Broadhectare study 2014 profile

Douglas Shire

Introduction

The preliminary estimated resident population of Douglas Shire (hereafter referred to as Douglas) at 30 June 2013 was 11,500 persons (Source: ABS 3218.0). This is expected to increase to between 12,600 (low series) and 13,200 (high series) persons by 2021, representing population growth over the 2012–2021 period of between 1,100 (low series) and 1,700 (high series) (Source: *Queensland Government Population Projections*, 2013 edition).

Land stock

The total area of broadhectare land available in Douglas for residential development is 314 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 — 225 hectares
- rural residential broadhectare land — 89 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.

Table 1 Douglas (S) land use profile

Land use category	Area	% of total
Suitable for urban residential broadhectare development	225 ha	0.09%
Suitable for rural residential broadhectare development	89 ha	0.04%
Assumed existing urban residential use	366 ha	0.15%
Assumed existing lower density residential use	1,798 ha	0.74%
Roads, watercourses and railway casements	5,870 ha	2.41%
Rural/Green/Open space	231,063 ha	94.86%
Balance area [a]	4,168 ha	1.71%

(a) Includes all land uses other than residential.

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).

Table 2 Douglas (S) broadhectare stock and dwelling yield [a]

	Broadhectare stock (hectares)				Theoretical	Expected dwelling yield (dwellings) [c]			
Timeframe	Higher density	Standard urban density	Rural density	Total stock	dwelling yield (dwellings) [b]	Higher density	Standard urban density	Rural density	Total dwellings
0–<2 years	0	12	0	12	122	0	122	0	122
2–<5 years	0	81	0	81	587	0	433	0	433
5–<10 years	0	68	0	68	438	0	288	0	288
10+ years	0	58	0	58	377	0	152	0	152
Not specified	0	5	89	94	136	0	18	39	58
Total	**0**	**225**	**89**	**314**	**1,660**	**0**	**1,013**	**39**	**1,052**

(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.

The main points from Table 2 are:

- Broadhectare land is likely to yield approximately 1,100 dwellings.
- There is no development at higher urban density.
- Development at standard urban density accounts for over 96 per cent of the total expected dwelling yield.

Stock composition

The broadhectare stock in Douglas is contained primarily within land parcels greater than 10 hectares in area (Table 3). For all broadhectare parcels, the difference between the overall parcel area (484 hectares) and the area available for development (314 hectares) indicates that some parcels are affected by physical or environmental constraints. The main points from Table 3 include:

- Residential stock is contained within 123 land parcels.
- Parcels less than or equal to 1.2 hectares account for over 50 per cent of all parcels.
- Parcels sized 10 hectares or more account for over 56 per cent of the expected total dwelling yield from broadhectare land.

Table 3 Douglas (S) 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	62	35	34	0	34	65	0	65
1.3–2.0	31	49	32	17	48	94	21	115
2.1–4.9	13	41	24	16	40	114	13	127
5.0–9.9	5	33	30	0	30	153	0	153
10.0+	12	326	105	56	162	587	5	593
Total	**123**	**484**	**225**	**89**	**314**	**1,013**	**39**	**1,052**

(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 Douglas at the time of the 2011 Census was 2.5 and 1.8 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 2,200 and 3,100 persons. Further development in existing residential areas, where the parcel size is less than 2,500 m^2, could also accommodate additional population.

