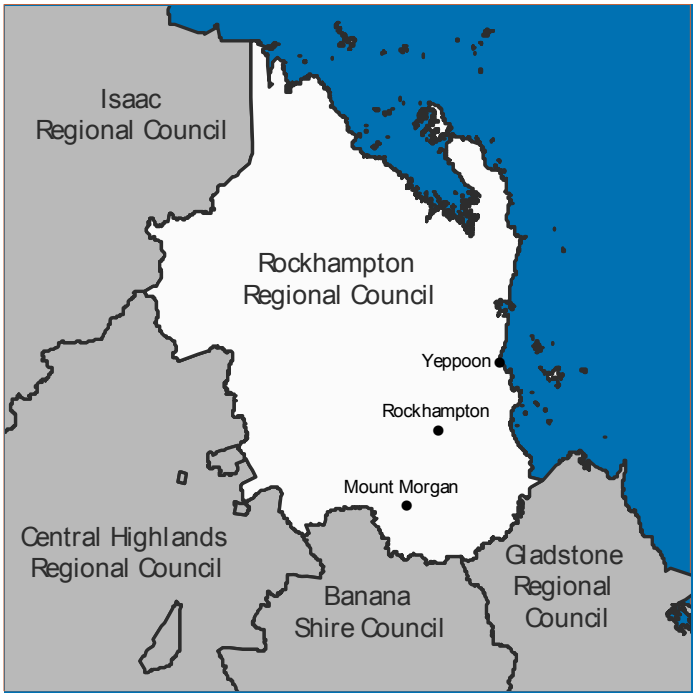
Queensland Treasury and Trade Government Statistician

Broadhectare Study 2012 profile
Rockhampton Regional Council

Introduction

The preliminary estimated resident population of Rockhampton Regional Council (hereafter referred to as Rockhampton) at 30 June 2011 was 112,380 persons (Source: ABS 3218.0). This is expected to increase to between 126,100 (low series) and 127,920 (high series) persons by 2016, representing population growth over the 2011–2016 period of between 13,720 (low series) and 15,540 (high series) (Source: Queensland Government Population Projections to 2031 Local Government Areas 2011 Edition).



Land stock

The total area of broadhectare land available in Rockhampton for residential development is 1,698 hectares, representing only a very small percentage of the total land area, (Tables 1 and 2).

This land is shown on the maps that accompany the profile.

Broadhectare land is defined as the amount of unconstrained residential land identified under the current planning scheme including existing residential developments approved by council.

Broadhectare land can be further classified as follows:

- urban residential land for development − 1,458 hectares
- lower density residential land for development − 240 hectares.

'Lower density' refers to development yielding three dwellings or less per hectare, or as otherwise described in the planning scheme.

'Standard urban density' refers to development yielding between 4 and 15 dwellings per hectare.

'Higher density' refers to development yielding greater than 15 dwellings per hectare.

Table 1: Rockhampton (R) land use profile

Land use category	Area	Per cent
Suitable for standard urban residential development	1,458 ha	0.08%
Suitable for lower density residential development	240 ha	0.01%
Assumed urban residential use	3,096 ha	0.16%
Assumed existing lower density residential use	8,048 ha	0.42%
Roads, watercourses and railway casements	114,103 ha	6.02%
Rural/Green/Open space	1,682,455 ha	88.78%
Balance area [a]	85,600 ha	4.52%

[a] Includes all land uses other than residential.

Table 2: Rockhampton (R) broadhectare stock and dwelling yield (a)

	Broadhectare stock (hectares)				Theoretic	Expected dwelling yield (dwellings) (c)			
Timeframe	Higher density	Standard urban density	Lower density	Total stock	dwelling yield (dwellings) (b)	Higher density	Standard urban density	Lower density	Total dwellings
0–<2 years	6	214	59	279	1,391	153	1,196	43	1,391
2–<5 years	37	269	23	329	2,996	846	1,814	43	2,703
5–<10 years	19	275	20	314	2,767	537	1,740	28	2,306
10+ years	5	420	127	552	3,533	229	2,118	359	2,706
Not specified	4	209	11	223	1,703	152	943	11	1,106
Total	**71**	**1,387**	**240**	**1,698**	**12,390**	**1,917**	**7,811**	**484**	**10,212**

(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.

Dwelling yields

Table 2 shows the potential number of dwellings that could be constructed based on the identified land stock. This is known as the 'expected dwelling yield'.

