

URBIS

SUPPLY AND DEMAND ANALYSIS

Prepared for Fraser Coast Council

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INTRODUCTION

Introduction

This report provides a summary of the analysis undertaken as part of Phase 5 of the Housing Diversity and Land Supply Study. Specifically, the outcomes of Phase 5 sought to:

1. Quantify the existing dwelling supply and potential growth capacity of the Fraser Coast against projected demand of dwellings over the forward planning horizon to 2041. This assessment will identify where projected growth can be accommodated and where pressures may be faced.
2. Assess the projected growth areas and typologies for the Fraser Coast against community needs and the identified place types – matching growth areas and typology to the spatially identified place types.
3. Assess identified constraints and opportunities for the identified growth and make recommendations to resolve conflicts. This will included matters that may fall outside of the scope of the planning scheme but which Council may be able to consider and influence.
4. Undertake an infrastructure assessment of the projected growth areas and advise on infrastructure capacity and constraints.

In preparing the Stage 5 analysis, the work undertaken as part of previous stages of the project have been considered:

Stage 3 : Baseline population and dwelling growth projections were established at an SA2 area level based on low, medium and high series projections (QGSO 2020 data). Based on local engagement, an assessment of recent development activity and a precautionary approach to planning demands, the high series projections for the housing demand model were considered in subsequent stages.

Stage 4: This report assessed dwelling supply potential based on assumed development yields within existing zoned land resulting in an indicative dwelling supply capacity within each SA2. This report extended its scope to included a demand and supply balance assessment to report on dwelling supply surpluses within each SA2 (brought forward from Task 5.1 of Stage 5).

The recommendations from Stage 4 are noted for context within this report:

A sensitivity assessment was recommended based on engagement feedback from industry. It was deemed worthwhile to test two scenarios:

1. “Efficient land use” assumptions – the existing Stage 4 capacity and growth modelling with the baseline supply/demand assessment undertaken based on the following reasonably conservative yield assumptions (acknowledging that this yield is higher than some recent development approvals):
    - 10 dw/ha for low-density residential (approximated as 800m^2 allotment subdivision)
    - 30 dw/ha for medium density residential (approximated as a multiple dwelling townhouse development yielding 1 dwelling/250m2 of site area)

2. “Business as usual” assumptions – the existing Stage 4 dwelling supply modelled with lower development yield assumptions. Feedback from industry indicated the following historic market acceptance rates are more acceptable for the Fraser Coast market:
    - 8 dw/ha for low-density residential (approximated as 900-950m^2 allotment subdivision)
    - 15 dw/ha for medium density residential (approximated as the development yield from recent manufactured home park developments inclusive of common areas)

The results of these this sensitivity assessment is presented within this report with a comparative assessment and future planning development recommendations documented.

HOUSING CAPACITY ASSESSMENT



DWELLING CAPACITY POTENTIAL: EFFICIENT LAND USE VS BUSINESS AS USUAL

Insights

This information presents the potential for dwelling capacity, with different densities projected.

Within Stage 4, Urbis provided a dwelling capacity scenario based on reasonable density yields ("**Efficient land use**" scenario). Overall, this would allow for a further 16,370 dwellings across Fraser Coast. Detailed information on each SA2 and summary data for Fraser Coast and the generic areas of Hervey Bay and Maryborough is provided in the Stage 4 report.

The "**Business as usual**" scenario (based on Industry feedback on current market based product) keeps development yield densities relatively similar to the current state. Typical yields for the Emerging community zoned land (where the bulk of development is currently occurring within the Fraser Coast) are:

- Low density residential (LDR) development as 900-950m^2 lot subdivisions yielding approximately 8 dw/Ha; and
- Medium density residential (MDR) development being manufactured home parks (as the only density of note), yielding 15 dw/Ha.

The SA2 level data assessment of this scenario is summarised here and presented in full within Appendix A of this report.

As a result of the lower development yield, available land is consumed more quickly and the total dwelling capacity falls to 12,260 dwellings – a reduction in capacity of 25%.

The largest capacity reduction difference is within Hervey Bay, which is problematic given this is the area that attracts the most growth.

Summary of Capacity

	Efficient land use (as per Stage 4)	Business as usual	
	Total Dwelling Capacity	Total Dwelling Capacity	Difference in Capacity
	No.	No.	No.
Fraser Coast Total	**16,371**	**12,258**	**4,113**
LDR			
Detached	**1,836**	1,469	367
Attached	**555**	328	227
Other			
MD			
Detached	**9**	8	1
Attached	**610**	416	194
Other			
HD			
Detached	**0**	0	
Attached	**173**	104	69
Other			
Rural Res			
Detached	**0**	0	0
Attached	**0**	0	0
Other			
Emerging Community			
Detached	**11,132**	8,905	2,227
Attached	**2,057**	1,028	1,029
Other			
Hervey Bay Region	**11,714**	**8,644**	**3,070**
Maryborough Region	**4,658**	**3,615**	**1,043**

FRASER COAST DEMAND AND SUPPLY: EFFICIENT LAND USE VS BUSINESS AS USUAL

Insights

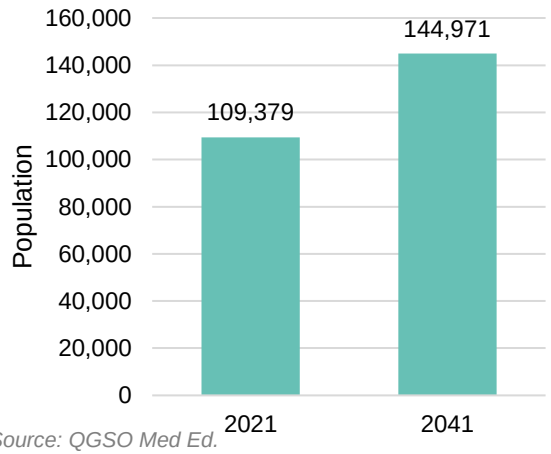
The high growth population series provides for an aggressive growth rate, increasing the additional persons to just under 35,600 additional residents over the next 20 years.

Dwelling growth needs are estimated at 14,800 dwellings over the planning horizon.

Overall, the *Business as usual* approach, with lower development densities over the existing zoned land yields a reduced dwelling count and deficiencies in both the detached and attached dwellings (total - 2,589 dwellings).

In comparison, the Efficient land use approach (with slighting higher development yields from the existing zoned land) provides for a dwelling supply surplus from the same development area (+1,524 dwellings)– more than sufficient to meet projected demand.

High Population Growth Series 2021-2041



Source: QGSO Med Ed.

	Projected Dwelling Surplus
Total Population Growth	35,592
Dwelling Requirements	
Detached	12,462
Attached	2,385
Capacity Surplus* - Efficient land use	
Detached	515
Attached	1,009
Capacity Surplus* - Business as usual	
Detached	-2,080
Attached	-509

*Positive figures result in greater capacity of dwellings relative to the required dwellings

HERVEY BAY REGION DEMAND AND SUPPLY: EFFICIENT LAND USE VS BUSINESS AS USUAL

Insights

The majority of the growth is set to occur within the Hervey Bay region.

Under the high growth scenario, an additional 28,200 people will reside in the Hervey Bay region - equating to 11,642 dwellings (78% of total Fraser Coast growth).

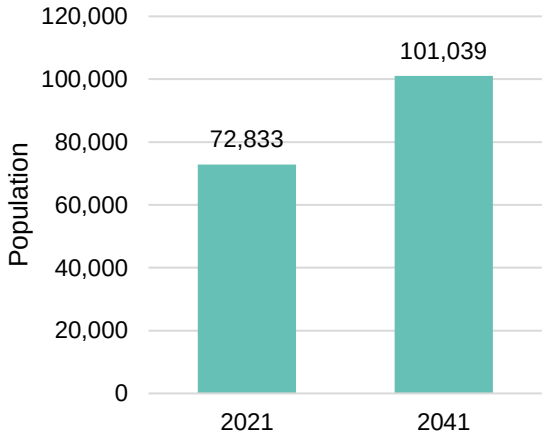
Given the built up nature of the region and the apparent difficulties in delivering infill product (resulting from a variety of causes including product cost differential, fragmented land resources and market reluctance), the bulk of the dwelling capacity is provided within the Emerging community zoned areas – inherently a lower yield product with a focus on single detached dwellings.

Under the *Efficient land use* scenario, a deficiency of 643 detached dwellings is projected - balanced against a attached dwelling surplus capacity of 715 yielding an overall slight dwelling surplus of +72 dwellings).

The *Business as usual* scenario with lower development yields consumes available land more quickly with the resulting being a total dwelling deficiency of -2,998 dwellings.

***Business as usual* will require new development fronts to be opened up earlier, consuming more fringe land, extending the infrastructure base and resulting in higher overall costs for infrastructure establishment and long term maintenance.**

High Population Growth Series 2021-2041



Source: QGSO Med Ed.

