

Broadhectare study 2015 profile

Whitsunday Regional Council

Introduction

The Broadhectare study identifies the location and quantifies the area, timing of development and dwelling yield of larger land parcels to house future population. The land identified is known as broadhectare and represents unconstrained residential land supply under the planning scheme and development approvals.

Land stock

The total area of broadhectare available in Whitsunday Regional Council (hereafter referred to as Whitsunday) is 2,556 hectares, representing a small percentage of the total land area of Whitsunday (Tables 1 and 2).

Broadhectare can be further classified as follows:

- urban residential broadhectare — 1,359 hectares
- rural residential broadhectare — 1,197 hectares.

The study refers to 'rural residential' development as yielding three dwellings or less per hectare, or as otherwise described in the planning scheme.

Urban development at 'standard urban density' or 'higher density' is classified as yielding between 4 to 20 dwellings and greater than 20 dwellings per hectare respectively.

Dwelling yield

Table 2 shows 'theoretical dwelling yield' (the potential number of dwellings that could be built 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 is expected to yield approximately 11,700 dwellings.
- Development at standard urban density accounts for 89 per cent of the total expected dwelling yield.
- Rural residential development is minor in terms of contribution to overall dwelling density.



Table 1 Whitsunday (R) land use profile

Land use category	Area	% of total
Suitable for urban residential broadhectare development	1,359 ha	0.06%
Suitable for rural residential broadhectare development	1,197 ha	0.05%
Assumed existing urban residential use	1,072 ha	0.04%
Assumed existing lower density residential use	4,058 ha	0.17%
Roads, watercourses and railway casements	66,469 ha	2.78%
Rural/Green/Open space	2,310,778 ha	96.80%
Balance area ^(a)	2,182 ha	0.09%

(a) Includes all land uses other than residential.

Table 2 Whitsunday (R) broadhectare stock and dwelling yield ^(a)

Timeframe	Broadhectare stock (hectares)				Theoretical dwelling yield (dwellings) ^(b)	Expected dwelling yield (dwellings) ^(c)			
	Higher density	Standard urban density	Rural density	Total stock		Higher density	Standard urban density	Rural density	Total dwellings
0-<2 years	1	127	80	208	1,081	30	931	120	1,081
2-<5 years	1	113	168	282	1,341	20	1,128	116	1,264
5-<10 years	0	293	406	700	3,404	5	2,864	212	3,081
10+ years	0	117	9	126	1,370	0	1,211	10	1,221
Not specified	0	707	535	1,242	5,881	5	4,280	773	5,058
Total	3	1,356	1,197	2,556	13,077	60	10,415	1,231	11,705

(a) Components may not sum exactly to totals due to rounding.

(b) Yield if all broadhectare stock is developed irrespective of ownership and/or fragmentation.

(c) Yield has been reduced to account for likelihood of development due to factors such as ownership and fragmentation.

Stock composition

The broadhectare stock in Whitsunday is located primarily within land parcels greater than 10 hectares in area (Table 3). For all broadhectare parcels, the difference between the overall parcel area (3,798 hectares) and the area available for development (2,556 hectares) indicates that some parcels are affected by physical or environmental constraints. The main points from Table 3 include:

- Broadhectare stock is contained within 508 land parcels.
- Parcels between 1.3 and 2 hectares size account for 37 per cent of all parcels.
- Parcels sized 10 hectares or more account for 70 per cent of the expected total dwelling yield from broadhectare land.

Table 3 Whitsunday (R) broadhectare stock composition ^(a)

Parcel size categories (hectares)	Land parcels (number)	Total area of parcels (hectares)	Broadhectare area (hectares)			Expected dwelling yield (number)		
			Urban residential ^(b)	Rural residential	Total stock	Urban residential ^(b)	Rural residential	Total dwellings
<= 1.2	98	53	47	0	47	354	0	354
1.3-2.0	187	350	43	284	327	300	381	681
2.1-4.9	140	438	133	243	376	1,239	393	1,632
5.0-9.9	33	220	90	88	178	783	111	895
10.0+	50	2,738	1,045	582	1,628	7,798	345	8,143
Total	508	3,798	1,359	1,197	2,556	10,474	1,231	11,705

(a) Components may not sum exactly to totals due to rounding.