The main points from Table 2 are:

- Broadhectare land can potentially yield some 10,200 dwellings.
- Higher density development accounts for almost 19 per cent of the total expected dwelling yield.
- Development at standard urban densities accounts for the majority of the total potential dwelling yield from broadhectare land.
- Lower density development on broadhectare land will account for almost 5 per cent of the total dwelling yield.

Stock composition

The broadhectare stock in Rockhampton 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 (2,495 hectares) and the area available for development (1,696 hectares) indicates that a number of parcels are affected by physical or environmental constraints. The main points from Table 3 include:

- Residential stock is contained within 400 land parcels.
- Parcels less than or equal to 1.2 hectares account for over 50 per cent of all parcels.
- Of the urban broadhectare stock, over 75 per cent is contained in parcels sized 10 hectares or more.
- Parcels sized 10 hectares or more account for the majority of the expected total dwelling yield from broadhectare land.

Table 3: Rockhampton (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)	Low density residential	Total stock	Urban residential (b)	Low density residential	Total dwellings
<= 1.2	217	105	110	3	112	827	4	831
1.3–2.0	36	61	33	17	50	246	27	272
2.1–4.9	63	231	203	6	209	1,187	5	1,192
5.0–9.9	32	224	137	14	150	1,023	79	1,102
10.0+	52	1,874	975	200	1,175	6,447	369	6,816
Total	**400**	**2,495**	**1,458**	**240**	**1,696**	**9,730**	**484**	**10,212**

(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 Rockhampton at the time of the 2011 Census was 2.6 and 1.6 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 current household sizes at the time of the 2011 Census are highlighted.

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

Development type	Number of dwellings	Household size (average persons per household)				
		2.2	2.4	2.6	2.8	3.0
		Possible population yield				
Lower density residential	484	1,065	1,162	1,258	1,355	1,452
Standard urban density residential	7,811	17,184	18,746	20,309	21,871	23,433
		Household size (average persons per household)				
		1.2	1.4	1.6	1.8	2.0
		Possible population yield				
Higher density residential	1,917	2,300	2,684	3,067	3,451	3,834
Total	**10,212**	**20,549**	**22,592**	**24,634**	**26,677**	**28,719**

The main finding from Table 4 is that, depending on average household size, land from broadhectare development could accommodate between 20,500 persons and 28,700 persons. Further development in existing residential areas, where the parcel size is less than 2,500 square metres, will also accommodate additional population.

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, to determine overall residential land supply for this study, existing vacant residential land stock below 2,500 square metres has been added to the broadhectare supply. Residential land supply based on these components indicates a total potential dwelling yield of approximately 13,100 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.

Years supply – illustrative only

Evidently, not all future dwelling demand will be met through development of broadhectare land. Nevertheless, an indicator of the adequacy of the 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 an 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. An allowance has been made for a continuous but gradual decline in average household size into the future. 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 existing developed vacant land stock accounts for over 22 per cent of the total residential land stock yield.

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

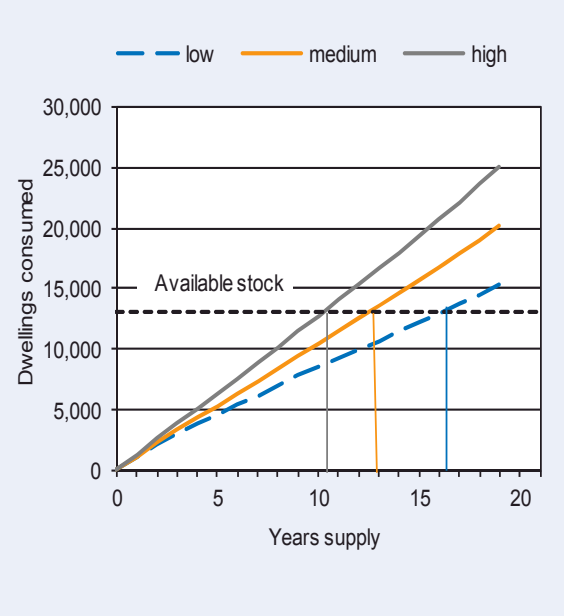


Table 5: Rockhampton (R) broadhectare supply scenarios

Dwelling production scenario (a)	Demand for residential lots: Dwellings required per annum (b)	Supply - Stock of residential lots: Broadhectare dwelling yield (c)	Existing vacant land stock (d)	Total potential dwellings (e)	Years supply (f)
Low trend	807	10,212	2,924	13,136	16
Medium trend	1,043	10,212	2,924	13,136	13
High trend	1,277	10,212	2,924	13,136	10

