could be expanded, p. 277



<b>Respondents Comments Relating to Recreation &amp; Open Space</b>	
<b>Beach</b>	
Don't need to go into Newcastle CBD – Charlestown has beaches, recreation, lake & good facilities, p. 278	
Conserve Dudley Beach and improve Glenrock Lagoon, p. 324	
<b>Dog Exercise Areas</b>	
No dog parks in area, even if had restricted hours for dogs in the park, p. 277	
I don't like the dog exercise park being near the cemetery and dogs running loose on the graves, p. 278	
Too many dogs, p. 332	
<b>Community Garden</b>	
Community garden great idea if council could help set it up, p. 324	
<b>Boat Ramps</b>	
Boat ramp in Warners Bay area - closer near one of the parks, p. 278	
Boat ramps need to be updated in LM - Speers Point/Swansea, p. 329	
<b>Development in relation to Open Space/Public Facilities</b>	
I would like council not to just go with what the developers want, p. 331	
I think the Square should have extended up to the mall instead of taking the bowling club. Should have gone north instead of south, p. 334	
Being a long term resident I have seen many changes but feel all the land taken by Charlestown Square is a real shame, p. 334	
Council could do more for the people of the area. Think there is too much emphasis on high-rise development, p. 335	
Too much high rise buildings, too close together which blocks out the sun and breeze, p. 335	
Too many high rise buildings and not enough facilities to cover the extra population, p. 335	
<b>Other</b>	
Appreciate the Council participating in the survey and hope the data will be put to good use, p. 331	

## APPENDIX 4 – Sports Fields Indicative Standard

The DoP has developed a guideline to identify the indicative population thresholds for key infrastructure<sup>323</sup> under 'ovals and sportsground's as detailed below. The guideline does not identify the population threshold for a generic field (as used in this plan) that is why the following analysis has been undertaken. To determine an indicative population threshold for a generic sports field a sample population of 50,000 was used.

Table 75. Charlestown CC – Sports Fields – Standards

SPORTS FIELDS/OVALS	SEASON PLAYED	INDICATIVE POPULATION THRESHOLD <sup>324</sup> 1 facility per	FOR A POPULATION OF 50,000 No. of fields/ovals
AFL	Winter	50,000	1
Athletics Track	Summer	25,000	2
Baseball/Softball	Winter / Summer	25,300	2
Cricket	Summer	2,500	20
Hockey	All year	5,000	10
Rugby League	Winter	3,000	16.7
Rugby Union	Winter	25,000	2
Soccer	Winter	5,000	10
<b>TOTAL NO. OF FIELDS/OVALS</b>			<b>63.6</b>

The guideline states that 'consideration should be given to co-location of facilities to maximise usage e.g. Cricket and AFL'.<sup>325</sup> Competition sports played in summer include: athletics, basketball, cricket, softball, whereas competition sports played in winter include: AFL, baseball, football (soccer), rugby league, rugby union. Based on the standards identified in the guideline (table above) and if all sports fields have a summer and winter use, wherever possible, then the total fields required for a population of 50,000 is about 48 sports fields as outlined in the following table:

Table 76. Charlestown CC – Sports Fields – Standards – Possible Dual Use Arrangements

POSSIBLE USE ARRANGEMENT	TOTAL GENERIC FIELDS	AFL	ATHLETIC TRACKS	BASE/ SOFT-BALL	CRICKET	RUGBY LEAGUE	RUGBY UNION	SOCCER
Athletics & Cricket	2		2		2			
Cricket & Baseball	1			1	1			
Cricket & Softball	1			1	1			
Cricket & AFL	1	1			1			
Cricket & Soccer	10				5			10
Cricket & Rugby League	17				9	17		
Cricket & Rugby Union	2				1		2	
<b>TOTALS</b>	<b>34</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>20</b>	<b>17</b>	<b>2</b>	<b>10</b>

LMCC does not provide hockey fields due to a synthetic hockey centre at Broadmeadow provided within the Newcastle City LGA. The provision for hockey has been deleted from the above table. However, LMCC does provide for equestrian and archery that are not included in the above provision standard. In order to make an allowance for these fields the generic standard has been rounded down.

Table 77. Charlestown CC – Generic Sports Field – Standard

INDICATIVE STANDARD	TOTAL FIELDS REQUIRED	FOR A POPULATION OF	FIELD/OVALS PER PERSON	APPROX. EQUAL TO
Fields/Ovals	32	50,000	1,470	1,500

If the indicative population thresholds (for each sport identified in the guideline apart from hockey) is applied to a population of 50,000 then a standard for a generic field is one (1) field per 1,500 persons. This is comparable with the local standard of the Charlestown CC of one (1) field per 1,400 persons.

<sup>323</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*, p. 92-93

<sup>324</sup> *Ibid.*,

<sup>325</sup> *Ibid.* p. 92.

## APPENDIX 5 – Park and Playground Standards

Various planning documents provide guidelines for the provision of parks and playgrounds as depicted in the following table. The two standards or measures used to assess the provision of parks or playgrounds are distance and population. The LDCG state that 'they (the standards) are not intended to be a finite definition of need' and all facilities must be considered in the context of the population characteristics of the LGA with the population thresholds applied on a case-by-case basis.<sup>326</sup> This plan recommends a departure away from the identified standards and the following analysis demonstrates the variation.

Table 78. Charlestown CC – Guidelines for Parks and Playgrounds

GUIDELINES	DESCRIPTION	SIZE	DISTANCE FROM DWELLINGS	POPULATION THRESHOLD
Draft LDCG <sup>327</sup>	Playground	None specified	400 m	1 per 500 dwellings (1,250)
R & O/S Guidelines <sup>328</sup>	Local park	0.5 – 2 ha	400 m	?
	District park	2 - 5 ha	2 kms	?
Growth Centres Development Code <sup>329</sup>	Local park	None specified	400 m	?
	Neighbourhood park		2 kms	?
Open Space Design Guidelines for Landcom Projects <sup>330</sup>	New parks	0.5 ha	?	?
	Smaller parks	0.5 ha – 1 ha	?	?

The common theme in the above standards is the 400 m distance from most dwellings. The Charlestown CC covers an area of 56.85 km<sup>2</sup> (whereas the City of Sydney's entire LGA covers an area of 26 km<sup>2</sup>). If LMCC provided a playground within 400 metres of most residential dwellings, then the Charlestown CC would require approximately 68 playgrounds. Currently, there are 35 playgrounds in the Charlestown CC as listed in **Table 38**. This was determined by drawing 400 m radius circles around existing playgrounds in the catchment then determining the number of additional circles required to cover the residential areas in the catchment.

The LDCG also recommends providing a playground for every 500 dwellings. Based on the assumption of 2.5 persons/dwelling<sup>331</sup> this population threshold would be one playground for every 1,250 persons. If a playground were provided for every 1,250 persons, then 47 playgrounds would be required, whereas, there are 35 playgrounds in the Charlestown CC.

Both thresholds of distance and population are considered unreasonable, unachievable, and unsustainable for the majority of the population of Charlestown CC.

### • Comparative

A comparison of playground provision within other LGA's revealed that the City of Sydney conforms to the distance from dwellings criteria but not the population threshold. If there is a high population in a small area then the average distance from each dwelling may be less than the 400 m standard and the population threshold maybe more than the above standard. For the City of Sydney, the average distance from dwellings to a playground is 319 metres (less than the standard of 400 m) but one playground is provided for every 2,098 persons (considerably more than the standard).

Wollongong, Tweed, and Coffs Harbour Council's conform to the population threshold but not to the distance from dwellings criteria. Interestingly, Newcastle City Council's standards of provision are similar to that of the Charlestown CC and close to the recommended standard for the catchment. Refer to the following table.

<sup>326</sup> DoP (2009) *Local Development Contributions Guidelines*. p. 91.

<sup>327</sup> Ibid., p. 93.

<sup>328</sup> DoP (2010) *Recreation and Open Space Guidelines for Local Government*, p. 29

<sup>329</sup> Growth Centres Commission (2006) *Growth Centres Development Code*, B-79

<sup>330</sup> Landcom (ND) *Open Space Design Guidelines for Landcom Projects*, p. 5.

<sup>331</sup> Based on 2011 Census Quick Stats: Lake Macquarie(C) [LM LGA] the average number of people per household is 2.5

Table 79. Charlestown CC – Comparison of Other LGA's

COUNCIL AREA	LGA POPULATION	AREA Km <sup>2</sup>	NO OF PLAYGROUNDS	AVERAGE AREA Km <sup>2</sup> /PLAYGROUND A	AVERAGE DISTANCE FROM DWELLINGS $r = \sqrt{A/\pi}$	PLAYGROUND PER POPULATION
<b>Guidelines</b>					<b>400 m</b>	<b>1,250</b>
City of Sydney	176,255	26	84	0.310	0.319 m	2,098
Wollongong	201,215	714	153	4.667	1,219 m	1,315
Tweed	91,000	1,303	83	15.699	2,235 m	1,096
Coffs Harbour	72,115	1,174	56	20.964	2,583 m	1,288
Newcastle	154,896	187	92	2.033	804 m	1,684
LM LGA	200,849	758.0	120	6.317	1,418 m	1,674
Charlestown CC	59,529	56.9	35	1.624	719 m	1,701
<b>RECOMMENDED STANDARD</b>					<b>400m - 800 m</b>	<b>1,500</b>

The recommended standard is to be used as a general guide for residential areas. Rural areas, natural areas/bushland, and employment lands are assessed differently.

## • Identified

The National Health Survey (NHS) results from the 2007/08 survey run by the Australian Bureau of Statistics released in 2009 revealed that approximately 600,000 Australian children (aged 5 to 17 years) or 25% of all children were overweight (17%) or obese (8%).<sup>332</sup>

The Heart Foundation recommends as a general guide:

- Adults include at least 30 minutes or more of moderate-intensity physical activity (such as brisk walking) on most, if not all days of the week. This amount of activity can be accumulated in shorter bouts, such as three 10-minute walks per day.
- For children, it's 60 minutes.<sup>333</sup>

The following table details the average time taken to walk certain distances as a slow, medium or fast walking pace.

Table 80. Walking Distance Calculator

Walking Speed	Time/Distance		
	10 minutes	20 minutes	30 minutes
Slow	0.6km	1.2km	1.8km
Medium	0.9km	1.8km	2.7km
Fast	1.1km	2.2km	3.3km

Source: <http://www.travelsmart.qld.gov.au/Travel-alternatives/Walking.aspx>

According to Austroads Standards, the practical limit for most non-recreational walking trips is approximately 1.5 km, equating to a 15 minute walk. School children may walk up to 2 km to school and people walking for recreation and exercise may walk up to 4km.<sup>334</sup>

## • Analysis

Based on a slow walking speed it would take 13 minutes to walk 800 metres or less if walked at a medium walking speed. By providing a local playground 800 metres from most dwellings, would take about 26 minutes for the return journey if walked at a slow walking speed for the return journey. This alone does not provide the recommended 60 minutes daily exercise for a child but it may for an adult.