(b) Includes dwellings at higher and standard urban densities.

Population capacity

The preliminary estimated resident population of Whitsunday at 30 June 2014 was 34,200 persons (Source: ABS 3218.0). This is expected to increase to between 40,700 (low series) and 45,800 (high series) persons by 2026, representing population growth over the 2014-2026 period of between 6,500 (low series) and 11,600 (high series) (Source: *Queensland Government Population Projections*, 2013 edition).

The average household size for occupied private dwellings in Whitsunday at the time of the 2011 Census was 2.8 and 1.9 persons for houses and attached dwellings respectively. Table 4 shows that depending on average household size, broadhectare development could accommodate between 25,700 and 35,100 persons. Further development in existing residential areas, where the parcel size is less than 2,500 m², could also accommodate additional population.

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

Development type	Number of dwellings	Household size (average persons per household)				
		2.2	2.4	2.6	2.8	3.0
Possible population yield						
Rural residential	1,231	2,708	2,954	3,200	3,446	3,692
Standard urban density residential	10,415	22,912	24,995	27,078	29,161	31,244
Household size (average persons per household)						
Possible population yield						
Higher density residential	60	89	101	113	125	137
Total	11,705	25,710	28,051	30,392	32,733	35,074

(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 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 13,300 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 of 2500 m².

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.

Figure 1 Whitsunday (R) projected demand for land stock based on dwelling projections

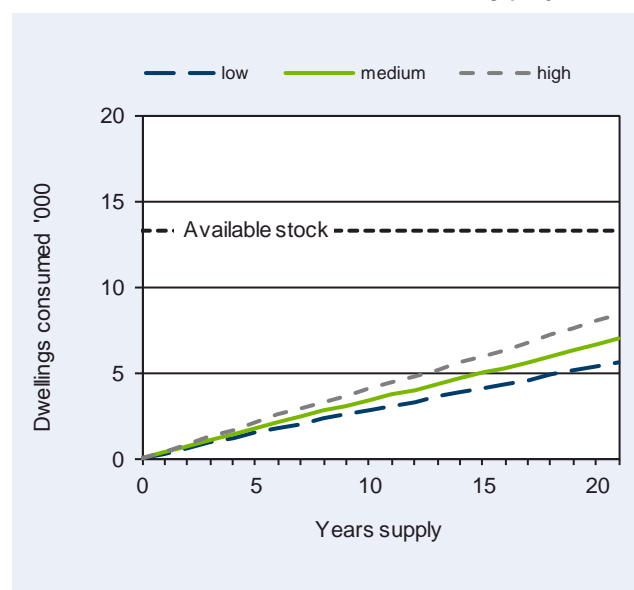


Table 5 also shows that developed land parcels that are vacant account for approximately 12 per cent of the total potential dwelling yield.

Table 5 Whitsunday (R) broadhectare supply scenarios

Dwelling production scenario ^(a)	Demand for residential lots		Supply - Stock of residential lots		
	Dwellings required to 2036 ^(b)	Broadhectare dwelling yield ^(c)	Existing vacant land parcels ^(d)	Total potential dwellings ^(e)	Years supply ^(f)
Low trend	5,618	11,705	1,561	13,266	n.a
Medium trend	6,937	11,705	1,561	13,266	n.a
High trend	8,396	11,705	1,561	13,266	n.a

(a) Based on dwelling projection levels produced in 2013.

(b) Dwellings required to 2036 based on Queensland Government household and dwelling projections, 2013 edition.

(c) Adjusted to take into account the propensity of development.

(d) Estimate of vacant residential parcels at January 2015.

(e) Supply of residential lots.

(f) Illustrative only, if no development occurs outside of broadhectare land.

n.a Supply beyond projection range.