(a) Based on dwelling projection levels produced in 2011.
(b) Dwellings required per annum to 2031 based on Government Statistician dwelling projections.
(c) Decreased to take into account the probability of development.
(d) Estimate of vacant residential land stock at April 2010.
(e) Supply of residential lots.
(f) Illustrative only if no additional infill or redevelopment occurs.
na* supply beyond projection range

Conclusion – Rockhampton Regional Council

The study has estimated that the total area of broadhectare land available for residential development is approximately 3,000 hectares. If this land was fully developed it could potentially yield approximately 10,200 dwellings and accommodate approximately 24,600 persons, using current average household sizes.

Based on current medium series household projections and a reduced broadhectare dwelling yield (to account for economics of development and ownership issues), the available residential land stock indicates 13 years of supply.

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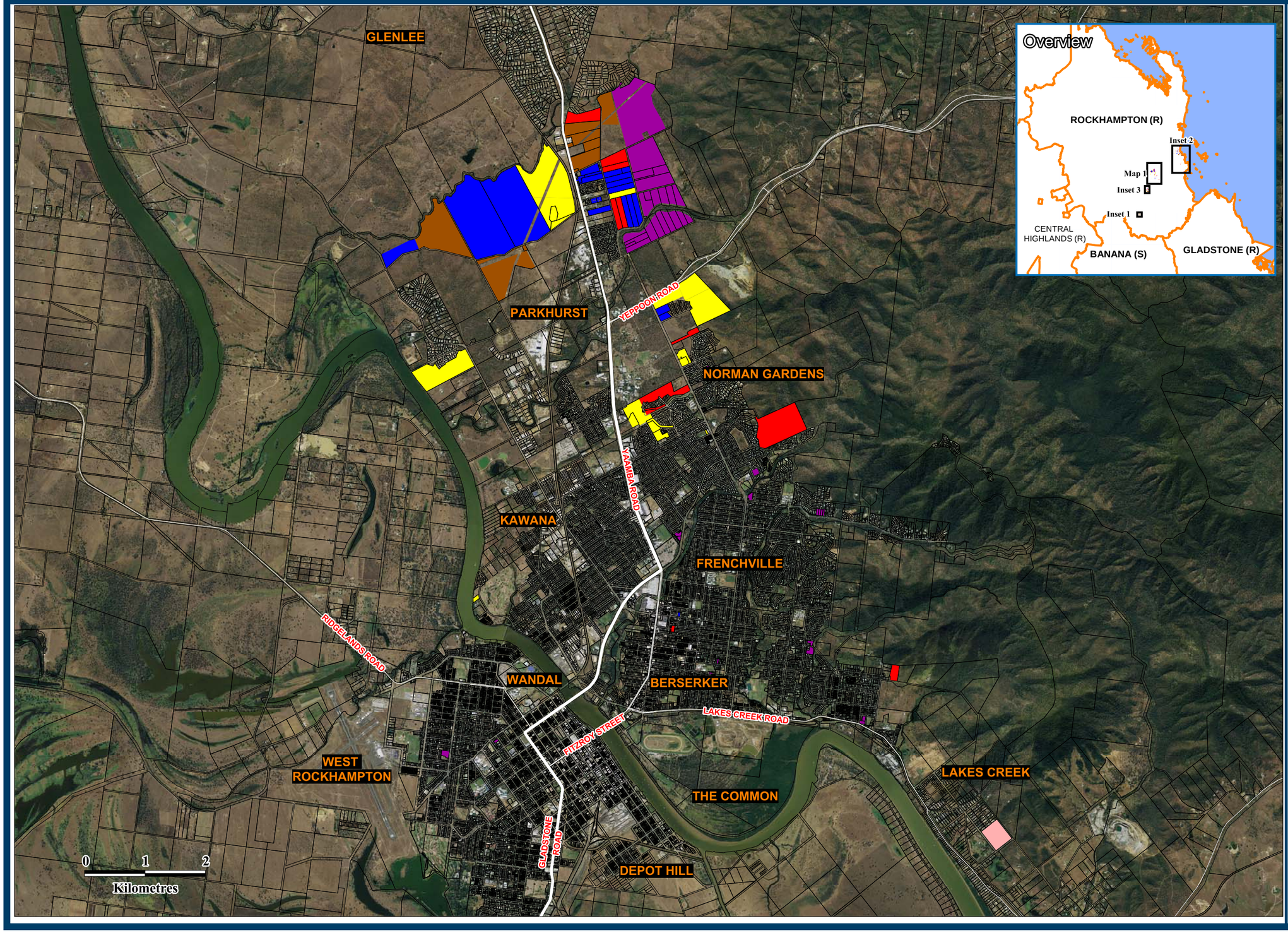