	Projected Dwelling Surplus
Total Population Growth	28,206
Dwelling Requirements	
Detached	9,678
Attached	1,964
Capacity Surplus* Efficient land use	
Detached	-643
Attached	715
Capacity Surplus* Business as usual	
Detached	-2,450
Attached	-548

*Positive figures result in greater capacity of dwellings relative to the required dwellings

Source: QGSO High Ed.

*Positive figures result in greater capacity of dwellings relative to the required dwellings

MARYBOROUGH REGION DEMAND AND SUPPLY: EFFICIENT LAND USE VS BUSINESS AS USUAL

Insights

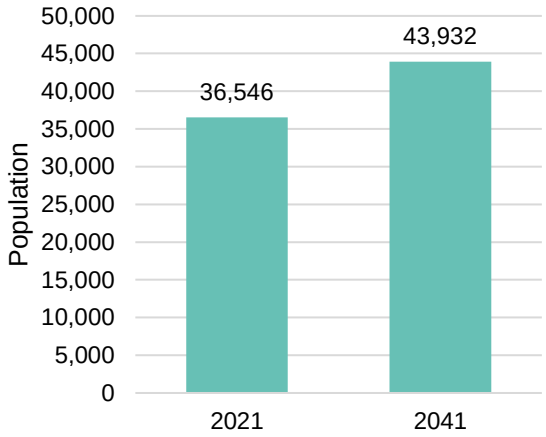
The Maryborough region is only set to hold 22% of the overall Fraser Coast growth under the high series population growth, equating to 7,386 new residents by 2041.

With a much lower rate of growth, the capacity for dwellings outperforms the need requirement, particularly for detached homes. This is primarily due to the large areas of Emerging Community zoned land at St. Helens (as yet developed).

Due to the considerable vacant land capacity in both the *Business as usual* and the *Efficient land use* development scenarios, there remains a surplus of dwelling capacity in Maryborough.

While there remains significant advantages in providing for efficient land use (including more cost effective infrastructure and increased dwelling diversity), a development scenario with larger residential allotments could be a point of difference of development between Maryborough and Hervey Bay regions.

High Population Growth Series 2021-2041



Source: QGSO Med Ed.

	Projected Dwelling Surplus
Total Population Growth	7,386
Dwelling Requirements	
Detached	2,784
Attached	421
Capacity Surplus* Efficient Land Use	
Detached	1,158
Attached	295
Capacity Surplus* Business as usual	
Detached	370
Attached	40

*Positive figures result in greater capacity of dwellings relative to the required dwellings

Source: QGSO High Ed.

*Positive figures result in greater capacity of dwellings relative to the required dwellings

RECOMMENDATIONS: BUSINESS AS USUAL vs EFFICIENT LAND USE

The two future development scenarios considered are based on differing development yield assumptions:

Business as usual – reflecting industry feedback based on what are current market based needs; and

Efficient land use – incorporating a slightly higher base development yield over available zoned land development yield (but still reasonable in term of the Fraser Coast market).

Business as usual	Efficient land use
Low Density Residential	
• Detached: 8 dw/ha • Attached: 15 dw/ha	• Detached: 10 dw/ha • Attached: 15-30 dw/ha
Medium Density Residential	
• Detached: 8 dw/ha • Attached: 25 dw/ha	• Detached: 10dw/ha • Attached: 30 dw/ha
High Density Residential	
• Detached: 8 dw/ha • Attached: 30 dw/ha	• Detached: 10 dw/ha • Attached: 50 dw/ha
Emerging Community	
• Detached: 8 dw/ha • Attached: 15 dw/ha	• Detached: 10 dw/ha • Attached: 30 dw/ha

Business as usual – reflects standard subdivision development of 900-950m^2 allotments (average) and manufactured home park development at 15 dw/Ha.

Efficient land use – reflects standard subdivision development at 800m^2 allotments (average) and multiple dwelling development at 1 dwelling per 200 – 330m2 site area (reasonable yield in terms of the Fraser Coast market).

The *Business as us*ual scenario delivers less development yield for the same zoned land (4113 less dwellings). The identified total dwelling deficiency (2589 dwellings) is balanced by a surplus yield in Maryborough. Within the higher growth area of Hervey Bay, the identified deficiency is 2,998 dwellings from existing zoned land. This will require an additional 343 Ha of development land to be constructed over the 20 year planning horizon (approximated as an additional Nikenbah Emerging community area being developed).

The *Business as usual* approach is delivering limited dwelling diversity in the form of large single detached dwellings (typically 4 bedrooms) with manufactured home parks (MHP) delivering limited density product (in the form of lifestyle/retirement products). These products form an important part of the product mix for the Fraser Coast and will continue to do so but they come at a cost to the long term viability of the Fraser Coast community through limiting product choice and long term infrastructure cost burdens.

Limited dwelling typologies under the *Business as usual* scenario are considered to be:

- Young single and couples professionals seeking low-maintenance lifestyle options;
- Lower-socio economic households seeking affordable, small unit rentals;
- Retirees seeking a lifestyle option to MHPs;
- Small lot housing options for affordable and size/lifestyle appropriate housing.

Limited dwelling choice leads to inappropriate and inefficient housing options (such as singles and couples occupying large single detached dwellings) or affordable housing options being unavailable in the market.

Long term costs of *Business as usual* results in a 38% higher infrastructure cost base with an average development yield of 8.7 dw/ha against a potential yield of 12 dw/ha should more efficient development options be delivered.

RECOMMENDATIONS: BUSINESS AS USUAL vs EFFICIENT LAND USE

There are considerable advantages in pursuing the *Efficient land use* development scenario:

- Lower infrastructure cost base for Council to establish and maintain over the long term.
- Greater diversity of dwelling product with additional multiple dwelling development delivering a range of dwelling typologies (ranging between 1 and 3 bedroom product within townhouse and apartment typologies) – appealing to a greater segment of the Fraser Coast community.
- More affordable building typologies in the form of mixed residential communities with small lot detached dwelling and apartment options.
- More compact urban form with greater population located in proximity to centres and lifestyle amenity.
- Improved potential for public and active transport options.
- Smaller development footprint providing opportunities to retain rural and natural landscape places.

These outcomes are positive responses to the key housing issues identified within early stages of the project:

- Lack of product diversity with 95% of recent development being single detached dwellings;
- Lower household income in comparison to the state average;
- Close to 50% of families are couples without children;
- 27% of the population of live alone;
- 25% of the population are empty nest households (aged 55-69);
- 16% of the population are retirees over 70;
- Emerging industry and professional employment requirements identify different housing needs into the future (key to talent attraction).

The *Efficient land use* scenario is not a wholesale change to the Fraser Coast development mix. Single detached dwellings on large lots and manufactured home parks will continue to be predominant products of choice within the Fraser Coast development market.

The *Efficient land use* development scenario is about modest improvements to established development outcomes focused on:

1. New development in emerging community areas provide a mix of product types with the inclusion of small lot options, a range of allotment sizes and some appropriately located multiple dwelling typology options. Target minimum net development yields of 12 dwellings per Ha (total yield over the developable area) for the Emerging community zone are recommended. This could maintain a dominant development form of between 700-900m2 allotments with a modest inclusion of small lot development and multiple dwellings.
2. Prior to development proceeding, Emerging community areas undergo a structure planning process that demonstrates overall land use outcomes, overall development yield, infrastructure servicing and sequencing.
3. The Emerging community zone establishes an Urban Neighbourhood (Expansion) place type with a focus on a mixed of residential product introducing dwelling diversity and typologies rather than a singular focus on large lot subdivisions and/or manufactured home parks.
4. There is a focus on infill development within existing well located areas in proximity to centres and amenity where higher density multiple dwelling development is actively encouraged.
5. Existing suburban areas generally maintain there low density attributes but appropriate small scale density interventions in the form of larger lot subdivision, dual occupancies and some small scaled multiple dwellings in targeted areas are supported.

HOUSING SUPPLY ASSESSMENT



DEMAND AND SUPPLY – DETACHED DWELLINGS

Insights

Projected dwelling requirements based on growth assumptions is a measure of dwelling demand over the future 20 year planning horizon.

It is notable to benchmark this growth requirement against the long term historic supply of product – to "ground truth" growth assumptions and identify possible problematic areas where historic growth does not meet projected demand.

As the table opposite demonstrates, the historic registration of lots (both standard and rural residential) is under performing relative to the level of projected dwelling requirements across Fraser Coast (based on the high series growth assumptions).

This is both a test of realistic growth assumptions (the high series growth projections are well above the long term average) and the development industry capacity (well below the long term growth requirements should they be realised).

The actual realised growth will probably align toward to the long term trend and be below the high series growth assumptions. This acknowledges that there is a short term growth spike currently being experienced as a raft of recent development approvals proceed through to construction after being stalled for some time.

While long term growth will probably align to trend (the medium growth trend), it is reiterated that prudent planning should account for the high growth scenario.