Shared pathways within an open space network connected to playgrounds (and other key destinations) provide good access. Thus, the walk or cycle to the playground significantly adds to the recreational experience of the playground. Where once a swing and a spring animal may have been sufficient to provide a local playground, modern day communities want more. By providing fewer (but better playgrounds) contributes to the individual's daily exercise requirement and the distance travelled to the playground makes the journey worth the additional effort.

<sup>332</sup> Australian Bureau of Statistics (2009) *National Health Survey, 2007/08* (ABS Cat. No. 4364.0)

<sup>333</sup> <http://www.heartfoundation.org.au/healthy-eating/mums-united/getting-active/Pages/default.aspx>

<sup>334</sup> Austroads Standards(1999) *Guide to Traffic Engineering Practices, Part 13: Pedestrians.*

## • Recommendation

The following provision standards are considered reasonable for the life of this plan. However, these standards are a guide and will need to be reviewed in subsequent plans as densities increase.

In suburbs or areas where population densities are moderate or low, a catchment (or distance from most dwellings) of 800 m is considered acceptable, however, in areas where population densities are high or planned to be high, a catchment of 400 m from most dwellings is more appropriate, e.g. around town or city centres.

Where communities have high levels of social disadvantage or where communities are physically isolated, a higher provision standard is appropriate. In these instances, the LDCG standard may be more appropriate.

For playgrounds within the Charlestown CC, the following is recommended:

Table 81. Charlestown CC – Playground Hierarchy

DESCRIPTION	AGE RANGE	DISTANCE FROM MOST DWELLINGS	PROVISION STANDARD
Local Playground	2 to 8 yrs	400 to 800 m	1,500
Neighbourhood Playground	2 to 12 yrs	2 km	5,000
Major Playground	2 to 15 yrs	5 km	Up to 50,000
City Playground	2 to adult	10 km	50,000 +

On a catchment basis, the following is recommended:

- One Major Playground
- One fenced playground
- One learner cyclist circuit
- One outdoor gym (provided in conjunction with a shared pathway or recreation trail)

All playgrounds are to have good footpath connections, and preferably be located on or near shared pathways providing easy walking and cycling access.

However, not every park has a playground the standard for parks within the Charlestown CC, is slightly different:

Table 82. Charlestown CC – Park Hierarchy

DESCRIPTION	SIZE HA	DISTANCE FROM MOST DWELLINGS	PROVISION STANDARD
Local Park	0.5 to 1 ha	400 to 800 m	1,400
Neighbourhood Park	1 to 5 ha	2 km	5,000
Major Park	5 to 10 ha	5 km	Up to 50,000
City Park	10 + ha	10 km	50,000 +



## APPENDIX 6 – Park Hierarchy

Table 83. City – Park Hierarchy

FUNCTION	LOCAL	NEIGHBOURHOOD	MAJOR	CITY
<b>Examples</b>	Mullington Park	Bennett Park	Warners Bay Foreshore	Thomas H Halton Park
<b>USABLE PARK AREA</b>	0.5 to 1 ha	1 to 5 ha	5 to 10 ha	10 + ha
<b>DISTANCE FROM RESIDENTS</b>	400 m to 800 m	Usually 2 km	Usually 5 km	Usually 10 km
<b>STANDARD</b>	1,400 persons	Every 5,000 persons	Up to 50,000 persons	50,000 + persons
<b>AREA SERVED</b>	One suburb	Two or three suburbs	Catchment (10-15 suburbs)	LM LGA
<b>USAGE</b>	Minimal	Moderate	High	Very High
<b>GROUP USE</b>	Individuals, carer with children	Small – medium sized groups	Large groups, functions	City festivals, civic events, circus
<b>USES / ACTIVITIES</b>	Park with some facilities, often a playground	Playground, picnic/BBQ, multi-court, skate, BMX, fete/markets	Playground, picnic/BBQ, skate, BMX, informal cricket/soccer, kite flying, fete/markets, weddings	Playground, picnic/BBQ, skate, BMX, informal cricket/soccer, kite flying, fete/markets/circus, wedding
<b>TRAVEL TO PARK</b>	Mostly walk	Walk or cycle	Walk, cycle or drive	Walk, cycle or drive
<b>DURATION</b>	Short (10-15 mins)	Up to 30 mins	Up to 1 hour	Up to several hours
<b>ACCESS</b>	Maybe accessible	Some parts accessible	Mostly all accessible	Extremely good accessibility
<b>PARK FACILITIES</b>	Very limited	Some	Moderate	Large number
<b>QUALITY</b>	Basic	Moderate	Good quality	High Quality
<b>Public toilet</b>	No	Yes	Several	Large number to cater for large events
<b>Seating</b>	One park bench	Several park bench seats	Numerous park bench seats	Park bench seats throughout the park
<b>BBQ</b>	No	One	Several	Numerous, some covered
<b>Rubbish bin</b>	No	One	Several	Numerous
<b>Picnic table</b>	No	One	Several	Numerous
<b>Covered picnic table</b>	No	One covered picnic table	Several and a covered group area	Numerous and covered group areas
<b>Shade structure</b>	No	Not usually	Yes	Yes
<b>Pathways</b>	Pathway to play equipment	Shared pathway to play equipment & beyond	Shared pathway to play and through park, may incl. separated pathways	Numerous shared and separated pathways linking activity nodes
<b>Parking</b>	On street	On street	Off street, perimeter parking	Off street, parking bays
<b>Signage</b>	Park sign	Park sign	Park & directional sign	Park, directional & interpretive sign
<b>Other features</b>	Not generally	Minimal	Yes	Sculptural art, fountains/water features
<b>Landscaping</b>	one or two large trees	Several large trees	Numerous significant trees with minor landscaped areas	Many significant trees in expansive grassed park area with landscaping
<b>PLAYGROUND</b>				
<b>Age range</b>	2 to 8 years	2 to 12 years	2 to 15 years	2 years to adult
<b>Equipment</b>	Slide, rocker, climbing equip	Large range of equipment	Several different areas of age related equipment, themed playground	Large scale, purpose built, many different play areas or special features, i.e. themed, water play, nature play, adventure play
<b>Bubbler / tap</b>	One bubbler	At least one bubbler	Several bubblers	Numerous bubblers
<b>Seating</b>	One bench seat at playground	Two bench seats at playground	Numerous bench seats at playground	Bench seats throughout the playground
<b>Fencing</b>	Not unless required	Not unless required	Probably	Yes
<b>Other facilities, i.e. bicycle circuit, outdoor gym, skate park, BMX track</b>	No	Possibly	Generally, more than one	Several

## APPENDIX 7 – Recommended Standards

The following indicative standards are the locally specific provision standards for applicable for LMCC. They are based on the city-wide existing provision in the LM LGA and take into consideration changing use patterns, expressed community needs and anticipated future needs.

Table 84. Charlestown CC – Recreation Standards

DESCRIPTION	SIZE	CATCHMENT	POPULATION THRESHOLD	FACILITIES
<b>SPORTS FIELD</b>			1:1,500	
Small Sports Ground	up to 5 ha	1 km		1 to 2 fields/ovals
Medium Sports Ground	5 to 10 ha	2 km		3 to 5 fields/ovals
Major Sports Ground	over 10 ha	3 to 5 km		5 + fields/ovals
<b>TENNIS</b>			1:2,200	
Small Tennis Centre	0.5	1 km		1 - 3 courts
Medium Tennis Centre	1.2 ha	2 km		4 - 7 courts
Major Tennis Centre	1.5 + Ha	5 + km		8 courts +
<b>NETBALL</b>			1:2,000	
Netball Training Centre	1.5 ha	2 km		1 - 6 courts
Netball Competition Centre	4 ha	10 + km		12 + courts
<b>MULTI-COURT PARK</b>			1:15,000	
Local Park	0.5 to 1 ha	400 m - 800 m	1,400	
Neighbourhood Park	1 to 3 ha	1 km	10,000	
Major Park	3 to 10 ha	5 km	Up to 50,000	
City Park	10 + ha	10 km	50,000 +	
<b>PLAYGROUND</b>				
Local Playground	2 to 8 yrs	400 m - 800 m	1,500	
Neighbourhood Playground	2 to 12 yrs	2 km	5,000	
Major Playground	2 to 15 yrs	5 km	Up to 50,000	
City Playground	2 to adult	10 km	50,000 +	
<b>COMMUNITY GARDEN</b>				
Local	up to 0.2 ha	1 km	1:5,000	
Neighbourhood	0.2 - 0.5 ha	4 km	1:50,000	
City Farm	over 10 ha	city wide	1:200,000	
<b>DOG EXERCISE AREA</b>			1:7,000	
<b>SKATE PARK</b>			1:20,000	
Small Skate Park	500 m <sup>2</sup>	2 to 5 km		
Large Skate Park	2,500 m <sup>2</sup>	5 to 10 km		
<b>BMX TRACK</b>			1:20,000	
Small BMX Track	2,000 m <sup>2</sup>	2 to 5 km	1:20,000	
Large BMX Track	5,000 m <sup>2</sup>	5 to 10 km		
<b>SHARED PATH</b>			1:0.37 LIN METRES	
<b>TRACKS AND TRAIL</b>			1:0.6 LIN METRES	
<b>MOUNTAIN BIKE AREA</b>			1:CATCHMENT	
<b>SURF LIFE SAVING FAC.</b>			1:60,000	
<b>BOAT RAMP</b>			1:20,000	
<b>JETTY</b>			1:20,000	
<b>SWIM POOL</b>			1:12,000	
<b>INDOOR SPORT &amp; RECREATION CENTRES</b>			1:60,000	

## APPENDIX 8 – Recreation Land Requirements

The DoP in their guidelines<sup>335</sup> recommend that Councils take care to ensure that the land they are receiving for open space purposes is appropriate for the end use.

Parks are:

*Reserves which have had their physical character and/or vegetation modified to support community recreation, community development and wellbeing uses. They include ornamental gardens, play facilities, community gardens and informal lawns<sup>336</sup>*

A sports ground is an area comprising sports fields, ovals or courts used for organised, competition or sports training.