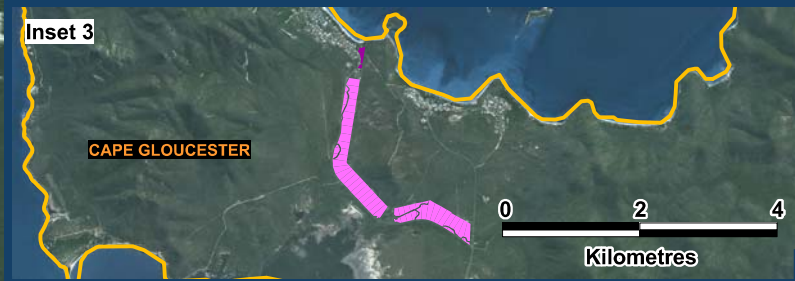
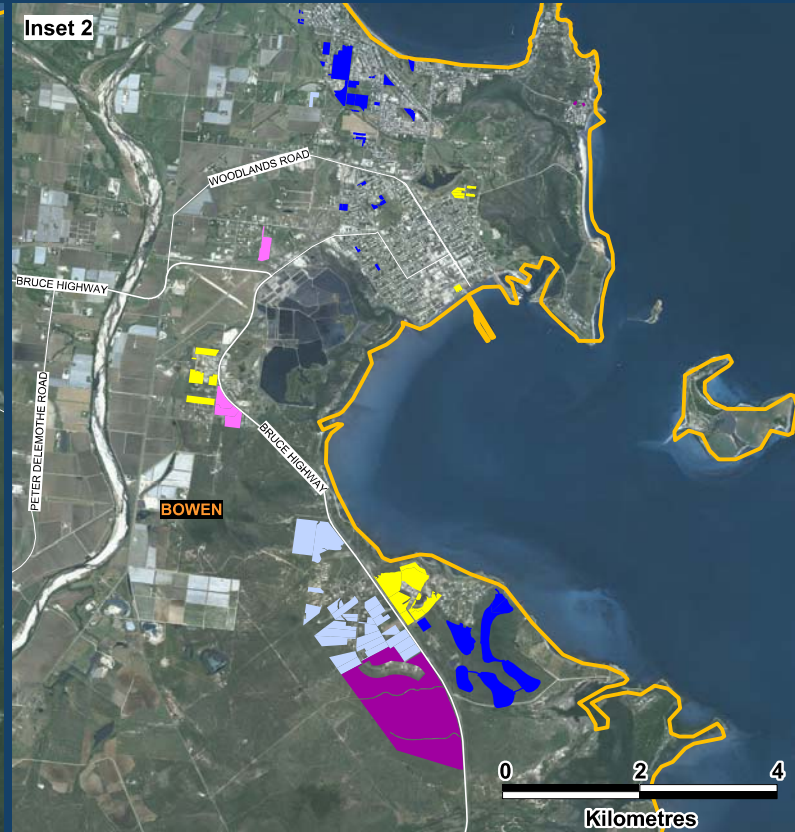
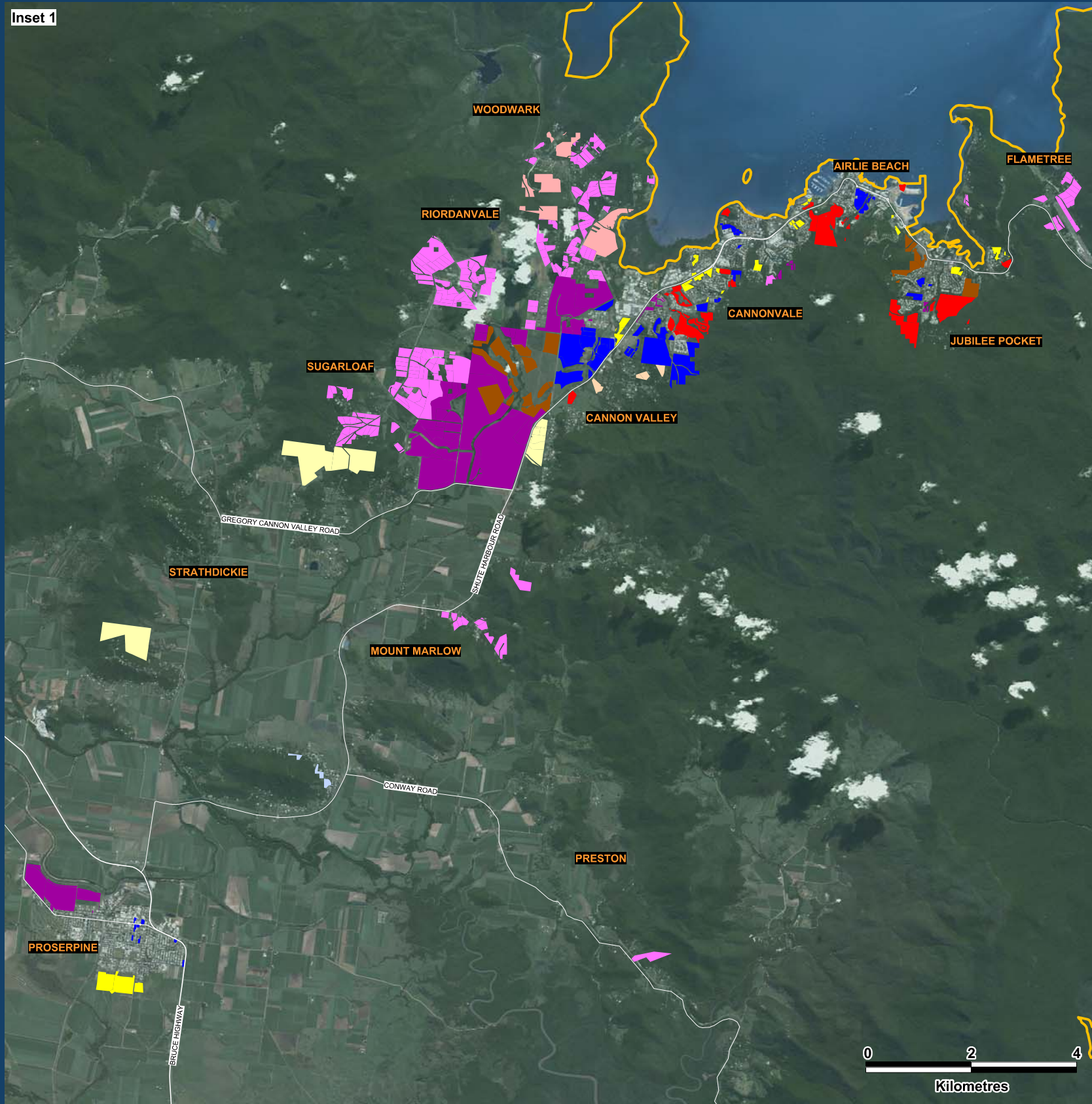
Conclusion — Whitsunday Regional Council