Detached Dwelling Demand and Supply Summary

	Total Dwelling Capacity#	Total Dwelling Requirements^	Annual Dwelling Requirements	Annual Lot Registrations*	Annual Lot Registrations*	Difference in Registrations v Requirements
	No.	2021-2041	2021-2041	2 Year Average	10 Year Average	Using 10yr Ave.
Fraser Coast	12,977	12,462	623	446	365	-258
Booral – River Heads	2,250	357	18	107	41	23
Maryborough	3,084	1,127	56	8	11	-45
Burrum – Fraser	976	1,649	82	41	23	-59
Point Vernon	41	385	19	16	7	-12
Torquay - Scarness – Kawungan	1,047	1,887	94	8	25	-69
Craignish - Dundowran Beach	1,717	1,065	53	11	12	-41
Pialba - Eli Waters	716	1,766	88	126	116	28
Urangan – Wondunna	2,287	2,285	114	117	112	-2
Granville	60	225	11	0	1	-10
Tinana	547	600	30	8	13	-17
Maryborough Region – South	251	832	42	7	6	-36
Maryborough Region	3,942	2,784	139	23	31	-108
Hervey Bay Region	9,035	9,678	484	424	335	-149

Source: QGSO, Urbis
#Efficient land use development scenario
^Dwelling requirements as per the high growth population scenario outlined in Phase 4
*Lot registrations include both standard and rural residential lots

DEMAND AND SUPPLY – ATTACHED DWELLINGS

Insights

There have been significantly less attached dwelling registrations in comparison to the detached dwelling projected market (attached dwellings inclusive of units and townhouses).

Should the current rate of delivery of attached product continue, the Fraser Coast will see just 880 new apartments and townhouses in 20 years (based on the previous 10 year average) – a significant shortfall of 1505 dwellings below the projected high series requirements (2,385 dwellings).

Anecdotal feedback from industry is that there is a fundamental pricing differential against multiple dwellings within the multiple dwelling/house and land product choice. Other factors weighing against multiple dwelling delivery include:

- Land fragmentation limiting delivery of multiple dwelling scale;
- The local development and building industry is attuned to the historic sale product of detached dwellings;
- Pricing competitiveness benefits house and land;
- Market “hangover” from pre-GFC stock excess has weighed on developer aversion to risk;
- Perceptions of increased approval risk associated with multiple dwellings.

Further feedback indicates some of these risk factors are reducing as recent house and land pricing increases are making multiple dwelling development comparatively more affordable.

Attached Dwelling Demand and Supply Summary

	Total Dwelling Capacity	Total Dwelling Requirements	Annual Dwelling Requirements	Annual Lot Registrations	Annual Lot Registrations	Difference in Registrations v Requirements
	No.	2021-2041	2021-2041	2 Year Average	10 Year Average	Using 10yr Ave.
Fraser Coast	3,394	2,385	119	49	44	-75
Booral – River Heads	355	6	0	0	0	0
Maryborough	570	306	15	0	3	-12
Burrum – Fraser	137	154	8	3	3	-5
Point Vernon	31	33	2	1	1	-1
Torquay - Scarness – Kawungan	445	1,196	60	6	7	-53
Craignish - Dundowran Beach	568	10	1	0	0	-1
Pialba - Eli Waters	432	410	21	33	16	-5
Urangan – Wondunna	710	936	47	6	12	-35
Granville	11	38	2	0	0	-2
Tinana	95	54	3	0	1	-2
Maryborough Region – South	40	23	1	0	0	-1
Maryborough Region	716	421	21	0	4	-17
Hervey Bay Region	2,679	1,964	98	49	40	-58

FRASER COAST LGA SUPPLY METRICS

Insights

The last five years has been relatively stable in terms of lot registrations and delivery of product. The majority of stock has been within the Hervey Bay area, with limited unit and townhouse development.

However, this may increase in the coming two years, with a significant surge in building approvals for new houses, and to a lesser extent, higher density development.

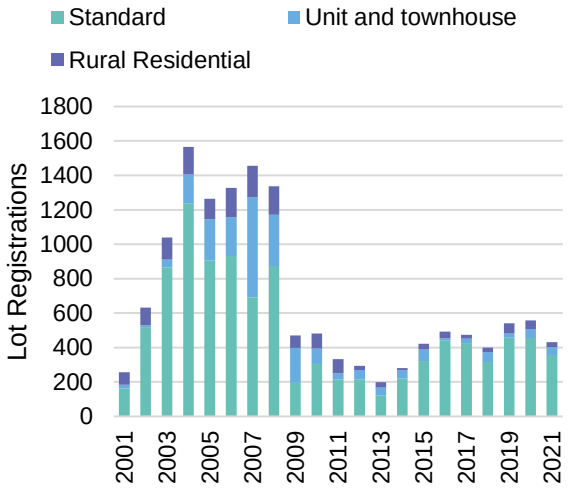
Under the high population growth scenarios, 14,847 dwellings are needed over the next 20 years, equating to 742 annually. Should the lot registrations continue at the recent peak rate of circa 580 per year (2020), the actual population growth will be much lower.

As an observation, current registrations remain well below the previous “boom” period in the years 2003 – 2008 where growth was well above 1000 registrations per annum for a sustained period of time.

Base data is accumulated to the Fraser Coast, Hervey Bay and Maryborough regions here and provided at the SA2 area level in Appendix B.

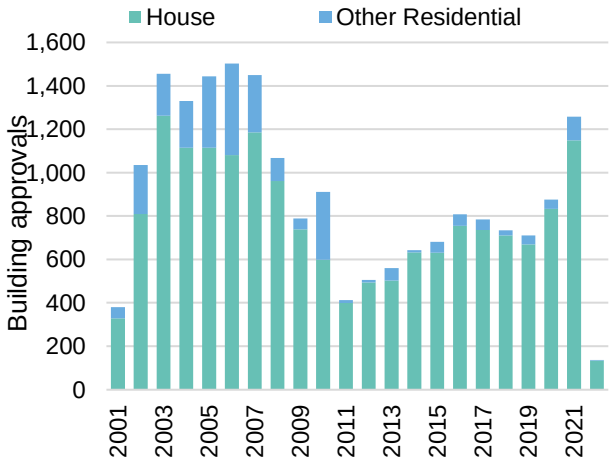
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Lot Registrations



Source: QGSO

Building Approvals



Source: ABS

Lot Registrations

Period	Standard	Unit and Townhouse	Rural Residential
10-Year Average	333	44	33
5-Year Average	402	41	37
2-Year Average	406	49	40

Source: QGSO
Standard = 60-2,500sqm
Unit and Townhouse = <60sqm
Rural Residential = >2,500sqm

Building Approvals

Period	House	Other Residential
10-Year Average	711	45
5-Year Average	819	53
2-Year Average	991	76

Source: ABS

HERVEY BAY REGION SUPPLY METRICS

Insights

The last five years to 2021 has remained relatively stable, at circa 460 registrations a year. Despite this, the levels are still considerably lower than seen in the mid 2000's. There may be a spike in registrations approaching given the substantial level of approval and construction activity underway but the long term sustainability of the current level of activity should be treated with caution.

Building approvals have followed a slightly different trend with approvals seeing a strong spike in the last 1-2 years.

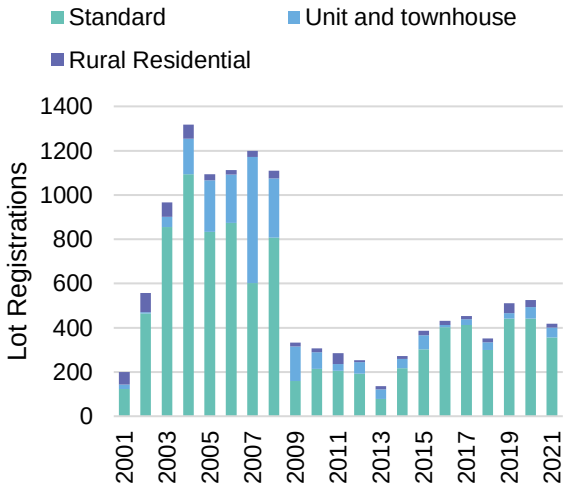
Given this, there may be a continued increase in lot registrations as the approvals convert to product.

Under the high population growth scenario, 11,642 dwellings are needed over the next 20 years, equating to 582 annual lot registrations.

The historic level of lot registrations will need to increase to meet the high series projected demand.

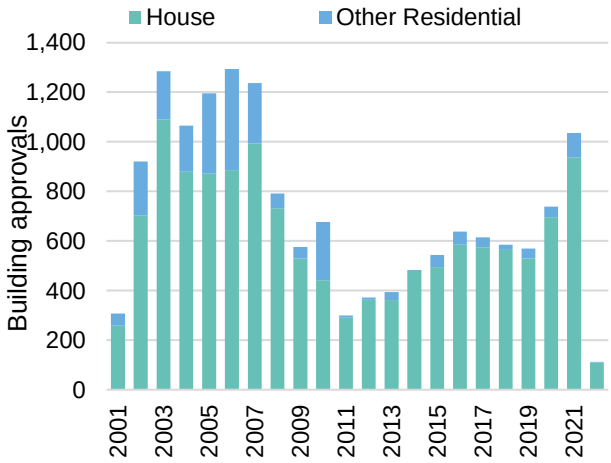
It must also be mentioned that these historic lot registrations do not include dwellings delivered through the *Qld Manufactured Home Parks* legislation which will add a significant level of supply to a particular market segment. Current levels of immediate annual supply are approximated as 200 dwellings per annum for 2020 and 21. This will increase to an estimated peak of 400 in 2026 base on current approval pipeline.