Considering what a park and sports ground is and how they are used, the recreation land dedicated within a subdivision is required to adhere to the following:

- be fit for purpose
- be located on flat land
- for parks - slopes generally <1:15, some areas of steeper slope <1:4 may be permitted for a park
- be predominantly square in configuration,
- have extensive street frontage on at least two of its site boundaries
- have good visibility into the area and good surveillance i.e. residential dwellings overlooking the land
- be centrally located to the catchment population served,
- have good access, located on a shared pathway, or cycleway network,
- have good solar access (winter sun),
- have good shade (in summer),
- for sports grounds the land is to provide a minimum of two senior full sized fields and a cricket oval, oriented north/south with the required safety zone, dead ball areas and buffers and to provide for additional supporting infrastructure. Field grades between 1:70 and 1:100 depending upon the nature of the growing media and subsurface drainage system.
- the entire parcel of land is to be categorised as 'sportsground' or 'park' according to the L G Act (1993), and

The land must NOT comprise:

- any endangered vegetation communities, endangered flora, nest/roost trees, senescent trees or any tree species known to drop limbs,
- any flood prone land,
- have drainage conflicts,
- any contaminated land or water, and
- transmission line easements

Refer to Council's specification templates for specific design requirements.

<sup>335</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*, p. 74.

<sup>336</sup> DoP (2010) *Recreation and Open Space Planning Guidelines for Local Government*, p. 16.

## APPENDIX 9 – NEW PARKS

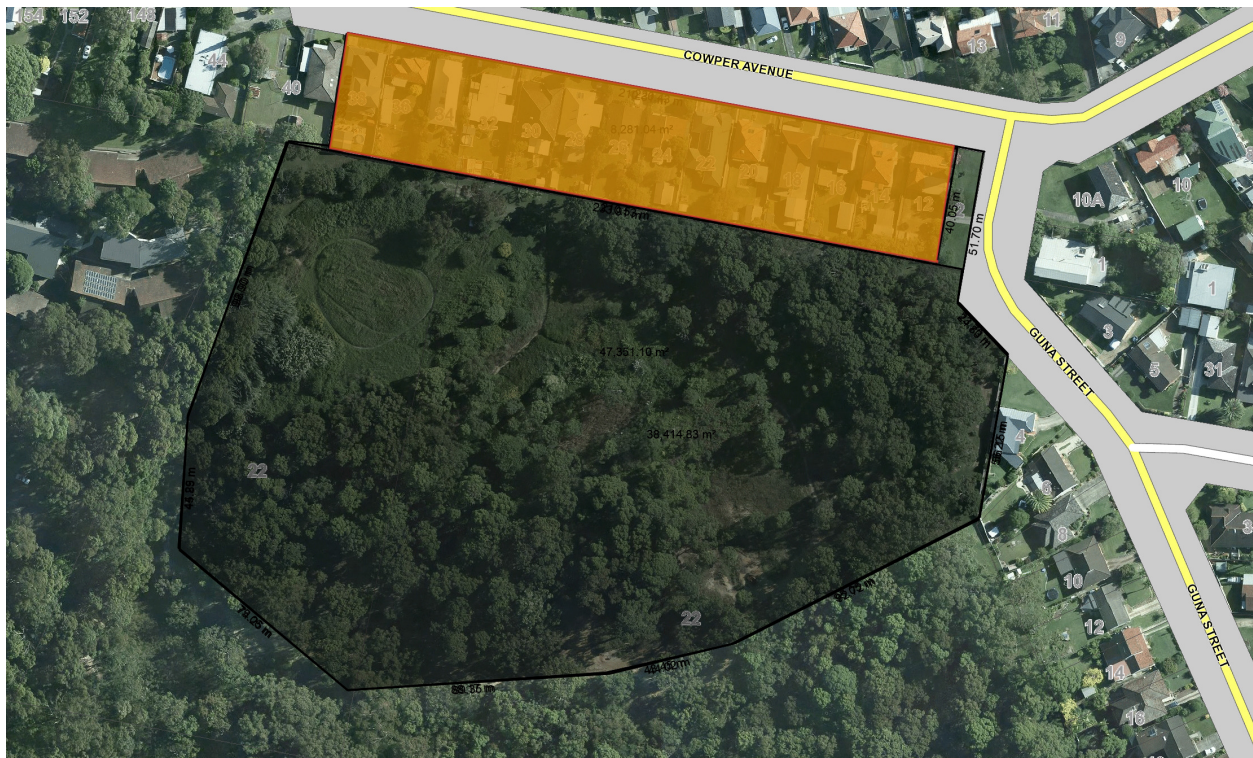
The following are the new parks proposed to be developed within the Charlestown CC that require land acquisition. The parks that do not require any land acquisition is detailed in Section 10.7 of this plan. The Draft LDCG identifies matters for consideration the guideline recommends that council should identify the land to be acquired.<sup>337</sup>

### • Charlestown Urban Park - Kaleen Street

Land is required for an urban park to serve the Charlestown city centre. Based on the projected growth in and around this centre, one new major park is required to be provided to serve this growing centre.

Acquisition is required of the residential properties along Cowper Avenue to provide a urban park for Charlestown, which will contain a major park with picnic and BBQ facilities, large adventure playground, BMX track, dog exercise area and pathway connection to the Fernleigh Track.

The land is approximately 4.7 ha. The area of land to be acquired is approximately **8,580 m<sup>2</sup>** comprising properties between 12 and 38 Cowper Avenue, Charlestown as identified by the yellow shaded area in the following plan.



<sup>337</sup> NSW Department of Planning (2009) *Draft Development Contributions Guidelines*, p. 93.

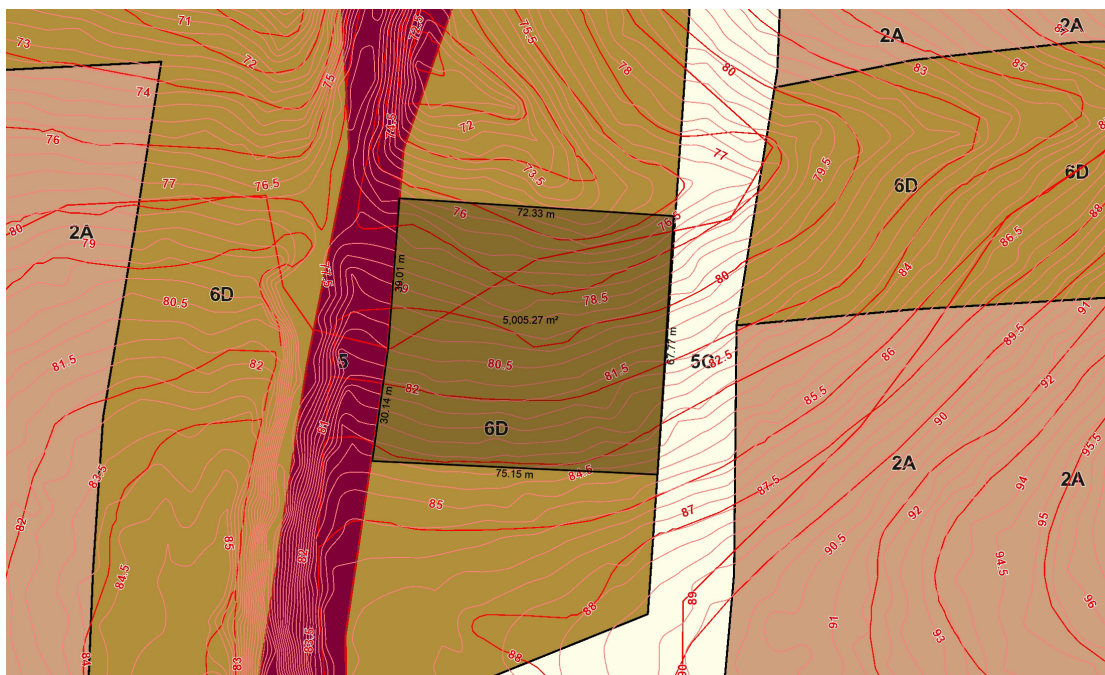
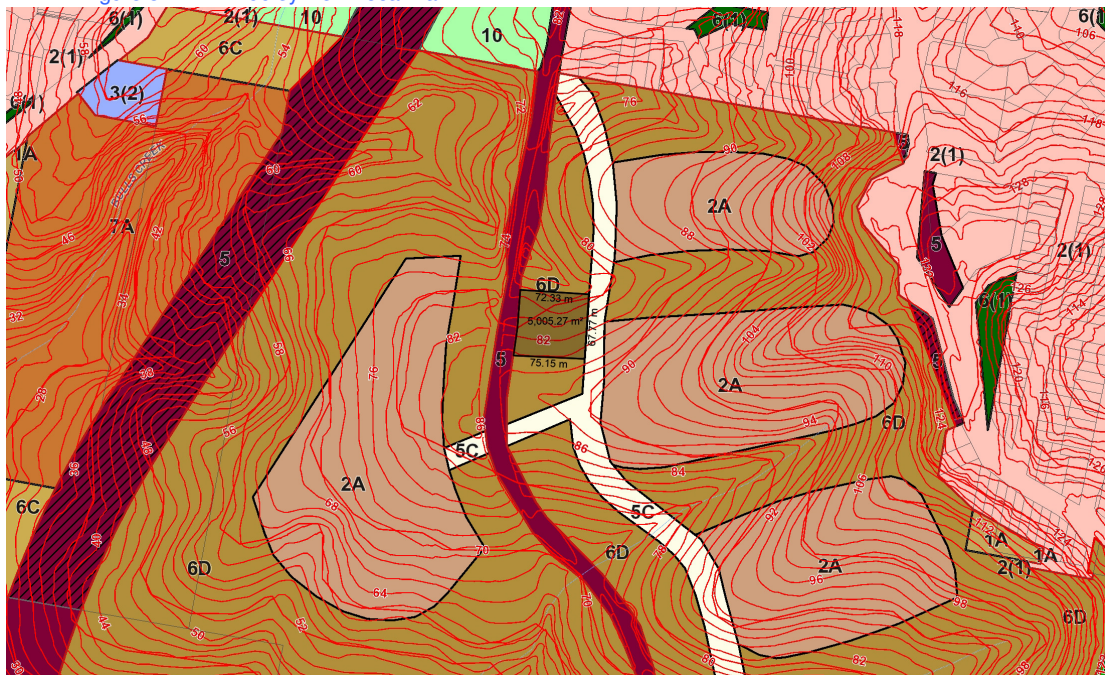


## • Dudley Local Park

Land is required for a local park within a possible future development site 621 in Figure 4 of this plan. The local park is required to be provided if residential development is approved within the development site. The proposed park is approximately 5,000 m<sup>2</sup> of land located within part of 150 Ocean Street, Dudley – part Lot 7390 DP 1164264, in the location shown by the brown square in the following plans. The land is zoned as a deferred matter under the LM LEP (2004) which means the zone reverts to the LM LEP 1984.