Table 4 Douglas (S) population yields based on a range of household sizes (persons) [(a)]

Development type	Number of dwellings	Household size (average persons per household)				
		2.1	2.3	2.5	2.7	2.9
		Possible population yield				
Rural residential	39	83	90	98	106	114
Standard urban density residential	1,013	2,128	2,330	2,533	2,736	2,938
		Household size (average persons per household)				
		1.4	1.6	1.8	2.0	2.2
		Possible population yield				
Higher density residential	0	0	0	0	0	0
Total	**1,052**	**2,210**	**2,421**	**2,631**	**2,842**	**3,052**

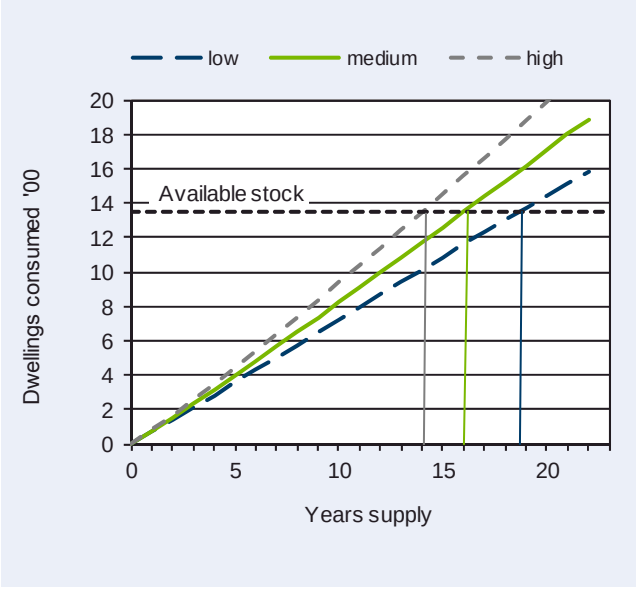
(a) Count of all persons enumerated in the dwelling on census night, including visitors from within Australia. Excludes usual residents who were temporarily absent on census night.

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 m^2, has been added to the broadhectare supply. Broadhectare residential land supply based on these components indicates a total potential dwelling yield of approximately 1,400 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.

Figure 1 Douglas (S) projected demand for land stock based on dwelling projections



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 22 per cent of the total potential dwelling yield from broadhectare land.

Table 5 Douglas (S) 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	1,586	1,052	300	1,352	19
Medium trend	1,887	1,052	300	1,352	16
High trend	2,212	1,052	300	1,352	14

(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 — Douglas Shire

The study has estimated that the total area of broadhectare land available for residential development is 314 hectares. If this land were fully developed it has the potential to yield approximately 1,100 dwellings and accommodate 2,600 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 16 years of supply.

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Legend

Broadhectare land

Timeframe	Urban residential	Rural residential
0 – 2 years	12ha	0ha
2 – 5 years	81ha	0ha
5 – 10 years	68ha	0ha
10+ years	58ha	0ha
Not specified	5ha	89ha

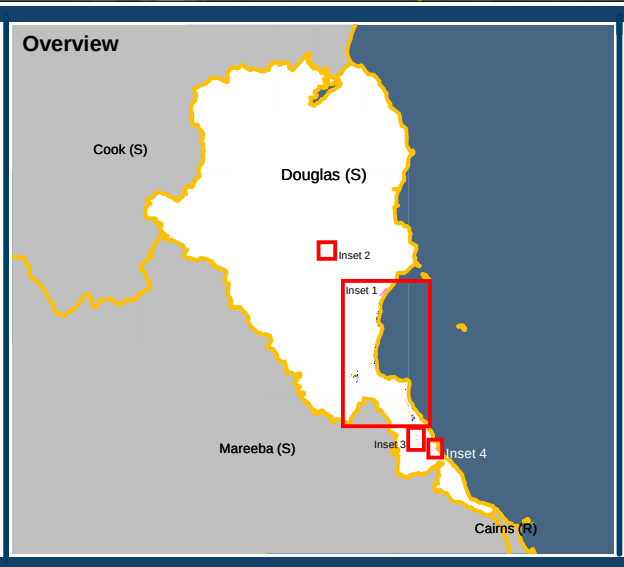
Land suitable and potentially available for residential development. Timeframes are indicative only.

Other map features

Local government boundaries

Major roads

N



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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This edition of the broadhectare study was based on the Digital Cadastral Database, August 2014.

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