Lot Registrations



Source: QGSO

Building Approvals



Source: ABS

Lot Registrations

Period	Standard	Unit and Townhouse	Rural Residential
10-Year Average	315	40	20
5-Year Average	390	36	25
2-Year Average	399	49	25

Source: QGSO
Standard = 60-2,500sqm
Unit and Townhouse = <60sqm
Rural Residential = >2,500sqm

Building Approvals

Period	House	Other Residential
10-Year Average	558	39
5-Year Average	660	49
2-Year Average	816	71

Source: ABS

MARYBOROUGH REGION METRICS

Insights

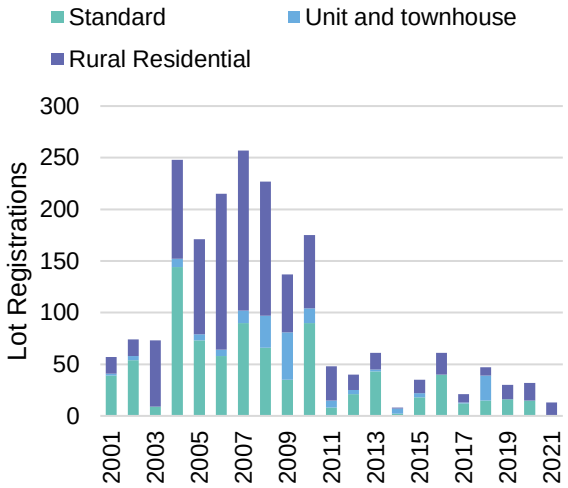
The Maryborough region has seen a significant decline in the level of registered lots over the last decade, with virtually nil growth in the last 2 years.

The lack of development may be attributed to several factors. Maryborough does not have the similar amenity that Hervey Bay offers, and is much more established with older homes.

House building approvals have largely followed the same trend with the last 10 years registering low approvals with circa 150 annually. That being said, approvals significantly increased in 2021 to 212 – the highest in a decade. Given the high level of approvals, there may be an increase in lot registrations in the coming years.

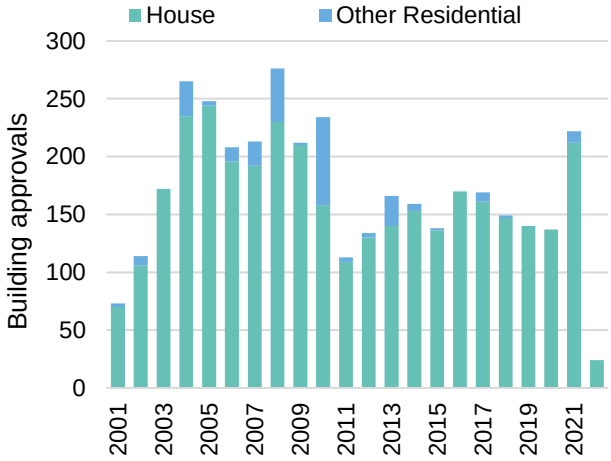
Under the high population growth scenarios, 3,205 dwellings will be needed over the next 20 years. However, to meet this, registrations would need to increase to 160 registrations per year – significantly more than the current rate.

Lot Registrations



Source: QGSO

Building Approvals



Source: ABS

Lot Registrations

Period	Standard	Unit and Townhouse	Rural Residential
10-Year Average	18	4	13
5-Year Average	12	5	12
2-Year Average	8	0	15

Source: QGSO
Standard = 60-2,500sqm
Unit and Townhouse = <60sqm
Rural Residential = >2,500sqm

Building Approvals

Period	House	Other Residential
10-Year Average	153	6
5-Year Average	159	4
2-Year Average	175	5

Source: ABS

DELIVERY OF MANUFACTURES HOME ESTATES

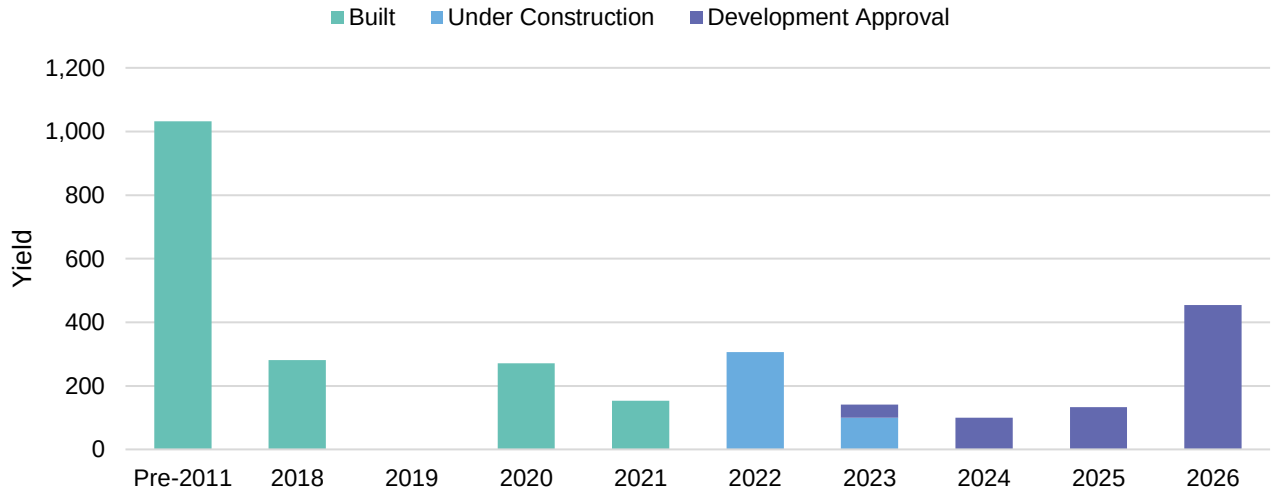
Insights

The Fraser Coast has one of the highest supplies of manufactured home product relative to the 55+ population. Existing estates include a mix of well established product, as well as new estates which have launched since 2000 and are progressively completing.

There are currently four projects under construction, including developments from major operators such as Ingenia, Thyme and Latitude.

These villages have provided diversity within the Fraser Coast. Offering small housing on leased land, the developments are able to offer density within a product type suitable for seniors. As a result, they have been widely accepted, and operators are seeking further opportunities in the region.

Supply of MHE Product



Source built figures: QLD Gov Register of Residential Parks
Source future supply: Cordell Connect, Urbis Retirement Database

FRASER COAST DEVELOPMENT PIPELINE

There is a considerable development pipeline underway on the Fraser Coast. In recent years there has been a history of development approvals being obtained and languishing unacted upon for a variety of reasons including land banking of approvals, speculative approvals and market timing issues.

In monitoring over 30 significant current approvals, there are over 6000 dwellings within the development pipeline – in various states of progression. It is clear that there the Fraser Coast is experiencing a marked spike in development activity with many previously stalled approvals actively being progressed through the operational works and construction phase of the development cycle.

The table below represents the current pipeline progression, current for August 2022.

Approval Phase	Dwellings
Detached Dwellings (residential subdivision)	
• Not commenced • Under approval • No site works • Under development • Complete	536 - 2159 1103 286
Sub-Total	**4084**
Lifestyle/Retirement Facility (incl MHP)	
• Not commenced • Under approval • No site works • Under development • Complete	346 290 254 569 547
Sub-Total	**2006**
TOTAL	**6090**

Category explanation

Not commenced – Town planning approval has been obtained with no further progression.

Under approval– Subsequent approvals including Operational work are in preparation or obtained.

No site works – Operational works have been obtained but no site works have commenced.

Under development - Construction on site has commenced with some stages approaching or have been completed.

Completed– The works as approved have been completed

There are over 1000 residential subdivision allotments actively under development and over 2000 allotments actively progressing approvals for site works commencement – leading to the possibility of +1000 allotment registrations in each of the next 3 years if all approvals continue progress. Similarly, there is close to 570 lifestyle/retirement units actively under construction with a further 500+ progressing approvals to construction.

This level of activity reflects the “boom” years of the mid 2000’s where +1000 allotment registrations and building approvals were consistently achieved between 2003 and 2008 prior to a significant drop in activity in subsequent years. Some caution is advised in relation to a consistent continuation of the current activity levels as:

- There are signs of construction capacity issues within the local market leading to constraints on product delivery; and
- The current activity has been during a particularly strong Australia wide housing market uplift that is now coming off record peaks which may damper local activity in line with interest rate rises.

The approach recommended is planning for high growth and if it falls short of expectations, Fraser Coast is still well placed to manage long term growth.

