The preliminary estimated resident population of Cairns Regional Council (hereafter referred to as Cairns) at 30 June 2013 was 157,100 persons (Source: ABS 3218.0). This is expected to increase to between 180,500 (low series) and 192,700 (high series) persons by 2021, representing population growth over the 2012–2021 period of between 23,400 (low series) and 35,600 (high series) (Source: Queensland Government Population Projections, 2013 edition).

Land stock

The total area of broadhectare land available in Cairns for residential development is 2,405 hectares, representing only a very small percentage of the total land area (Tables 1 and 2).

Broadhectare land is defined as the amount of unconstrained residential land under the current planning scheme including existing residential developments approved by council. For this study, land parcels are excluded that yield less than three dwellings.

Broadhectare land can be further classified as follows:

- urban residential broadhectare land — 2,120 hectares
- rural residential broadhectare land — 285 hectares.

The broadhectare study refers to ‘rural residential’ development as yielding three dwellings or less per hectare, or as otherwise described in the planning scheme. Development at ‘standard urban density’ and ‘higher density’ is classified as yielding between 4 to 20 dwellings and greater than 20 dwellings per hectare respectively.
Dwelling yields

Table 2 shows 'theoretical dwelling yield' (the potential number of dwellings that could be constructed based on the identified land stock) and 'expected dwelling yield' (which takes into account factors affecting development of land such as ownership and land fragmentation).

The main points from Table 2 are:

- Broadhectare land is likely to yield approximately 25,300 dwellings.
- Development at higher density accounts for 11 per cent of the total expected dwelling yield.
- Development at standard urban density will account for almost 88 per cent of the total expected dwelling yield.

Stock composition

The broadhectare stock in Cairns is contained primarily within land parcels greater than 10 hectare in area (Table 3). For all broadhectare parcels, the difference between the overall parcel area (4,323 hectares) and the area available for development (2,405 hectares) indicates that some parcels are affected by physical or environmental constraints. The main points from Table 3 include:

- Residential stock is contained within 430 land parcels.
- Parcels less than or equal to 1.2 hectares account for over 37 per cent of all parcels.
- Parcels sized 10 hectares or more account for almost 76 per cent of the expected total dwelling yield from broadhectare land.

Table 3 Cairns (R) broadhectare stock composition (a)

<table>
<thead>
<tr>
<th>Parcel size categories (hectares)</th>
<th>Land parcels (number)</th>
<th>Total area of parcels (hectares)</th>
<th>Broadhectare area (hectares)</th>
<th>Expected dwelling yield (number)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Urban residential (b)</td>
<td>Rural residential (b)</td>
</tr>
<tr>
<td>&lt;= 1.2</td>
<td>161</td>
<td>92</td>
<td>87</td>
<td>0</td>
</tr>
<tr>
<td>1.3–2.0</td>
<td>57</td>
<td>93</td>
<td>69</td>
<td>9</td>
</tr>
<tr>
<td>2.1–4.9</td>
<td>58</td>
<td>185</td>
<td>120</td>
<td>26</td>
</tr>
<tr>
<td>5.0–9.9</td>
<td>55</td>
<td>405</td>
<td>263</td>
<td>57</td>
</tr>
<tr>
<td>10.0+</td>
<td>99</td>
<td>3,548</td>
<td>1,583</td>
<td>193</td>
</tr>
<tr>
<td>Total</td>
<td>430</td>
<td>4,323</td>
<td>2,120</td>
<td>285</td>
</tr>
</tbody>
</table>

(a) Components may not sum exactly to totals due to rounding.
(b) Includes dwellings at higher and standard urban densities.
Population capacity

Average household size for occupied private dwellings in Cairns at the time of the 2011 Census was 2.8 and 1.9 persons for houses and attached dwellings respectively. Table 4 shows a range of possible population yields for the total identified broadhectare stock in each density category by a range of household sizes. The household sizes current at the time of the 2011 Census are highlighted.

The main finding from Table 4 is that, depending on average household size, land from broadhectare development could accommodate between 58,300 and 78,600 persons. Further development in existing residential areas, where the parcel size is less than 2,500 m², could also accommodate additional population.