Legend

Broadhectare land Rockhampton RC

Timeframe	Urban residential	Low density residential
0 – 2 years	220 ha	59 ha
2 – 5 years	306 ha	23 ha
5 – 10 years	294 ha	20 ha
10+ years	425 ha	127 ha
Not specified	213 ha	11 ha

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

Other map features

- Local government boundaries
- Major roads
- Urban Land Development Authority area

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.

These maps form part of the Broadhectare Study and are 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, September 2012.

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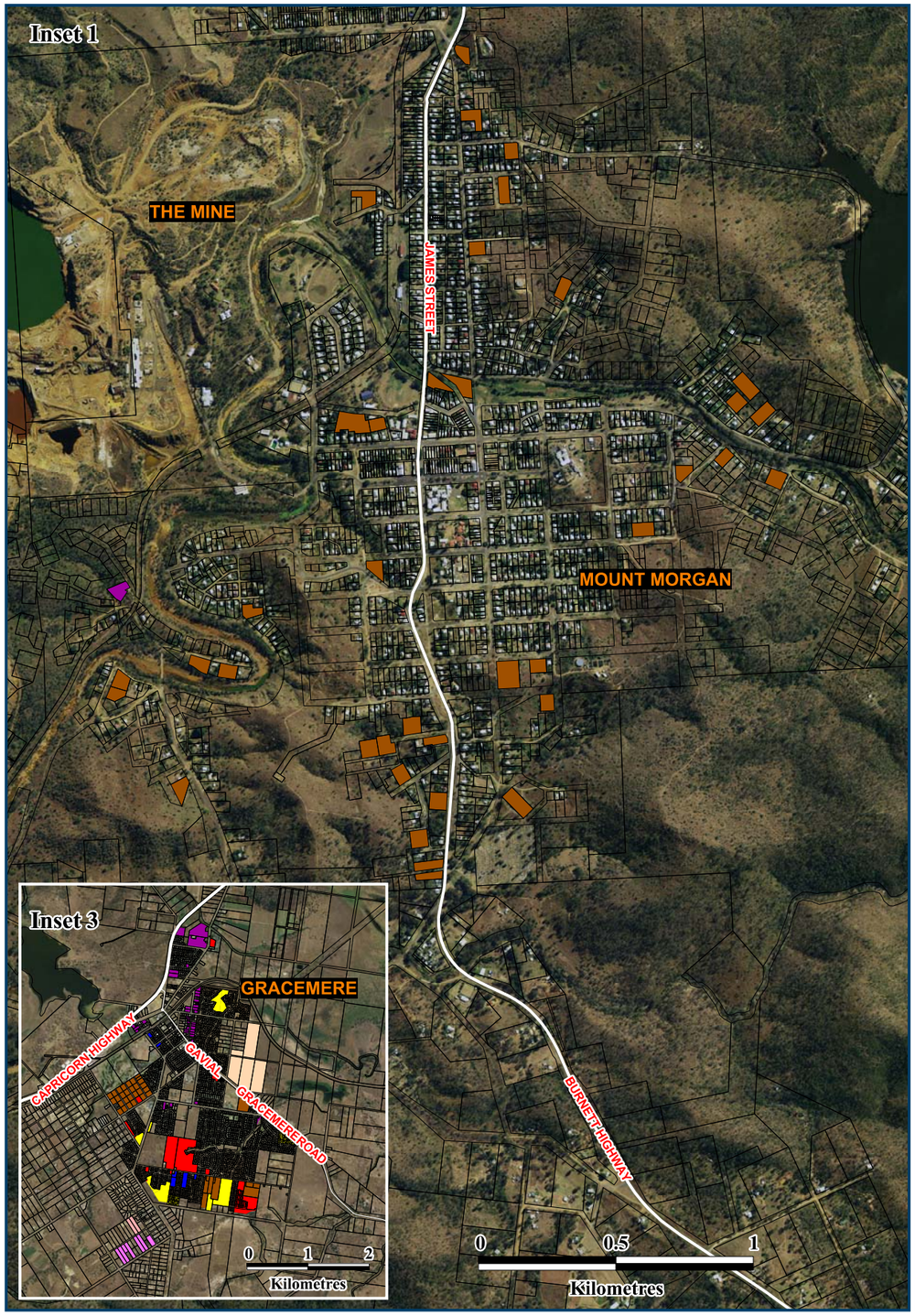