Of note is that density product is dominated by manufactured home parks in various formats (lifestyle and retirement village typologies) - with over 1000 dwelling units within the development pipeline. With a delivery timeframe of 3-4 years that is between 250-350 dwelling units per annum. This compares to recent annual registrations of 40+ for apartments and townhouses.

DWELLING SUPPLY - INSIGHTS AND RECOMMENDATIONS

From the Stage 3 and Stage 4 reports – the QGSO high series growth is recommend to be used as the basis for forward land use planning. This recognises the elevated current level of development activity within the Fraser Coast (noted that it is almost exclusively within the Hervey Bay Region with Maryborough contributing very little recent growth activity. The annualise high growth series dwelling targets are:

Fraser Coast:	623 dwelling per year
Hervey Bay Region:	484 dwellings per year
Maryborough Region:	139 dwellings per year

These growth targets are compared to the previous 5 year annual average for historic registrations:

Fraser Coast:	480 dwelling per year
Hervey Bay Region:	451 dwellings per year
Maryborough Region:	29 dwellings per year

The high series 20 year dwelling targets are higher than in the immediate preceding years. The current development uplift being experienced is real and may be sustained for a period of time but in all likelihood growth will revert back to the historic norms over the long term 20 year horizon (in line with economic trends). The conclusion to draw is that the planned high series growth is viewed as a conservative assumption overall and planning for high series growth that may not occur remains prudent planning policy.

Adding to supply are dwellings delivered as Manufactured Home Parks – estimated to be in the vicinity of 200 per annum over the past 2 years and with close to 569 under development. This product supply is significant but basically only serves the +55 age demographic.

The relatively high level of growth for Maryborough is noted in comparison to Hervey Bay. Should the suppressed growth of Maryborough continue and lead to a diversion of intended growth to Hervey Bay – additional pressures will be placed on land resources in Hervey Bay areas.

To cater for identified growth pressures, the following is recommended at a strategic level:

Plan for increased infill development.

The planning scheme and Council policies should be aligned to encourage infill multiple dwelling development around targeted areas – in proximity to centres and amenity locations. The Urban Neighbourhood place type envisages a mix of housing product types delivering diversity and housing choice within communities that integrate with open space, urban services, transit opportunities and pathways

Suburban areas in general (nominated generally as existing developed areas – the Suburban place type) should accommodate some level of density intervention in the form of subdivision, dual occupancy and targeted multiple dwelling outcome – especially where large existing residential lots can accommodated additional dwelling and remaining sensitive to the existing suburban place type.

Plan for expansion through investigation areas.

Large areas of Emerging Community zoned land remain undeveloped (Dundowran, Kawungan, Wondunna and St Helens). These should be developed in the normal course of development pipeline delivery prior to additional fringe expansion being contemplated.

Investigation areas for urban expansion are however nominated as prudent planning options should these planned areas fail to be realised for development within the life of the scheme or if development demand exceeds expectations. Clear limits on the circumstances on when it would be appropriate to bring forward these development fronts is required.

SA2 AREA RECOMENDATIONS



BOORAL – RIVER HEADS

Summary

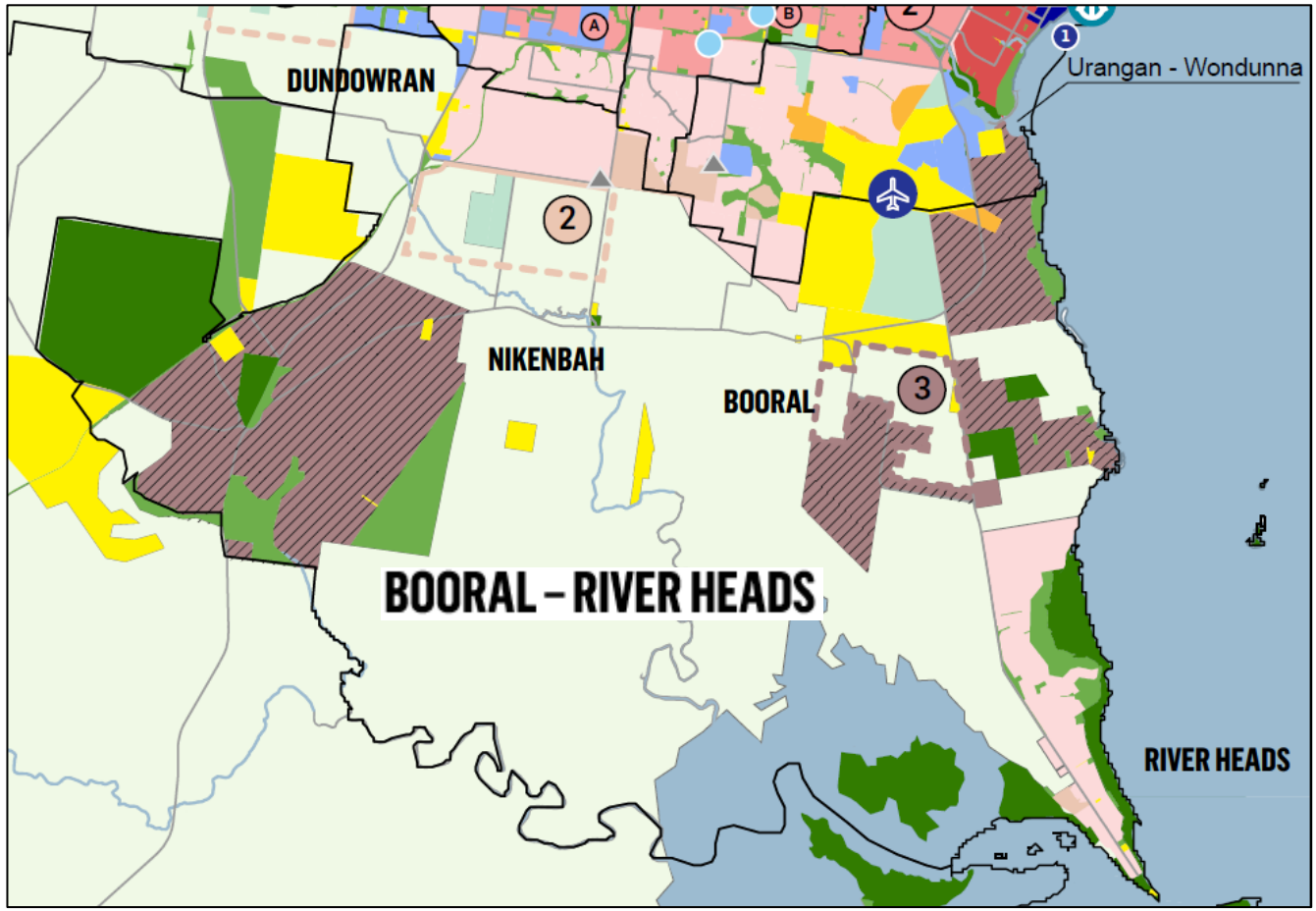
Booral – River Heads residential capacity is characterised by largely rural residential land and emerging community land. Rural residential lands border the area to the west and east and is largely developed into large residential allotments. River Heads is to the south-east and comprises the areas low density residential land.

The significant development front of Nikenbah dominates residential growth opportunities and is currently experiencing rapid construction growth stemming from existing approvals. Most of the development outcomes are “baked-in” from existing approvals and there is little opportunity to alter outcomes during the construction phase.

The development is an active example of the development issues facing Fraser Coast:

- Development activity across multiple large sites with problematic approval processes and a lack of infrastructure coordination and neighbourhood connectivity (lack of proper structure planning);
- “monoculture” urban form dominated by large lot detached dwellings and manufactured home parks (lack of product diversity);
- Fringe development dominated (lack infill development in proximity to centres, transport and amenity);
- Large urban fringe development is clearly attractive for development with the bulk of dwelling delivery being located in these precincts (current the only product of volume is being delivered in these large unfragmented and unconstrained allotments).

Strategic Mapping Extract



BOORAL – RIVER HEADS

Growth Summary

QGSO Growth Projection: 357 dwellings

Clearly the QGSO projections do not reflect current development activity in the Nikenbah Emerging Community zoned land and the current level of development activity. It is recommended to plan for the overall dwelling capacity in this SA2 - 2,605 dwellings assuming all of the Emerging community growth area is developed.

Growth capacity: +2605 dwellings

Dominant Residential Place Types

Suburban

The Riverheads community is essentially complete (infrastructure constrained) and will only undergo some modest further subdivision development in isolated locations.

The Nikenbah Emerging community expansion area is committed to being developed generally in large lot residential (900m2) and MHP formats. The emergent place type is **Suburban** with the area lacking the dwelling diversity desired for remaining Emerging community development areas (with the desired integrated diversity of Urban Neighbourhood – Expansion places).

Rural Residential

Rural residential infill areas in Sunshine Acres and Booral are identified for increase yield potential through subdivision of larger allotments. It will be important to ensure the place type values of openness and rural style amenity is retained as additional infill development occurs.

A Rural residential investigation area at Booral is identified as a potential infill development area.