The required site is square in configuration, has a reasonable slope, extensive street frontage, centrally located, and the contours imply there is no steep embankment to the Fernleigh Track, providing good access onto the Fernleigh Track.

Figure 8. Dudley New Local Park





## APPENDIX 10 – Recreation Land Required – Standards

The two guidelines prepared by the NSW DoP were used to determine the land required to provide the recreation facilities. The guidelines provide the indicative population thresholds<sup>338</sup> and the size<sup>339</sup> requirements open space types. The table lists the recreation infrastructure type together with the indicative population thresholds in the two left hand columns. Based on these population thresholds the number of recreation facilities required for an additional population of 12,540 was calculated. The different types of open space and the corresponding size requirements are listed in the fourth and fifth columns. The area of land required to provide the recreation facilities is detailed in the last column.

Table 85. Charlestown CC – Recreation Land – for Recreation Infrastructure

DEVELOPMENT CONTRIBUTIONS GUIDELINES <sup>A</sup>		NO. OF REC. FAC. FOR POP 12,540	RECREATION & OPEN SPACE GUIDELINES <sup>B</sup>		AREA REQUIRED FOR REC. FAC. HA
RECREATION INFRASTRUCTURE TYPE	INDICATIVE POPULATION THRESHOLD		STANDARDS FOR LOCAL OPEN SPACE		
			TYPE	SIZE	
Sports Fields/Ovals <sup>C</sup>	1,200 <sup>D</sup>	10.5	Outdoor sport	5 Ha <sup>D</sup>	26.3
Tennis Courts	1,800	7.0			included above
Netball Courts	3,000	4.2			included above
Basketball Courts	1,800	7.0			included above
Indoor Sports Courts & Recreation Centres	100,000	0.1			included above
Playgrounds <sup>E</sup>	1,250	10.0	Parks	0.5 - 2 ha <sup>E</sup>	8.00
Skate Parks - small	6,000	2.1			included above
Skate Parks - large	10,000	1.3			included above
BMX Tracks					included above
Golf Courses	30,000	0.4			not included
Multi-purpose Leisure/Aquatic Centres	60,000	0.2			included above
Swimming Pools	17,500	0.7			included above
Shared Pathways and Cycleways			Linear & linkage	up to 1 km <sup>G</sup>	2.00
Public Domain/ Streetscape					included above
Surf Life Saving Facilities	1 per patrolled beach				not included
TOTAL AREA					36.25

Note: <sup>A</sup> DoP (2009) *Draft Local Development Contributions Guidelines*

<sup>B</sup> DoP (2010) *Recreation and Open Space Planning Guidelines for Local Government*, p. 29

<sup>C</sup> Sports fields are those listed on p. 92 of guidelines and include: AFL, Baseball/softball, cricket, hockey, RL, RU, and soccer. Refer Appendix 3.

<sup>D</sup> Derived from dual use of all the sports fields identified in guidelines, refer to Appendix 3

<sup>E</sup> Outdoor sport local - based on locating 2 sports fields & 2 tennis or netball courts, skate park or BMX track per local sportsground

<sup>F</sup> Parks - Local - (based on 8 parks x 0.5 ha and 2 park x 2 ha)

<sup>G</sup> Linear & linkage - Local (based on 1 km length x 20 m wide)

Area requirements for golf courses and surf lifesaving facilities are not included in above

Based on the indicative population thresholds and the minimum size requirement for open space types provided by the DoP guidelines, the total land required to provide the recreation facilities for a population of 12,540 is 36.25 ha or 2.89 Ha/1,000 population. This assumes:

Local sportsgrounds comprise two sports fields, two netball or two tennis courts, any basketball courts, a skate park, BMX track,

Indoor sports courts & recreation centres, multi-purpose leisure/aquatic centres, swimming pools are located in local sportsgrounds,

Local parks provide playgrounds, and public domain areas

Local linear & linkage / passive open space provide for any shared pathways and cycleways

Golf courses, surf lifesaving facilities have not been included.

<sup>338</sup> NSW DoP (2009) *Draft Local Development Contributions Guidelines*, Appendix C, p. 92-96.

<sup>339</sup> NSW DoP (2010) *Recreation and Open Space Planning Guidelines for Local Government*, p. 29

## APPENDIX 11 – Recreation Land – This Plan

Table 86. Charlestown CC – Open Space Land Acquisition

SUBURB	LOCATION	FACILITY DESCRIPTION	AREA M2	TOTAL	PRIORITY
<b>PARKS</b>				<b>13,580</b>	
DUDLEY	150 Ocean Street, site directly adjoining Fernleigh Track	New local park & playground within proposed development area	5,000		High
CHARLESTOWN	12 Cowper Avenue	Kaleen Street Reserve – major park	610		High
CHARLESTOWN	14 Cowper Avenue	Kaleen Street Reserve – major park	608		High
CHARLESTOWN	16 Cowper Avenue	Kaleen Street Reserve – major park	609		High
CHARLESTOWN	18 Cowper Avenue	Kaleen Street Reserve – major park	609		High
CHARLESTOWN	20 Cowper Avenue	Kaleen Street Reserve - major park	607		High
CHARLESTOWN	22 Cowper Avenue	Kaleen Street Reserve – major park	608		High
CHARLESTOWN	24 Cowper Avenue	Kaleen Street Reserve – major park	609		High
CHARLESTOWN	26 Cowper Avenue	Kaleen Street Reserve – major park	607		High
CHARLESTOWN	28 Cowper Avenue	Kaleen Street Reserve – major park	605		High
CHARLESTOWN	30 Cowper Avenue	Kaleen Street Reserve – major park	606		High
CHARLESTOWN	32 Cowper Avenue	Kaleen Street Reserve – major park	606		High
CHARLESTOWN	34 Cowper Avenue	Kaleen Street Reserve - major park	605		High
CHARLESTOWN	36 Cowper Avenue	Kaleen Street Reserve - major park	600		High
CHARLESTOWN	38 Cowper Avenue	Kaleen Street Reserve – major park	609		High
<b>LINEAR &amp; LINKAGE</b>				<b>22,149</b>	
BELMONT	14 Halyard Way	Fernleigh Track to Lake foreshore	825		Low
CHARLESTOWN	59 E K Avenue	Great North Walk /Yuelarbah Track	2,780		Medium
CHARLESTOWN	29 Fraser Parade	Great North Walk/Yuelarbah Track	4,856		Medium
DUDLEY	15 Duford Street	Dudley Branch Line	400		Very High
TINGIRA HTS	100C Burton Rd	Recreation trail - unformed road	3,120		Low
ELEEBA	113 Burton Rd	Recreation trail – unformed road	8,534		Low
WARNERS BAY	6 Punt Road	South Creek - linkage	974		Low
VALENTINE	2 Keira Close	Lake foreshore pathway	660		Medium
<b>SPORTS GROUNDS</b>				<b>2,679</b>	
CHARLESTOWN	4 Mulbinga Street	New tennis centre	830		Low
DUDLEY	33 Gardener Street	John Balcomb Field expansion	612		Medium
DUDLEY	35 Gardener Street	John Balcomb Field expansion	612		Medium
REDHEAD	21 Elsdon Street	Liles Oval netball courts	625		High
<b>TOTAL (m<sup>2</sup>)</b>				<b>38,408</b>	
<b>TOTAL RECREATION LAND (Ha)</b>				<b>3.84</b>	

The land to be acquired is **3.84 ha** which is considerably less than the **36.25 ha** recommended by the guidelines prepared by DoP.<sup>340</sup> Refer to **Appendix 10**.

<sup>340</sup> DoP (2009) *Local Development Contributions Guidelines* and DoP (2010) *Recreation and Open Space Planning Guidelines for Local Government*

## APPENDIX 12 – Rates of Provision – Standard

The following table details the recommended rates of provision or standards for recreation facilities for the City. It also identifies the required number of facilities required to be provided based on the projected population for the Charlestown CC.

Table 87. Charlestown CC – Standards of Provision

RECREATION INFRASTRUCTURE TYPE	RECOMMENDED RATES OF PROVISION (STANDARD)	NO. OF RECREATION FAC. FOR POPULATION 12,540
Sports fields	1,500	8.4
Tennis courts	2,200	5.7
Netball courts	2,000	6.3
Multi-purpose half courts	15,000	0.8
Parks	1,400	9
Playgrounds	1,500	8
Community gardens	5,000	2
Dog exercise areas	7,000	2
Skate parks	20,000	0.6
BMX tracks	20,000	1
Shared pathways	0.38	4,640
Tracks and trails	0.58	7,273
Mountain Bike Area	1/catchment	0
Surf life-saving /beach facilities	60,000	0.2
Boat ramps	20,000	0.6
Jetties	20,000	0.6
Swimming pools	12,000	1
Multi-purpose leisure/aquatic centres	100,000	0.1

## APPENDIX 13 – Planned Recreation Facilities

The following table lists the recreation facilities proposed to be included in the Charlestown developer contributions plan.