The study has estimated that the total area of broadhectare available for residential development is 2,556 hectares. If this land were fully developed it has the potential to yield approximately 11,700 dwellings and accommodate 30,400 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 that supply is beyond the projection range.



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Legend

Broadhectare land

Timeframe	Urban residential	Rural residential
0 – 2 years	128ha	80ha
2 – 5 years	114ha	168ha
5 – 10 years	293ha	406ha
10+ years	117ha	9ha
Not specified	707ha	535ha

Land suitable and potentially available for residential development. Timeframes are indicative only.

Other map features

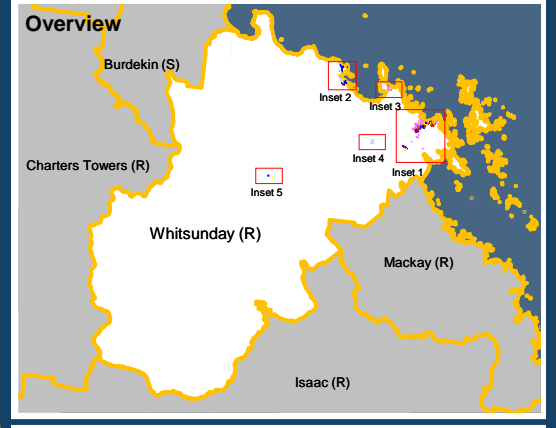
- Local government boundaries
- Major roads

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. This map forms part of the broadhectare study and is to be read in conjunction with the main text of the profile.

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