Strategic Recommendations

1. The Nikenbah growth area is an important development front for the Fraser Coast. It is delivering significant dwelling capacity and is likely to grow to capacity during the 20 year planning horizon. While overall, the Fraser Coast is considered to have sufficient overall dwelling capacity to cater for projected growth (high series), it is acknowledged that certain areas may be under additional growth pressure as projected development areas may not be realised (due to land banking or development constraint issues). Accordingly, it is prudent to plan for additional "relief" growth areas. An Urban Neighbourhood (Investigation Area 2) south of Chapel Road is identified as a potential future growth area – focused around the existing sports precinct as an amenity anchor for further development. It will important to ensure that issues associated with existing Nikenbah growth front are not repeated within the investigation area. Structure planning, infrastructure coordination, neighbourhood integration and dwelling diversity must be a focus of the investigation process.
2. Rural residential areas within the Sunshine Acres and Booral area have potential for additional yield through further subdivision. Strategic changes to the minimum lots sizes to a general 1Ha minimum and 3000m2 for identified, well located precincts may be considered. These specific development outcomes would be considered for inclusion within the planning scheme subdivision code. An investigation area for limited rural residential is identified for the Booral area.

CRAIGNISH – DUNDOWRAN BEACH

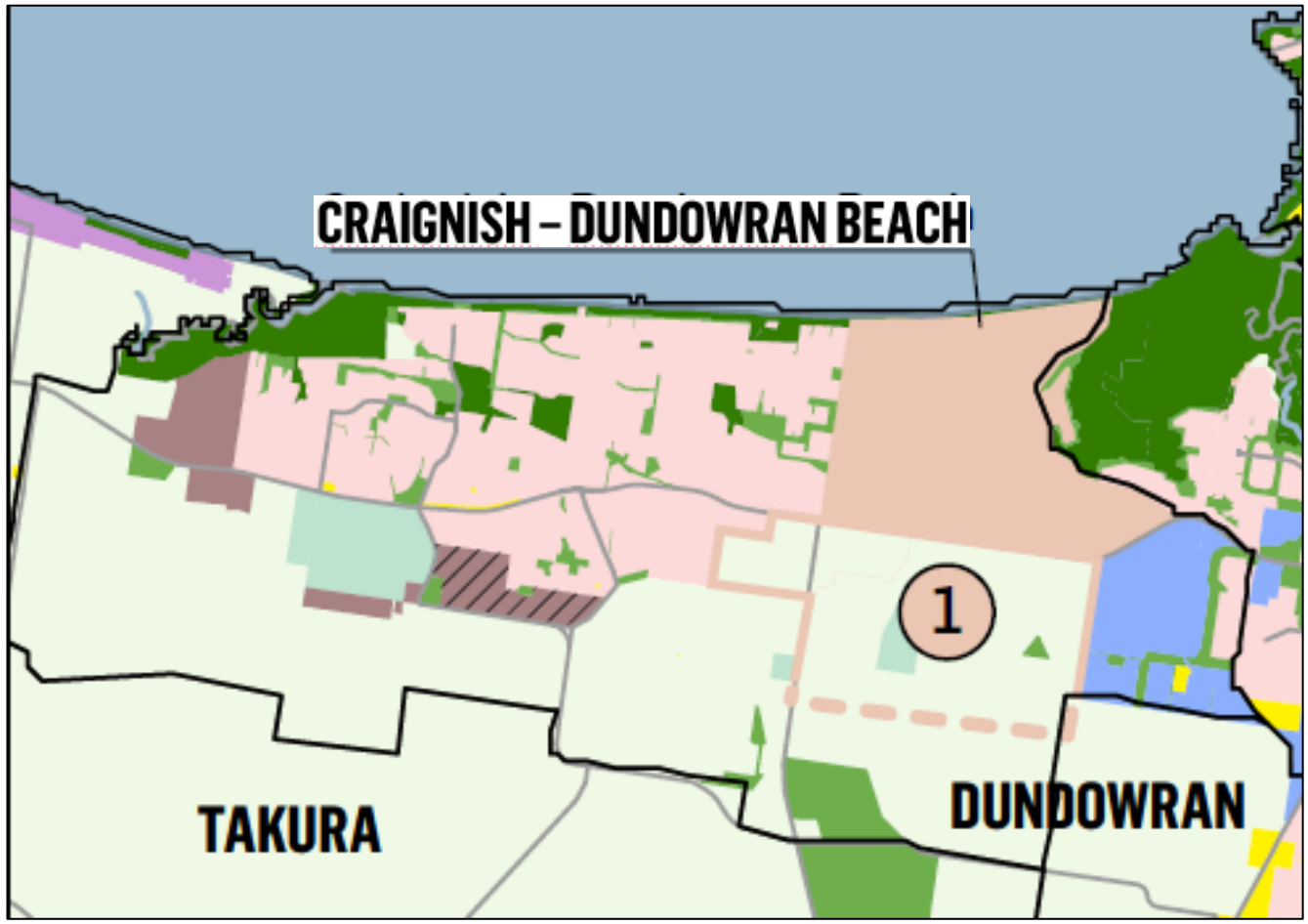
Summary

The Craignish – Dundowran Beach SA2 is currently largely an established low density suburban neighbourhood. Some limited fringe rural residential land exists on the southern and western fringe of the suburban area. Further development potential is suppressed by a lack of reticulated sewerage.

The large area of Emerging Community zoned land in the Dungowan Beach area forms an important growth node for the Fraser Coast and if efficiently developed, can provide significant dwelling capacity. The site has an existing preliminary planning approval for development however it has remained undeveloped for some time. The site has recently changed hands to new owners which offers renewed prospects for development. Coastal hazard constraints are acknowledged for the site which may impact on yield and development feasibility overall.

Should this development not proceed due to development feasibility issues, contingency planning for additional growth areas will become more important for the Fraser Coast important.

Strategic Mapping Extract



CRAIGNISH – DUNDOWRAN BEACH

Growth Summary

QGSO Growth Projection:	1,075 dwellings
Growth capacity:	2,285 dwellings
Dwelling surplus:	**+1210 dwellings**

Virtually all of the growth is delivered within the Dundowran Beach growth area where there is significant surplus capacity.

Dominant Residential Place Types

Urban Neighbourhood Expansion

The Dundowran Beach growth area is identified as a future Urban Neighbourhood Expansion place type. Being a currently undeveloped site, a structure planning process is considered vital to extract the intended place outcomes of a compact, connected neighbourhood. It has the potential to be an exemplar development of the type desired by the Fraser Coast.

Suburban

The Craignish Dundowran community is an establish suburban neighbourhood essentially fully development with large lot, detached dwelling development. Limited change is envisaged into the future without a significant commitment to sewer the area (which is unlikely).

Rural Residential

There are isolated areas of rural residential to the south and west of the urban fringe.

Strategic Recommendations

1. The Dundowran Beach growth area is an important development front for the Fraser Coast however coast hazard development constraints are acknowledged that may ultimately impact on development and yield and the development feasibility overall. An existing preliminary approval planning permit is acknowledged and therefore it is assumed that this development will occur and has the potential to deliver 2000+ dwellings (well above growth projections). The large, well located site has potential to be developed as an integrated community incorporating open space parkland, the natural environment and active pathways into a connected urban neighbourhood incorporating a diverse housing stock inclusive of low rise townhouses and multiple dwellings, small lot detached housing as well as standard allotments. A 75%/25% split between detached and attached dwellings should be targeted as part of the structure planning process.
2. However, should the Dundowran Beach development not proceed due to feasibility issues, contingency planning in the form of additional investigation areas has been provided for at Nikenbah (Booral Riverheads SA2) and Dundowran (south of Pialba Burrum Heads Road). The Dundowran Urban Neighbourhood Investigation Area 1 is identified for variable, mixed use development with potential for a fluid mix of industry, commercial or residential outcomes – depending on community need at the time of development. Structure planning, infrastructure coordination, residential need and impacts, neighbourhood integration and economic need must be a focus of the investigation process.
3. The Rural residential area to the south of the existing Craignish community is identified as having potential for additional yield through further subdivision.