[Charlestown CC – Planned Recreation Facility Provision](#)

SUBURB	RECREATION FACILITY	PRIORITY
ADAMSTOWN HTS	<b>RASPBERRY GULLY RESERVE</b>	
	Community Garden	Low
BELMONT	<b>LINKAGE HALYARD WAY</b>	
	Land acquisition – 825 m2	Low
BELMONT NORTH	<b>BELMONT BRANCH LINE</b>	
	Off-road shared pathway, access onto Fernleigh Track	High
CHARLESTOWN	<b>ATTUNGA PARK</b>	
	Upgrade playground	Low
	<b>CHARLESTOWN SWIM CENTRE</b>	
	Multi-purpose leisure centre upgrade, gym, amenities, car parking	Low
	Community garden	Low
	<b>CHARLESTOWN PARK, KALEEN ST</b>	
	Neighbourhood park	High
	Major adventure / nature playground	High
	Major BMX track (Charlestown or Redhead)	High
	Shared pathway from Yuelarbah Track to park	High
	Land acquisition – properties in Cowper Ave - 8,500 m2	Very High
	Charlestown Dog Park – fenced area with agility equipment (at Kaleen St; 291 Charlestown Rd/34/40 Bradman St; OR Amy Close, )	High
	<b>CARL CLOSE</b>	
	New multi-purpose half-court	High
	<b>CHARLESTOWN SKATE</b>	High
	Large skate park	High
	<b>JACK STEWART NETBALL</b>	
	Netball courts (2) & associates facilities	High
	<b>CHARLESTOWN TENNIS – 10 MULBINGA STREET</b>	
	Tennis centre, 4 multi-purpose courts, club house, car parking	Low
	Land acquisition – 4 Mulbinga St - 830 m2 & crown land 10 Mulbinga St and 14&16 Mulbinga St – 1,470 m2 (Charlestown Girl Guides hall)	High
	<b>GREAT NORTH WALK</b>	
	Fernleigh Track to Milson St Charlestown along Yuelarbah Track, upgrade for bicycles	High
	Charlestown Anjon St to West Charlestown bypass, upgrade for bicycles	Medium
	Land acquisition – 59 E K Avenue - 2,780 m2 + 29 Fraser Pde - 4,856 m2	High
CROUDACE BAY	<b>PARKLEA AVENUE SPORT COMPLEX</b>	
	1 new dual use field, relocate netball courts, amenities, cricket practice nets, parking, lighting, pathways, seats, earthworks	Medium
	Tennis court (1) & tots playground	Medium
DUDLEY	<b>JOHN BALCOMB FIELDS</b>	
	1 new field to provide dual use, amenities, cricket wicket, fencing, car park	Low
	Land acquisition – 33-35 Gardener St – 1,224 m2	Very High

	<b>DUDLEY BRANCH LINE</b>	
	New shared pathway – Stage 1, Ocean St to Burwood Rd	High
	New shared pathway – Stage 2, Burwood Rd to Fernleigh	High
	Land acquisition – 15 Durfold St - 400 m2	Very High
	<b>FRANK WATKINS PARK</b>	
	Community garden	Low
	<b>PARK IN DEVELOPMENT AREA 150 OCEAN ST</b>	
	New local park	Low
	New local playground	Low
	Land acquisition – 5,000 m2	Low
CROUDACE BAY / ELEEBANA	<b>THOMAS H HALTON PARK</b>	
	Major park upgrade, new amenities, shelters, learner cyclist circuit, outdoor gym	High
	Major feature playground	High
	Skate park upgrade	High
	New BMX track	High
	New fenced dog park	High
	<b>LAKE FORESHORE SHARED PATHWAY</b>	
	Shared pathway, Eleebana Lions Park to Croudace Bay	High
ELEEBANA	<b>BUNYA PARK</b>	
	Park upgrade	Medium
	Community garden	Medium
FLORAVILLE	<b>MARKS OVAL</b>	
	1 new field north, demolish & reinstate tennis courts south, club house, stormwater, car parking	Low
	New playground	Low
GATESHEAD	<b>ALLEN DAVIS FIELD</b>	
	1 new field to provide dual use, cricket wicket, fencing, amenities, car park	High
	<b>HAROLD KNIGHT COMPLEX</b>	
	1 new field to provide dual use, cricket wicket, amenities, car park	Medium
HILLSBOROUGH	<b>HILLSBOROUGH OVAL</b>	
	BMX track (Nth of oval at 25 Percy St)	Low
KAHIBAH	<b>KAHIBAH OVAL &amp; ANDY BIRD FIELD</b>	
	Upgrade car park	Low
	<b>KAHIBAH PARK</b>	
	Park upgrade	Medium
	Playground upgrade	Low
	<b>KAHIBAH, WARATAH &amp; REDHEAD STS (PIT HORSE PARK)</b>	
	Park upgrade	Medium
	Community garden	Medium
	<b>FERNLEIGH TRACK (ACCESS ONTO)</b>	
	Shared pathway - NW side of Burwood Road to Fernleigh	Medium



MOUNT HUTTON	<b>MOUNT HUTTON TENNIS</b>	
	Tennis court (1)	Low
	<b>MULLINGTON PARK</b>	
	Park upgrade	Medium
	Playground upgrade	Medium
REDHEAD	<b>LILES OVAL</b>	
	Netball, 2 new multi-purpose courts, car parking	Low
	Land acquisition – 21 Elsdon St - 625 m2	High
	<b>O'CONNOR PARK</b>	
	Park facilities	Medium
	Community garden	Medium
	<b>REDHEAD BEACH</b>	
	Upgrade lifeguard tower	High
	Additional car parking	Low
	Coastal trail, extend boardwalk to beach car park, bridge over First Creek	Low
	Coastal trail south, Belmont Wetlands State Park, bridge over Third Creek	Low
	<b>WEBB PARK</b>	
	Park upgrade	High
	Playground upgrade	Medium
SPEERS POINT	<b>SPEERS POINT PARK</b>	
	Major park upgrade in a/c with master plan	Medium
TINGIRA HEIGHTS	<b>ST JOHNS MEMORIAL PARK</b>	
	Playground upgrade	Low
	<b>WYNDHAM FIRE TRAIL</b>	
	Voilet Town Rd to lake, upgrade for bicycles	Low
	Land acquisition – 100C Burton Rd - 3,120 m2 + 113 Burton Rd - 8,534 m2	High
VALENTINE	<b>BENNETT PARK</b>	
	Playground upgrade	Medium
	New pontoon jetty	Low
	Boat ramp and car park upgrade	Low
VALENTINE / CROUDACE BAY	<b>LAKE FORESHORE PATHWAY</b>	
	New shared pathway from Green Point to Thomas H Halton Park	Medium
	Land acquisition – 2 Keira Cl – 660 m2	High
	<b>NARELA PARK</b>	
	Community garden	Low
WARNERS BAY	<b>WARNERS BAY FORESHORE</b>	
	Upgrade park, in a/c with Warners Bay Master Plan	Medium
WHITEBRIDGE	<b>RIAWENA PARK</b>	
	Playground upgrade	Low

**LAKE MACQUARIE CITY COUNCIL**

WINDALE	<b>WAKOOL STREET</b>	
	Neighbourhood park	Low
	New local playground	Low
	New fenced dog exercise area	Low
	Community garden	Low
	<b>CITY FARM</b>	
	Site yet to be determined	Low

## APPENDIX 13 – Figures and Tables

### Table Index

Table 1.	Lower Hunter Regional Strategy - Neighbourhood Planning Principles	8
Table 2.	Charlestown CC – Sub-catchments	14
Table 3.	Estimated Resident Population Growth – Hybrid Development Scenario	17
Table 4.	Estimated Age Profile – Medium Growth Scenario	19
Table 5.	Summary of Type of Residential Development – Hybrid Growth Scenario	20
Table 6.	Charlestown CC – Sports Ground - Existing	23
Table 7.	Charlestown CC – Sports Ground - Hierarchy	23
Table 8.	Charlestown CC – Sports Fields – Existing	24
Table 9.	Charlestown CC – Sports Facility Strategy Capital Works	26
Table 10.	Charlestown CC – Sports Fields - Comparative	27
Table 11.	Charlestown CC – Sports Fields – Proposed Locations	28
Table 12.	Charlestown CC – Tennis Courts - Existing	29
Table 13.	Charlestown CC – Tennis Courts - Hierarchy	29
Table 14.	Charlestown CC – Tennis Courts - Comparative	30
Table 15.	Charlestown CC – Tennis Courts – Proposed Locations	31
Table 16.	Charlestown CC – Netball Courts – Existing	32
Table 17.	Charlestown CC – Netball Courts - Hierarchy	32
Table 18.	Charlestown CC – Netball Courts – Competition Courts	33
Table 19.	Charlestown CC – Netball Courts - Comparative	33
Table 20.	Charlestown CC – Netball – Proposed Locations	34
Table 21.	Charlestown CC – Multi-purpose Half-courts - Existing	35
Table 22.	Charlestown CC – Multi-purpose Half-courts - Comparative	36
Table 23.	Charlestown CC – Multi-purpose Half-courts – Proposed Location	36
Table 24.	Charlestown CC – Park – Hierarchy	37
Table 25.	Charlestown CC – Park – Existing	38
Table 26.	Charlestown CC – Park - Comparative	40
Table 27.	Charlestown CC – Park – Proposed Locations	41
Table 28.	Charlestown CC – Playground - Existing	43
Table 29.	Charlestown CC – Playground – Hierarchy	44
Table 30.	Charlestown CC – Playground - Comparative	45
Table 31.	Charlestown CC – Playground – Proposed Locations	45
Table 32.	Charlestown CC – Community Gardens - Existing	48
Table 33.	Charlestown CC – Community Gardens - Comparative	49
Table 34.	Charlestown CC – Community Gardens - Hierarchy	50
Table 35.	Charlestown CC – Community Gardens – Proposed Locations	51
Table 36.	Charlestown CC – Dog Exercise Area - Existing	52
Table 37.	Charlestown CC – Dog Exercise Area - Comparative	53
Table 38.	Charlestown CC – Dog Exercise Area – Proposed Locations	54
Table 39.	Charlestown CC – Skate Park - Existing	55
Table 40.	Charlestown CC – Skate Park - Comparative	56
Table 41.	Charlestown CC – Skate Park – Proposed Locations	56
Table 42.	Charlestown CC – Skate Park - Hierarchy	56
Table 43.	Charlestown CC – BMX Track - Comparative	59
Table 44.	Charlestown CC – BMX Track – Proposed Locations	59
Table 45.	Charlestown CC – BMX Track - Hierarchy	60
Table 46.	Charlestown CC – Shared Pathway - Existing	61
Table 47.	Charlestown CC – Shared Pathway - Comparative	64
Table 48.	Charlestown CC – Shared Pathway – Proposed Locations	65
Table 49.	Charlestown CC – Tracks and Trails - Existing	68
Table 50.	Charlestown CC – Tracks & Trails – Comparative	70
Table 51.	Charlestown CC – Tracks and Trails – Proposed Locations	71
Table 52.	Charlestown CC – Surf Life Saving Facility - Existing	74
Table 53.	Charlestown CC – Surf Life Saving Facility - Comparative	74
Table 54.	Charlestown CC – Surf Life Saving Facility – Proposed Location	75
Table 55.	Charlestown CC – Boat Ramp - Existing	76
Table 56.	Charlestown CC – Boat Ramp - Comparative	77
Table 57.	Charlestown CC – Boat Ramp – Proposed Locations	77
Table 58.	Charlestown CC – Jetty - Existing	78
Table 59.	Charlestown CC - Jetty - Comparative	78
Table 60.	Charlestown CC – Jetty – Proposed Locations	79
Table 61.	Charlestown CC – Swimming Pool - Existing	80
Table 62.	Charlestown CC – Swimming Pool - Comparative	81
Table 63.	Charlestown CC – Swimming Pool – Proposed Location	82
Table 64.	Charlestown CC – Indoor Sports Centre – Existing	83