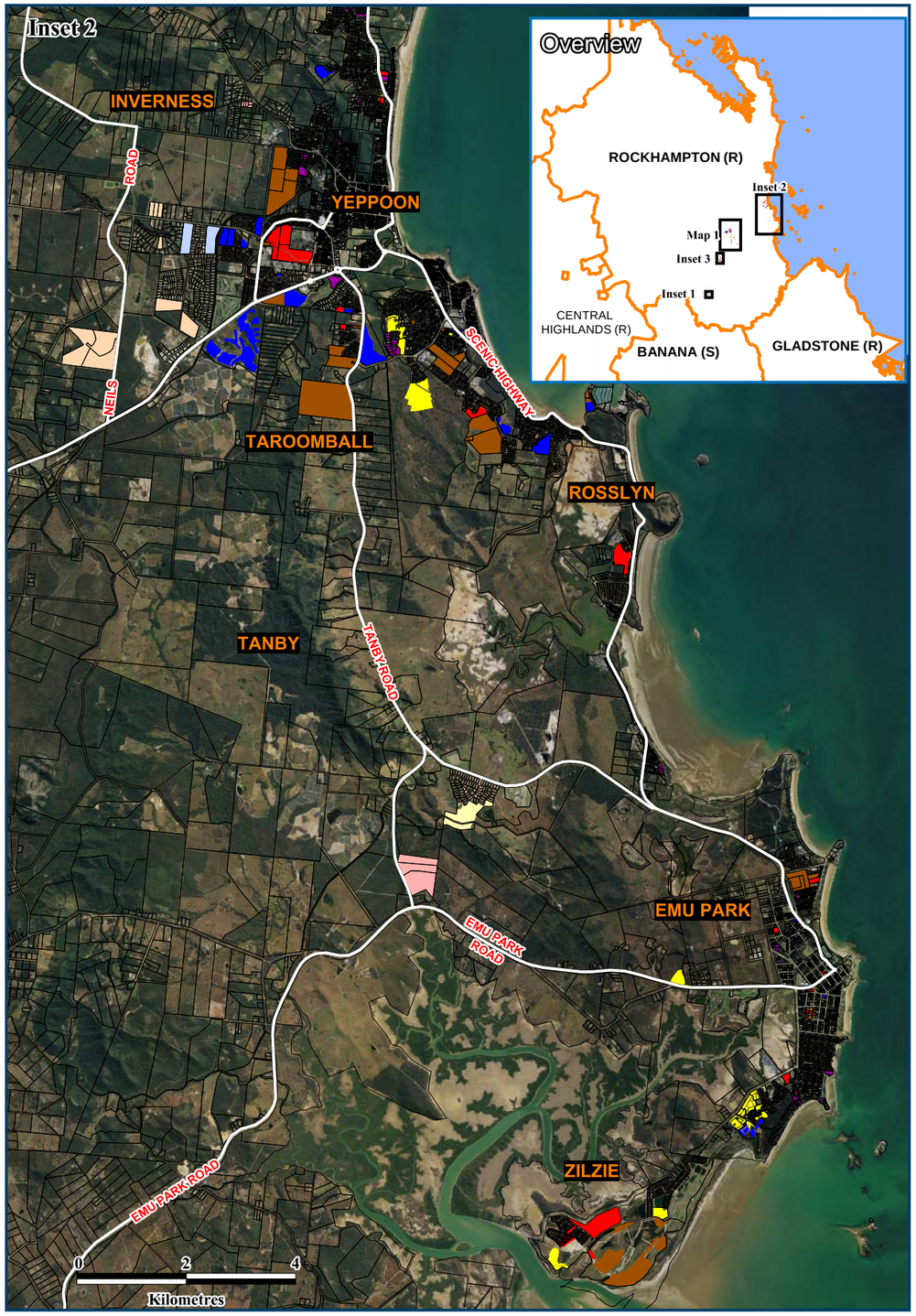

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