POINT VERNON

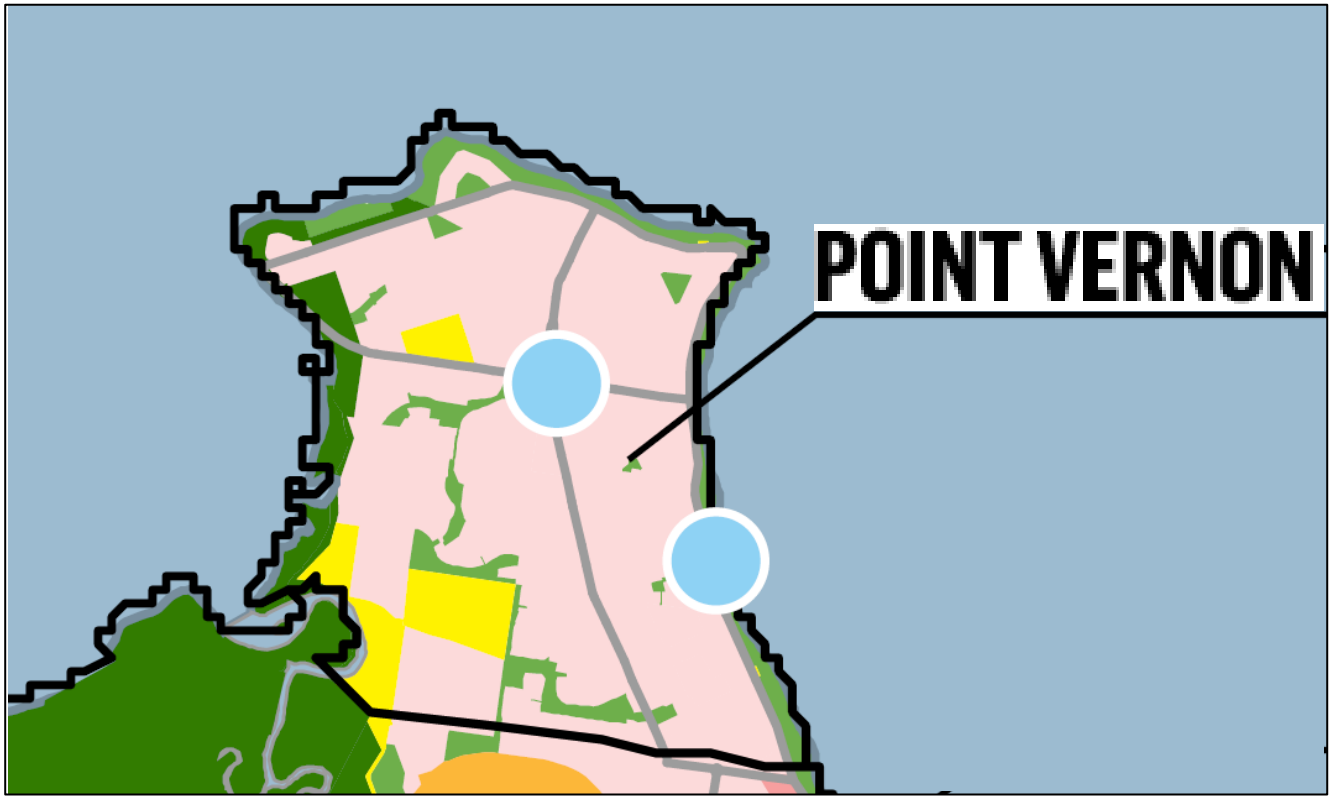
Summary

Point Vernon is one of the smaller SA2's covering just the peninsula to the west of the Hervey Bay Esplanade. The area is characterised by low density detached dwellings, with a handful of medium density pockets along the southern coastline.

With limited opportunities for new development, Point Vernon is not expected to see a major population growth however should the high growth series be realised for the area, there will be a capacity issue and increased dwelling demand.

Given the area is so well established and is constrained by the coastline, there are minimal areas for expansive development. Development is suggested to be focused on suitably scaled pocket infill in areas where older stock and/or large allotments currently exist and would be suitable for redevelopment.

Strategic Mapping Extract



POINT VERNON

Growth Summary

QGSO Growth Projection:	418 dwellings
Growth capacity:	72 dwellings
Dwelling deficit:	**-346 dwellings**

The lack of scaled development opportunities is acknowledged for Point Vernon. Targeted infill opportunities will need to be realised to provide for the projected growth.

Dominant Residential Place Types

Suburban

The Point Vernon community is an established suburban neighbourhood essentially fully developed with large lot, detached dwelling development.

Anecdotal feedback is the local community would be resistant to any wholesale change so further development should be targeted sites in well located areas.

Development interventions should be cognisant of existing residential impacts and be responsive to the individual site circumstances to maintain the suburban place outcomes.

Strategic Recommendations

1. While the QGSO high series growth is acknowledged, ultimately additional dwellings will be required to realise the growth. Should additional dwellings not be realised, the growth will relocate elsewhere.
2. There are no specific strategic interventions proposed for Point Vernon however, additional growth should be encouraged through targeted infill development wherever appropriate – especially the recycling of older housing stock on large allotments for appropriately scaled low rise development. Modest density interventions should be encouraged in the form of smaller allotment subdivision, dual occupancies and limited multiple dwelling developments where residential impacts can be addressed through appropriate design measures of scale, setbacks and landscaping. Suburban Neighbourhood place type outcomes are to be respected.

PIALBA – ELI WATERS

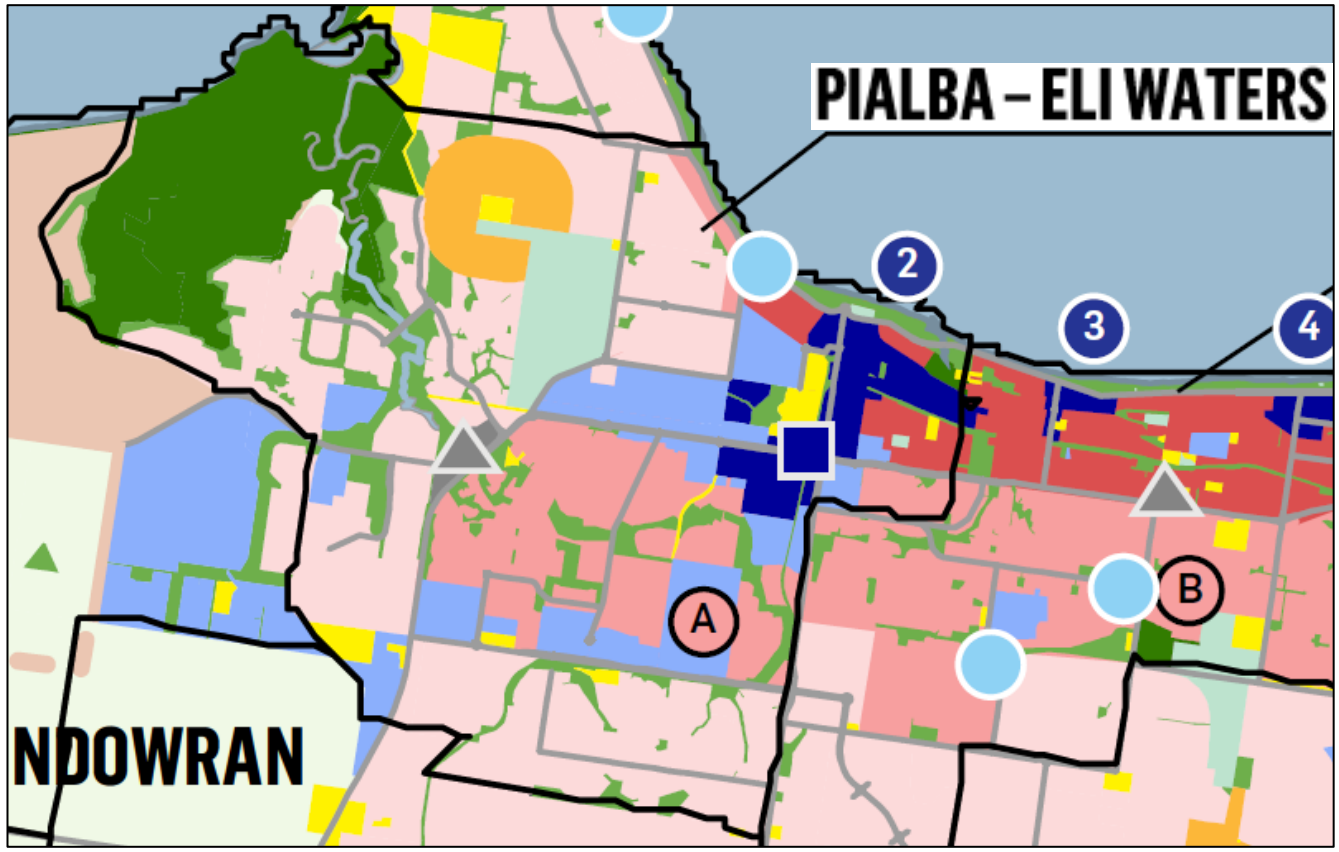
Summary

The Pialba – Eli Waters SA2 covers a large area within the centre of the Hervey Bay Region. As a result, the SA2 includes majority of the zonings with the Pialba CBD principle centre located to the east, and existing medium and high density circling that zone. The existing areas to the north and east are largely low density areas.

Despite being relatively established, the Pialba-Eli Waters SA2 is still projected to hold a sizable population with the projected high growth scenario, leading to a dwelling capacity issue with about 1,028 dwellings not being able to be provided for.

The imperative to maximise development yield from existing developed land through infill development in this location is evident if forecast growth is to be serviced. The new Pialba CBD masterplan should be leveraged for additional infill development as a priority.