## LAKE MACQUARIE CITY COUNCIL

Table 65.	Charlestown CC – Indoor Sports Centre - Comparative	84
Table 66.	Charlestown CC – Golf Course - Comparative	86
Table 67.	Charlestown CC – Bowling Club & Green - Comparative	86
Table 68.	LM LGA – Community Land – Existing	89
Table 69.	Charlestown CC – Community Land – Existing	90
Table 70.	Charlestown CC – Community Land – Existing Land Categorised Park	90
Table 71.	Charlestown CC – Community Land – Existing Land Categorised Sportsground	91
Table 72.	Charlestown CC – Recreation Land – Actual Existing	91
Table 73.	Charlestown CC – Recreation Land – British Standard	94
Table 74.	Charlestown CC – Recreation Land – % of Urban Residential Area Standard	95
Table 75.	Charlestown Sub-Catchment – Community Land - Existing	96
Table 76.	Charlestown CC – Sports Fields – Standards	108
Table 77.	Charlestown CC – Sports Fields – Standards – <b>Possible</b> Use Arrangements	108
Table 78.	Charlestown CC – Generic Sports Field – Standard	108
Table 79.	Charlestown CC – Guidelines for Parks and Playgrounds	109
Table 80.	Charlestown CC – Comparison of Other LGA's	110
Table 81.	Walking Distance Calculator	110
Table 82.	Charlestown CC – Playground Hierarchy	111
Table 83.	Charlestown CC – Park Hierarchy	111
Table 84.	City – Park Hierarchy	112
Table 85.	Charlestown CC – Recreation Standards	113
Table 86.	Charlestown CC – Recreation Land – for Recreation Infrastructure	118
Table 87.	Charlestown CC – Open Space Land Acquisition	119
Table 88.	Charlestown CC – Standards of Provision	120
Table 89.	Charlestown CC – Planned Recreation Facility Provision	121

### Figure Index

Figure 2.	Charlestown CC – Catchment and Sub-catchments	13
Figure 3.	Charlestown CC – Centres and Suburb Boundaries	14
Figure 4.	Socio-Economic Indices for Areas (SEIFA) Map of LM LGA – Advantage/Disadvantage Index 2006 Census	16
Figure 5.	Geographic Distribution of Expected New Private and Non-Private Residents by 2025	18
Figure 6.	Charlestown CC – Community Land	92
Figure 7.	Charlestown Sub-Catchment – Community Land	97
Figure 8.	Dudley New Local Park	116
Figure 9.	Whitebridge - New Town/Urban Park	117

## APPENDIX 14 – Glossary of Terms

Best practice	Considers service issues, industry standards and new service models
Citywide standard	Means existing standard of provision within the City of Lake Macquarie
Club-based physical activity	Physical activity for exercise, recreation or sport that was organised in full or in part by a sport or recreation club or association that required payment of membership, fees or registration. This is distinct from fitness, leisure or sports centres that required payment for participation. Excludes all aerobics/fitness participants
Community garden	A public garden used for growing edible plants and herbs maintained by the community
Community land	Land retained for public use such as a park or public reserve
Comparative need	The need based on service equity and provision across the LGA, between LGAs and based on planning standards
Contribution catchment	The contribution catchment is the boundary of the Charlestown Contribution Catchment as defined by <b>Figure 1</b>
Dog exercise area	A dog exercise area or dog park is a facility set aside for dogs to exercise and play off-leash in a controlled environment under the supervision of their owners
Estimated Resident Population	Estimated Resident Population (ERP) – is the official ABS estimate of the Australian population. The ERP is based on the results of the census and is compiled for each census and updated quarterly between census. The ERP is calculated by applying the following adjustments to the 'usual residence' census counts: <ul style="list-style-type: none"> <li>- Include Australian residents who were temporarily absent overseas on census night;</li> <li>- <input type="checkbox"/> Adjust the census counts for undercounting using results of the Post Enumeration Survey and;</li> <li>- Backcast the resulting estimates which relate to 6 August 2001 to 30th June 2001 using births, deaths and migration data.</li> </ul>
Identified need	Is based on the outcomes of consultation with residents and key stakeholders
Football	Football refers to a number of sports that involve, to varying degrees, kicking a ball with the foot to score a goal. The most popular of these sports worldwide is association football, more commonly known as just "football" or "soccer". Unqualified, the word football applies to whichever form of football is the most popular in the region
Futsal	A scaled down version of outdoor soccer mainly played indoors
Local standard	Existing standard of provision within the respective catchment i.e. Charlestown CC
Multi-purpose half-court	A hard surface area usually a half basketball court used for informal games of basketball, netball goal shooting, and could include a tennis hit up wall
Multi-purpose sports court	A hard surface court with different line markings to enable a number of different sports to be played on the one court e.g. futsal, basketball, netball, tennis, volleyball, soccer, or badminton
Non-organised physical activity	Physical activity for exercise, recreation or sport that was non-organised in full or in part (that is, not fully organised by a club, association or other type of organisation)
Normative need	The socio-demographic profile of the area, relative social disadvantage and resultant social issues
Open space (public)	Public land set aside for sport, recreation and community purposes, including parks, sports fields, playgrounds, skate parks, civic squares, plazas, and bushland
Organised physical activity	Physical activity for exercise, recreation or sport that was organised in full or in part by (1) a fitness, leisure or indoor sports centre that required payment for participation, (2) a sport or recreation club or association that required payment of membership, fees or registration, (3) a workplace, (4) a school, or (5) any other type of organisation
Organised sport	Organised sports are those that are organised in full or part by a club, association or other type of organization.
Operational land	Land held as a temporary asset or as an investment, land that facilitates the carrying out by a council of its functions or land, which may not be open to the general public, such as a works depot or a council garage.
Park	An area of land with a town, set aside for public use, often landscaped with trees and gardens and with recreational and other facilities: Hyde Park.
Participation rate	For any group, this is the number of persons who participated in the activity,



	expressed as a percentage of the population in the same group
Passive open space	An area of land, generally in an urban context, which is landscaped, beautified and set aside for the enjoyment of the public, excluding sporting activities
Public land	Any land (including public reserves) vested in or under the control of the council, but does not include a public road, land subject to the <i>Trustees of school of Arts Enabling Act 1902</i> , or a regional park under the <i>National Parks and Wildlife Act 1974</i>
Recreation	Recreation is an activity, voluntarily undertaken primarily for pleasure and satisfaction, during leisure time
Recreational trail	A recreational trail maybe a narrow unsealed track or an unsealed fire trail. These occur mainly in natural areas on steeply sloping land or on land with constraints and are used by cyclists with wide tyres and walkers
Shared pathway	A shared pathway is an accessible sealed pathway provided though parks or sporting areas but can also be provided through natural areas. It is a multi-use pathway for walking, cycling, skates/ roller blades, people with walking aides, mobility scooters and parents/carers with strollers
Sport	An activity requiring some physical degree of prowess, usually of a competitive nature, such as racing, baseball, tennis, golf, bowling, wrestling, boxing, hunting etc.
Sports ground	A sportsground is an area of open space which may comprise one or more sports/playing fields, ovals or courts used for organised or competition sport
Sports field	A sports field is a flat usually grassed area used to play sport and it includes synthetic surfaced fields
Walking (bush)	Includes bush walking only, excludes other types of walking which are categorised as walking (other)
Walking (other)	Walking but does not include bushwalking

## APPENDIX 15 – Key to Abbreviations

ABS	Australian Bureau of Statistics
AFL	Australian Football League
ASC	Australian Sports Commission
CC	Contributions Catchment
CL	Community Land
Community Plan	<i>LMCC Community Plan 2008-2018</i>
CP	Developer Contributions Plan
Cycling Strategy	<i>LMCC Cycling Strategy 2021</i>
DCP	Development Control Plan
DoP	NSW Department of Planning
DPI	Department of Primary Industries
ERP	Estimated Resident Population
EPA Act	Environmental Planning and Assessment Act
ibid	Ibid. (Latin, short for ibidem, meaning "the same place") is the term used to provide an endnote or footnote citation or reference for a source that was cited in the preceding endnote or footnote.
LDCG	<i>(Draft) Local Development Contributions Guidelines (2009)</i>
e.g.	For example
ERASS	Participation in Exercise, Recreation and Sport Survey
Ha	Hectares
kms	Kilometres
LHRS	<i>Lower Hunter Regional Strategy</i>
LEP	Local Environmental Plan
LGA	Local Government Act
LM	Lake Macquarie
LMCC	Lake Macquarie City Council
LM LCA	<i>Lake Macquarie Liveable Communities Assessment</i>
LM LGA	Lake Macquarie Local Government Area
NCC	Newcastle City Council
NPWS	NSW National Parks & Wildlife Service
NSW	New South Wales
PCYC	Police Citizens Youth Club
PD	Planning District, (refer to <b>Appendix 1</b> )
PoM	Plan of Management
Pop	Population
PSDM	Pool Service Delivery Model
Recreation Plan	<i>Lake Macquarie City Council Recreation Plan</i>
RL	Rugby League
RU	Rugby Union
SCA	State Conservation Area
SEIFA	Socio-economic Indices for Areas
SLS	Surf Life Saving
SLSF	Surf Life Saving Facility
SNAP	Sustainable Neighbourhood Action Plan
Social Plan	<i>Lake Macquarie Social Plan 2009-2014</i>
Sports Strategy	<i>Lake Macquarie City Council Sports Facility Strategy 2009-2014</i>
SRA	State Recreation Area
R&O/S	Recreation and Open Space

## APPENDIX 16 – References

### CHARLESTOWN & CENTRES

- Hunter New England Population Health and Hunter Regional Managers Network (2011) *Lake Macquarie Liveable Communities Assessment: Final Report*, Hunter New England Population Health
- Lake Macquarie City Council (2007) *Charlestown Master Plan*, December 2007
- Lake Macquarie City Council (2010) *Residential Population and Non-Residential Development Growth Forecasts: Development Contributions Plan Charlestown Contributions Catchment*, prepared by Don Fox Planning Consultants.
- NSW Department of Planning (2009) *Draft Centres Policy: Planning for Retail and Commercial Development*
- NSW Department of Planning (2011) *Draft Centre Design Guidelines*, Department of Planning Sydney

### COMMUNITY GARDENS

- Australian City Farms and Community Gardens Network (ACFCGN), Russ Grayson & Fiona Campbell
- Blue Mountains City Council (2010) *Guidelines for the Establishment of Community Gardens on Council owned and/or Managed Lands in Blue Mountains*
- City of Burnside (2008) *Community Gardens: Policy Directions for the City of Burnside*
- City of Subiaco (2009) *Community Garden Opportunities in the City of Subiaco*
- City of Sydney (2008) *Getting Started in Community Gardening*, City of Sydney, Sydney
- City of Sydney (2009) *Community Gardens Policy*
- Green Building Council of Australia (2012) *Green Star Communities: Places for People Pilot Submission Guideline*
- Hatherly, J. (ND) *Community Gardens: More than Urban Green Spaces*, Royal Botanic Gardens, Sydney
- Kogarah Municipal Council (2008) *Carss Park Community Garden: Gardeners Guidebook*
- Kogarah Municipal Council (2008) *Community Gardens: Policy Directions for Kogarah Municipal Council*
- Marrickville Council (2007) *Community Gardens Policy Directions for Marrickville Council*
- Nettle, C. (2010) *Growing Community: Starting and Nurturing Community Gardens*, Adelaide Health SA, Government of South Australia and Community and Neighbourhood Houses and Centres Association Inc.
- Thompson, S., Corkery, L., and Judd, B. (2007) *The Role of Community Gardens in Sustaining Healthy Communities*, Paper presented at the 2009 State of Australian Cities Conference.