Table 4 Cairns (R) population yields based on a range of household sizes (persons) (a)

<table>
<thead>
<tr>
<th>Development type</th>
<th>Number of dwellings</th>
<th>Household size (average persons per household)</th>
<th>Possible population yield</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Rural residential</td>
<td>344</td>
<td>826</td>
<td>895</td>
</tr>
<tr>
<td>Standard urban density</td>
<td>22,188</td>
<td>53,251</td>
<td>57,689</td>
</tr>
<tr>
<td>Higher density residential</td>
<td>2,814</td>
<td>4,221</td>
<td>4,784</td>
</tr>
<tr>
<td>Total</td>
<td>25,346</td>
<td>58,298</td>
<td>63,368</td>
</tr>
</tbody>
</table>

(a) Count of all persons enumerated in the dwelling on census night, including visitors from within Australia. Excludes usual residents who were temporarily absent on census night.

Total potential dwelling yield

Land ownership and fragmentation of land are potential constraints to residential development, and adjustments have been made to the broadhectare stock by applying potential development rates to land parcels. Furthermore, existing vacant residential land stock below 2,500 m² has been added to the broadhectare supply. Broadhectare residential land supply based on these components indicates a total potential dwelling yield of approximately 26,800 dwellings (See Table 5).

It is important to note that this dwelling yield does not include dwellings that would have been achieved through infill and redevelopment of smaller parcels below the broadhectare model threshold.

Dwelling demand

Evidently, not all future dwelling demand will be met through development of broadhectare land. Nevertheless, an indicator of the adequacy of supply of residential land (broadhectare and vacant lots) can be calculated by comparing the total supply as indicated above with future demand.

To make an assessment of future demand and determine whether there is adequate supply of residential land, three scenarios of dwelling projections have been used based on the Queensland Government’s population projection series — low, medium and high. Figure 1 and Table 5 show, based on these scenarios, the amount of land supply in terms of years remaining.
Table 5 also shows that developed land parcels that are vacant account for approximately 6 per cent of the total potential dwelling yield from broadhectare land.

### Table 5 Cairns (R) broadhectare supply scenarios

<table>
<thead>
<tr>
<th>Dwelling production scenario (a)</th>
<th>Demand for residential lots</th>
<th>Supply - Stock of residential lots</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dwellings required to 2036 (b)</td>
<td>Broadhectare dwelling yield (c)</td>
</tr>
<tr>
<td>Low trend</td>
<td>33,990</td>
<td>25,346</td>
</tr>
<tr>
<td>Medium trend</td>
<td>39,942</td>
<td>25,346</td>
</tr>
<tr>
<td>High trend</td>
<td>46,285</td>
<td>25,346</td>
</tr>
</tbody>
</table>

(a) Based on dwelling projection levels produced in 2013.
(b) Dwellings required to 2036 based on Queensland Government's household and dwelling projections, 2013 edition.
(c) Adjusted to take into account the propensity of development.
(d) Estimate of vacant residential parcels at August 2014.
(e) Supply of residential lots.
(f) Illustrative only, if no development occurs outside of broadhectare land.

### Conclusion — Cairns Regional Council

The study has estimated that the total area of broadhectare land available for residential development is 2,405 hectares. If this land were fully developed it has the potential to yield approximately 25,300 dwellings and accommodate 68,400 persons, using current average household sizes.

Based on current medium series household projections and the expected broadhectare dwelling yield, the available residential land stock indicates 15 years of supply.
Other map features

- Local government boundaries
- Major roads

Legend

Broadhectare land

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Urban residential</th>
<th>Rural residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 2 years</td>
<td>327ha</td>
<td>60ha</td>
</tr>
<tr>
<td>2 – 5 years</td>
<td>1,100ha</td>
<td>10ha</td>
</tr>
<tr>
<td>5 – 10 years</td>
<td>131ha</td>
<td>10ha</td>
</tr>
<tr>
<td>10+ years</td>
<td>552ha</td>
<td>7ha</td>
</tr>
<tr>
<td>Not specified</td>
<td>10ha</td>
<td>14ha</td>
</tr>
</tbody>
</table>

Legend

This map indicates the areas which are suitable and potentially available for residential development. Timeframes are indicative only. This map forms part of the broadhectare study and is to be read in conjunction with the main text of the profile.

Notes

This map indicates the areas which are suitable and potentially available for residential development. This map does not commit council to approve developments within these identified areas or within the indicated timeframes.

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Legend

Broadhectare land
Timeframe

0 – 2 years
2 – 5 years
5 – 10 years
10+ years
Not specified

Urban
residential

Rural
residential

Legend

Major roads

Local government boundaries

Overview

Notes

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