### CYCLEWAYS AND SHARED PATHWAYS

- Austrorads Standards Australia (1999) *Guide to Traffic Engineering Practice Part 14 Bicycles*, p. 86.
- ACT Government (2012) *Territory & Municipal Services Annual Report 2011-2012 Volume 1*, p. 15.
- Department of Infrastructure and Transport (2012) *Walking, Riding and Access to Public Transport: Draft Report for Discussion*, P. 109.
- Lake Macquarie City Council (2012) *LMCC Cycling Strategy 2021: A place for all residents to enjoy the pleasure of cycling for all journeys*, prepared by GHD
- Lake Macquarie City Council (2012) *LMCC Cycling Strategy 2012-2022*, prepared by GHD.
- NSW Government (2004) *Planning Guidelines for Walking and Cycling*, Sydney
- Lake Macquarie City Council and Newcastle City Council (1996) *Newcastle and Lake Macquarie Bike Plan*, prepared by Cycle Planning Consulting Services
- NSW Government (2010) *New South Wales Bikeplan*
- Roads and Traffic Authority (2010) *Action for Bikes: BikePlan 2010 New South Wales*
- Wyong Shire Council (2010) *On-Road Bicycle and Shared Pathway Strategy*

### DOG EXERCISE AREAS

- Parks & Leisure Australia (2013) 'Fenced Dog Parks: What you probably don't know but need to know!', PLA Vic/Tas Seminar Series held on 19 March 2013 in Melbourne.
- Petcare Information and Advisory Service (2012) *How Do Companion Animals Help Improve the Lives of People?*
- Petcare Information and Advisory Service (2006) *National People and its Pet Survey Socially Responsible Pet Ownership in Australia: A Decade of Progress*, prepared by Professor Bruce Headey.
- Petcare Information & Advisory Service (1995) *Public Open Space and Dogs: A Design and Management Guide for Space Professionals and Local Government*, prepared by Harlock Jackson Pty Ltd Planning & Development Consultants
- Planning Institute of Australia (2012) *Pet Friendly Planning Award for 2012* <http://www.planning.org.au/whatson/pfpa>

### INDOOR RECREATION/LEISURE CENTRE

- Lake Macquarie City Council (N.D.) *Lake Macquarie Leisure Facilities: Provision of Aquatic & Dry Facilities within Lake Macquarie*

## LAKE MACQUARIE CITY COUNCIL

---

Lake Macquarie (2004) *Indoor Sport and Recreation Facilities Strategy 2004*

### LEGISLATION

Environmental Planning and Assessment Act 1979

NSW Companion Animals Act 1998 No. 87

Local Government Act 1993

### LMCC GUIDE

Lake Macquarie City Council (N.D.) *The Sustainable Eating Guide*

### LMCC POLICY

Lake Macquarie City Council (2009) *Community Gardens Policy*

Lake Macquarie City Council (2009) *Dog Exercise Areas Policy*

### MANAGEMENT PLAN / PLAN OF MANAGEMENT

Belmont Wetlands State Park Trust (2010) Final Plan of Management: *Belmont Wetlands State Park*, prepared by Andrews Neil.

Lake Macquarie City Council (2013) *Jewells Wetland Flood Study Draft Report April 2013*, prepared by BMT WBM Pty Ltd.

Lake Macquarie City Council (2011) *Plan of Management for Community Land*

Lake Macquarie City Council (1999) *Jewells Wetlands Catchment Management Strategy Proposed Plan of Management*, prepared by Connell Wagner.

Lake Macquarie City Council (2012) *Warners Bay Foreshore Master Plan Report: May 2012*, prepared by Jackson Teece, RPS, Mansfield Brodbeck.

### NETBALL

NSW Netball Association Ltd (2011) *Netball NSW: 2011 Annual Report*

### OPEN SPACE

Lake Macquarie City Council (2001) *Lake Macquarie Open Space Strategy*, prepared by URS

Lake Macquarie City Council (1996) *Lake Macquarie Open Space Plan: Volumes 1 and 2*, prepared by Clouston

Landcom (2008) *Open Space Design Guidelines* (for Landcom Projects)

Newcastle & Lake Macquarie City Council (1987) *Newcastle/Lake Macquarie Open Space Study*.

Redland City Council (2012) *Redland Open Space Strategy 2012 – 2026*.

Veal, A. J. (2008) *Open Space Planning Standards in Australia: in Search of Origins*, University of Technology, School of Leisure, Sport and Tourism, Sydney.

### PARK

The Trust for Public Land (2003) *The Excellent City Park System: What Makes it Great and How to Get There*, USA

Parks Victoria (2002) *Healthy Parks Healthy People: The Health Benefits of Contact with Nature in a Park Context*

Parks Forum (2008) *The Value of Parks: Inspire Refresh Conserve Protect Play*

Queensland Government Department of State Development Infrastructure and Planning *Parks 4 People* website

<http://www.dsdiqld.gov.au/parks4people>

### PLANNING

Commission for Architecture and the Built Environment (2003) *Is the Grass Greener?* United Kingdom, and other subsequent guidelines

Lake Macquarie City Council (2013) *Lake Macquarie City Lifestyle 2030 Strategy*

Lake Macquarie City Council (2008) *Ageing Population Plan 2008-2017*

Lake Macquarie City Council (2008) *Lake Macquarie Community Plan 2008 – 2018*

Lake Macquarie City Council (2013) *City of Lake Macquarie Community Strategic Plan 2013-2023*

Lake Macquarie City Council (2013) *City of Lake Macquarie Delivery Program 2013-2017*

Lake Macquarie City Council (2008) *Lake Macquarie Draft Social Plan 2009 – 2014 - D02053103*

Lake Macquarie City Council (2014) *Lake Macquarie Ageing Population Plan 2014-2017*

Lake Macquarie City Council (2004) *Section 94 Contributions Plan City Wide 2004* (as amended)

Lake Macquarie City Council (1999) *Jewells Wetlands Catchment Management Strategy Proposed Plan of Management*

Local Government Association of NSW and Shires Association of NSW (2004) *Planning the Local Government Response to Ageing and Place*.

NSW Department of Planning (2006) *Lower Hunter Regional Strategy 2006-31*, NSW Government

NSW Department of Planning (2009) *Draft Centres Policy: Planning for Retail and Commercial Development*  
 NSW Department of Planning (2009) *Draft Development Contribution Guidelines*  
 NSW Department of Planning (N.D.) *State Plan Summary: A New Direction for NSW*  
 NSW Department of Premier and Cabinet (2011) *NSW 2021: A plan to make NSW number one*  
 NSW Government (2011) *Draft Centres Design Guidelines*  
 NSW Growth Centres Commission (2006) *Growth Centres Development Code*

## **PLAYGROUND**

AS 1924.1 - (1981) *Playground Equipment for Parks, Schools and Domestic Use*  
 AS 1924.2 - (1981) *Playground Design and Construction, Safety aspects*  
 AS 4685 - (2004) *Playground Equipment (Parts 1-6)*  
 AS/NZS 4422 - (1996) *Playground Surfacing: Specifications, requirements & test methods*  
 AS/NZS 4486.1 - (1997) *Playgrounds and Playground Equipment - Development, installation, inspection, maintenance and operation*  
 AS 1428.1-4 - (1997) *Design for Access and Mobility Parts (1-4)*  
 AS/NZS 4360 - (2004) *Risk Management*.  
 Bishop, K. (2001) *Promoting the Value of Play: Designing Sensory Play Environments for Children with Special Needs*, The Playgrounds and Recreation Association of Victoria.  
 Corkery, L. (2004) *Play Environments in the Sustainable Community*, University of New South Wales.  
 Community Activities Network NSW (1987) *Playspace: Handbook for Planning Outdoor Play Environments*, written and illustrated by Linda Corkery.  
 Jeavons, M. (1988) *Promoting the Value of Play: Play Areas for Children with Disabilities Design Details*, The Playgrounds and Recreation Association of Victoria Inc.  
 Kidsafe and NSW Health Department (1998) *Playground Safety for Local Government*.  
 State Health Publication No. (IPU) 9701 20.  
 Kidsafe NSW Playground Advisory Unit  
 Matheson, J. (2001) *Play and the learning process*, The Playgrounds and Recreation Association of Victoria Inc.  
 National Program for Playground Safety (NPPS) (2005) *Age-appropriate Design Guidelines for Playgrounds*, <http://www.playgroundsafety.org/safety>  
 NSW Commission for Children and Young People. <http://www.kids.nsw.gov.au>.  
 Playgrounds and Recreation Association of Victoria Inc (PRAV) (2001) *Play Area Development Policy for Local Government in Victoria*.  
 Playground and Recreation Association of Victoria (PRAV) (2000) *Promoting the Value of Play: Young People and Use of Public Open Space*.  
 Playground and Recreation Association of Victoria (1999) *Promoting the Value of Play: Play Frees Language*.  
 Playground and Recreation Association of Victoria (2007) *The Good Play Space Guide: I can play too*

## **RECREATION**

Clark R. N. and Stankey, G. H. (1979) *The Recreation Opportunity Spectrum: A Framework for Planning, Management, and Research*  
 Department of Planning (1992) *Outdoor Recreation and Open Space Guidelines for Local Government*  
 Lake Macquarie City Council and Newcastle City Council (1999) *Implementation Plan for the Fernleigh Track*, prepared by Manidis Roberts Consultants.  
 Lake Macquarie City Council (1998) *Lake Macquarie City Council Recreation Plan: Volume 1*, prepared by H M Leisure Planning Pty Ltd  
 Lake Macquarie City Council (1998) *Lake Macquarie City Council Recreation Plan: Volume 2*, prepared by H M Leisure Planning Pty Ltd  
 NSW Department of Planning (2010) *Recreation and Open Space Planning Guidelines for Local Government*  
 NSW Department of Local Government (2006) *Creating Active Communities: Physical Activity Guidelines for Local Council*  
 South Australian Department of Recreation & Sport (1990) *Recreation Planning: A Manual for Local Government, Second Edition*, prepared by Dr K L Marriott  
 Sport and Recreation Tasmania (2010) *Planning for the Provision of Leisure and Recreation Opportunities in Australia*, Department of Economic Development, Tourism and the Arts, Hobart prepared by H M Leisure Planning – D02301081  
 Hornsby Shire Council (ND) *Unstructured Recreation Strategy Volume 1*, prepared by @leisure.



## RECREATIONAL TRAILS AND MOUNTAIN BIKE

Department of Environment, Climate Change and Water NSW (2009) *Nature-based outdoor recreation demand and preferences quantitative research findings*, prepared by Ipsos-Eureka Social Research Institute.

Department of Infrastructure, Planning and Natural Resources (2005) *Sydney Metropolitan – Regional Recreation Trails Framework Final Report*, prepared by Hassel Pty Ltd.

Government of South Australia (N.D.) *Sustainable Recreation Trails: Guidelines for the Planning, Design, Construction and Maintenance of Recreational Trails in South Australia*.

Hornsby Shire Council (2011) *Hornsby Mountain Bike Trail Plan and Implementation*, Executive Manager's Report No. ENV28/11, council meeting 20 July 2011.

International Mountain Biking Association (IMBA) (2004) *Trail Solutions: IMBA's Guide to Building Sweet Singletrack*, IMBA.

Logan City Council (2010) *Recreation Trails 2010-2020*, Logan City Council.

Office of Environment and Heritage (2011) *Sustainable Mountain Bike Strategy*

Office for Recreation, Sport and Racing (2001) *State Mountain Bike Plan for South Australia*

Parker, T. S. (2004) *Natural Surface Trail Design: Physical and Human Design Essentials of Sustainable, Enjoyable Trails*, Natureshape

Sunshine Coast Council (2011) *A Guide to Mountain Bike Tracks on the Sunshine Coast*

Sunshine Coast Council (2012) *Sunshine Coast Recreational Trail Plan 2012*

Tails SA (ND) *South Australian Trails: Your Guide to Walking, Cycling, Horse Riding, Diving, Canoeing*, [www.southaustraliantrails.com](http://www.southaustraliantrails.com)

Trails SA (ND) *Sustainable Recreational Trails: Guidelines for the Planning, Design, Construction and Maintenance of Recreational Trails in South Australia*,

<http://www.naracoortelucindale.sa.gov.au/webdata/resources/files/TrailManualsml1.pdf>

Warringah Council (2011) *Draft Mountain Biking in Warringah: Research and Directions*

Warringah Council (2007) *Warringah Regional Multiple Use Trail Strategy*

## RECREATIONAL TRAILS AND MOUNTAIN BIKE

Department of Environment, Climate Change and Water NSW (2009) *Nature-based outdoor recreation demand and preferences quantitative research findings*, prepared by Ipsos-Eureka Social Research Institute.

Department of Infrastructure, Planning and Natural Resources (2005) *Sydney Metropolitan – Regional Recreation Trails Framework Final Report*, prepared by Hassel Pty Ltd.

Hornsby Shire Council (2011) *Hornsby Mountain Bike Trail Plan and Implementation*, Executive Manager's Report No. ENV28/11, council meeting 20 July 2011.

International Mountain Biking Association (IMBA) (2004) *Trail Solutions: IMBA's Guide to Building Sweet Singletrack*, IMBA.

Logan City Council (2010) *Recreation Trails 2010-2020*, Logan City Council.

Office of Environment and Heritage (2011) *Sustainable Mountain Bike Strategy*

Office for Recreation, Sport and Racing (2001) *State Mountain Bike Plan for South Australia*

Parker, T. S. (2004) *Natural Surface Trail Design: Physical and Human Design Essentials of Sustainable, Enjoyable Trails*, Natureshape

Sunshine Coast Council (2011) *A Guide to Mountain Bike Tracks on the Sunshine Coast*

Sunshine Coast Council (2012) *Sunshine Coast Recreational Trail Plan 2012*

Tails SA (ND) *South Australian Trails: Your Guide to Walking, Cycling, Horse Riding, Diving, Canoeing*, [www.southaustraliantrails.com](http://www.southaustraliantrails.com)

Trails SA (ND) *Sustainable Recreational Trails: Guidelines for the Planning, Design, Construction and Maintenance of Recreational Trails in South Australia*,

<http://www.naracoortelucindale.sa.gov.au/webdata/resources/files/TrailManualsml1.pdf>

Warringah Council (2011) *Draft Mountain Biking in Warringah: Research and Directions*

Warringah Council (2007) *Warringah Regional Multiple Use Trail Strategy*

## SKATE PARK & BMX

Mornington Peninsula Shire (2008) *Skate/BMX Strategy Volume 1 Strategies and Actions*, prepared by @leisure.

Sport and Recreation Victoria (2001) *The Skate Facility Guide*

Sport and Recreation Victoria (1990) *Skateboard Facility Planning: A Manual for Local Government*

## SPORT

Daly, J. (2000) *Recreation and Sport Planning and Design*, Second Edition, Human Kinetics, South Australia

## LAKE MACQUARIE CITY COUNCIL

---

Daly, J. (1995) *Recreation and Sport Planning and Design: A Guidelines Manual*

Lake Macquarie City Council (2008) *Sports Facility Audit*

Lake Macquarie City Council (2010) *Sports Facility Strategy 2009-2014*

NSW Sport and Recreation Advisory Council and NSW Sport and Recreation (2007) *Game Plan 2012 NSW Sport & Recreation Industry Five Year Plan: Shaping our Future for a Sustainable Community*

NSW Sports Federation Inc (2011) *NSW Sports Federation Policy Statement 2011*

### SURVEY

Australian Bureau Statistics (2002) *Directory of Culture and Leisure Statistics*

Australian Sports Commission (2010) *Participation in Exercise, Recreation and Sport: Annual Report 2010 State and Territories Tables for NSW*,

[http://www.ausport.gov.au/information/casro/ERASS/exercise\\_recreation\\_and\\_sport\\_survey\\_past\\_reports/erass\\_2010](http://www.ausport.gov.au/information/casro/ERASS/exercise_recreation_and_sport_survey_past_reports/erass_2010)

Bureau of Transport Statistics (2010) *2006 Journey to Work Data Set*

Lake Macquarie City Council (2012) *Lake Macquarie City Council Community Research: March 2012* prepared by Micromex Research.

### SUSTAINABLE ACTION PLANS

Belmont Sustainable Neighbourhood Group (2012) *Belmont Sustainable Action Plan*

Charlestown East Sustainable Neighbourhood Group (2011) *Charlestown East Sustainable Neighbourhood Action Plan*

Dudley Sustainable Neighbourhood Group (ND) *Dudley Sustainable Neighbourhood Action Plan*

Valentine Sustainable Neighbourhood Group (2011) *Valentine Sustainable Neighbourhood Action Plan*

Woodrising, Booragul and Marmong Point Sustainable Neighbourhood Group (2011) *Woodrising, Booragul and Marmong Point Sustainable Neighbourhood Action Plan*

### SWIMMING CENTRES

Lake Macquarie City Council (2011) *Private and Public Partnership of Swim Centres* (presentation to the executive)

Lake Macquarie City Council (2010) *Hunter Sports Centre Business Feasibility Study: Final Report*, prepared by Coffey Commercial Advisory Pty Ltd

Lake Macquarie City Council (2008) *Lake Macquarie City Council Pool Service Delivery Model*, prepared by Strategic Leisure Pty Ltd - D02069139

Lake Macquarie City Council (2004) *Indoor Sport and Recreation Facilities Strategy*, prepared by LMCC

Lake Macquarie City Council (1999) *Charlestown Swimming Centre Redevelopment Plan & Financial Review*, prepared by Prior & Cheney Architects & H M Leisure Planning Pty Ltd.

Lake Macquarie City Council (1994) *City of Lake Macquarie: Integrated Leisure Centre Feasibility Study*, prepared by LRM Australia Pty Ltd (Leisure Management Consultants)

Lake Macquarie City Council (1994) *Operational Review and Management Planning Study City of Lake Macquarie Swimming Centres*, prepared by LRM Australia Pty Ltd.

Lake Macquarie City Council (1998/9) *Feasibility Study of Charlestown Pool*, prepared by Prior and Cheney

Lake Macquarie City Council (1989) *City of Lake Macquarie: Swimming Facilities Assessment and Strategic Opportunities for the future*, prepared by LRM Australia Pty Ltd.

Lake Macquarie City Council (ND) *Lake Macquarie Leisure Facilities: Provision of Aquatic & Dry Facilities within Lake Macquarie*

Sydney Water (2011) *Best Practice Guidelines for Water Management in Aquatic Leisure Centres*

### TENNIS

Tennis Australia (2011) *Tennis Strategy T-16 2012-2016* (released to the states in Dec 2011)

Tennis Australia (2011) *Tennis 2020: Facility Development and Management Framework for Australian Tennis*

Tennis NSW (2010) *Tennis NSW Strategic Plan 2010-2015: From Grassroots to Grand Slam*

??? (2012) *Draft Regional Tennis Strategy - Gosford – Newcastle - Wyong*

Lake Macquarie City Council (ND) *Draft Tennis Strategy*

### WALKING

Austroroads Standards Australia (1999) *Guide to Traffic Engineering Practices, Part 13: Pedestrians*.

Department of Infrastructure and Transport (2012) *Walking, Riding and Access to Public Transport*, Commonwealth of Australia.

Department for Planning and Infrastructure (2001) *Walk there today: The Western Australian Walking Guide 2001-2001*

**LAKE MACQUARIE CITY COUNCIL**

---

Standards Australia (2001) *AS 2156.2 Walking Tracks Part 1: Classification and signage*

Standards Australia (2001) *AS 2156.1 Walking Tracks Part 2: Infrastructure design*

Sunshine Coast Council (N.D.) *A Guide to Walking Tracks on the Sunshine Coast*

NSW Department of Sport and Recreation (2002) *Active Community Guide Facts on Walking*

NSW Department of Local Government (2001) *Creating Active Communities: Physical Activity Guidelines for Local Councils*