Strategic Mapping Extract



PIALBA – ELI WATERS

Growth Summary

QGSO Growth Projection:	2,176 dwellings
Growth capacity:	1,148 dwellings
Dwelling deficit:	**-1028 dwellings**

The potential lack of scaled infill development opportunities is acknowledged for Pialba-Eli Waters given the fragmented land holdings. Infill opportunities to deliver significant multiple dwelling development will be important to deliver sufficient dwellings for the projected growth.

Dominant Residential Place Types

Activity Node

The Pialba CBD principle centre is identified as a key Activity Node place type. The existing Pialba CBD masterplan recognises the intensive, mixed use development required to create a vibrant city heart for Hervey Bay.

Urban Neighbourhood Infill

Leveraging the Pialba CBD and the employment precincts, higher density infill development is proposed in proximity to these more active employment and commercial centres. Higher density infill is envisaged to the north, adjoining the CBD and Esplanade precincts.

Enterprise, Education and Employment

Areas surrounding the CBD and the Urraween Road corridor are focused on employment generating enterprises including education, health and higher order retail offers.

Suburban Neighbourhood

Existing suburban neighbourhoods further away from the identified Activity Node and Urban Neighbourhood Infill areas will retain their existing place attributes while seeking infill development opportunities in the form of smaller lot subdivisions, dual occupancies and small-scale townhouses.

Strategic Recommendations

1. While the QGSO high series growth is acknowledged, ultimately additional dwellings will be required to realise the growth. Should additional dwellings not be realised, the growth will relocate elsewhere.
2. The existing Pialba CBD Master Plan and its associated implementation strategies are considered vital to the overall economic and community vibrancy of Hervey Bay and the Fraser Coast in general. The Master Plan recognises retail, community, civic, education and mixed use residential precincts within the Activity Node. Place outcomes of concentrating a mix of uses that are denser and of a higher standard of development within a well-designed public realm will create vibrant streets. These activated streets provide opportunities for social interaction and activities for local communities with a pedestrian focus in mind, featuring shade, safety, and character. The CBD is highly accessible by being centred around public transport, pedestrian and cycling networks. High-rise multiple dwellings up to 20 storeys are envisaged as being an integral part of the CBD Activity Node.
3. It will be important to leverage this CBD Activity Node through infill density and within the immediate proximity. Urban Neighbourhood Infill Areas are proposed to encourage infill development of appropriate scale. Realisation of the required infill development to meet projected growth needs will require active policy incentives to encourage the multiple dwelling development that has been missing from the Fraser Coast market in recent years.
4. Urban Neighbourhood Infill 1 – within the immediate proximity of the CBD activity node and located towards the high amenity area of the Hervey Bay Esplanade, higher intensity infill multiple dwelling development is envisaged – scaling from between 12 storeys at the edges to 20 storeys within the CBD. Development focuses on design quality and integration with the surrounding community, amenity areas and the emerging CBD Activity Node.
5. Urban Neighbourhood Infill 2 – located to the south of the CBD activity node, infill development in the form of low to medium rise multiple dwellings (3 – 5 storeys) is envisaged to deliver quality, affordable multiple dwelling product with proximity to the CBD and key employment nodes.
6. The existing Hervey Bay TAFE site is identified as a catalyst site that can be developed for infill multiple dwelling development at significant scale and be a showcase for desirable density within the Fraser Coast.

TORQUAY – SCARNESS – KAWUNGAN

Summary

Torquay – Scarness – Kawungan is located on the coastline, with the northern border facing the ocean. As a result, there are a range of zoning areas and product types. This SA2 holds the greatest supply of high density zoning which is located along the coastline. There are also a few blocks of medium density, before reverting to the more standard low density zoning.

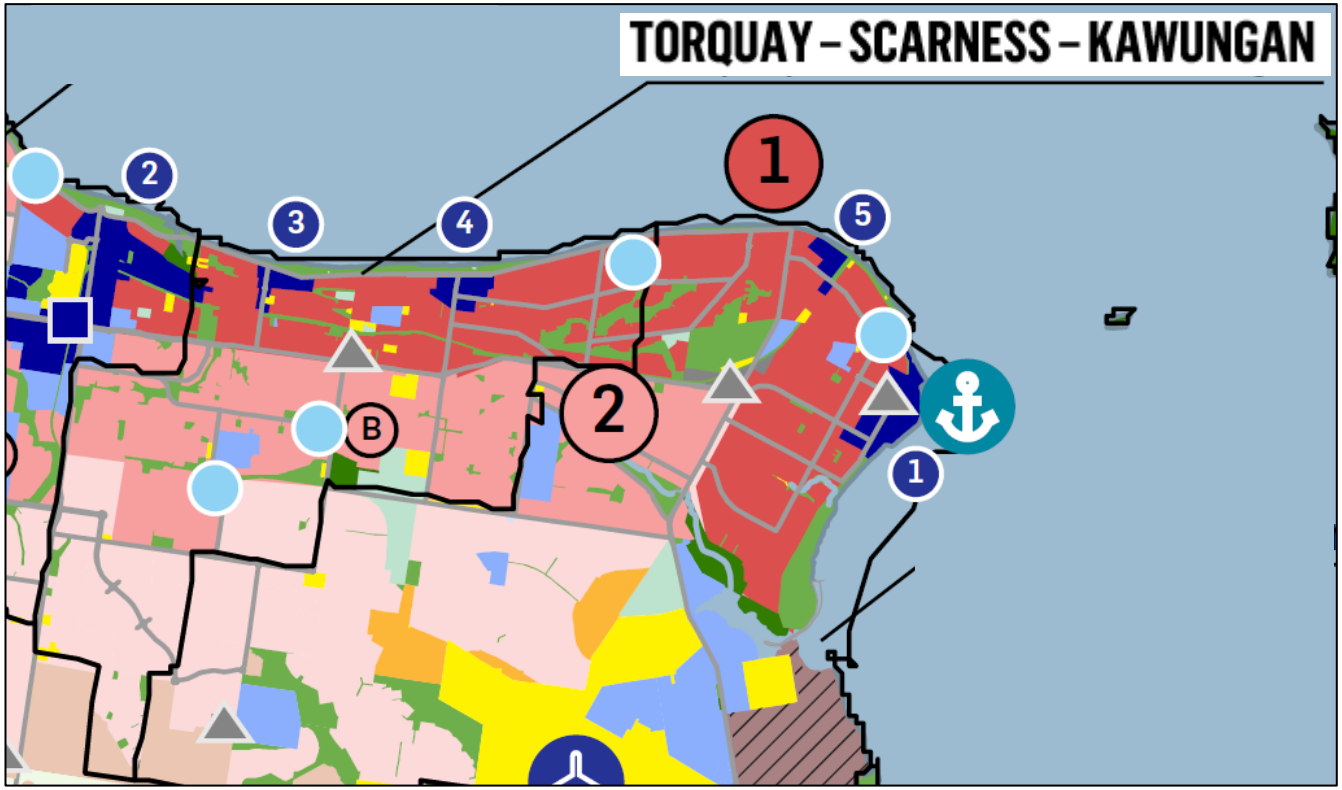
For the most part, the SA2 is largely residential, with some areas zoned as community facilities.

Despite being relatively established, the Torquay SA2 is still projected to hold a sizable population. Under the medium case population series, there are forecast to be an additional 4,462 persons over the 20 years. Given this strong growth and established nature, there may be a capacity issue to provide housing.

Under the high growth scenario, the capacity issue is further exacerbated, with about 1,600 dwellings not being able to be provided for.

The imperative to maximise development yield from the Emerging Community zoned land and encourage infill development in this location is evident if forecast growth is to be serviced.

Strategic Mapping Extract



TORQUAY – SCARNESS – KAWUNGAN

Growth Summary

QGSO Growth Projection:	3,083 dwellings
Growth capacity:	1492 dwellings
Dwelling deficit:	**-1,591 dwellings**

The potential lack of scaled infill development opportunities is acknowledged for Torquay, Scarness and Kawungan given the fragmented land holdings. Significant areas are proposed to transition to a higher scale of development to provide additional infill development opportunities.

Dominant Residential Place Types

Urban Neighbourhood Infill

The entire precinct from the Esplanade to Doolong Road/Boundary Road is allocated to the Urban Neighbourhood Infill place type – seeking infill development in well located areas to occur over the longer term. Higher density multiple dwelling opportunities are envisaged closer to the Esplanade, transitioning down in height and intensity to the south.

Suburban Neighbourhood

Committed new development underway and planned within the Emerging Community zoned land is identified as the suburban place type with limited multiple dwelling development (though significant MHP are planned). As this is new development, infill opportunities are limited.

Activity Nodes

The Scarness and Torquay Tourist Precincts (Activity Nodes 3 and 4) encourage higher order multiple dwelling development inclusive of short term accommodation developments. These locations encourage an attractive and active ground plane with restaurants and retail integrated with Esplanade frontage amenity to create a desirable public realm.

Strategic Recommendations

1. While the QGSO high series growth is acknowledged, ultimately additional dwellings will be required to realise the growth. Should additional dwellings not be realised, the growth will relocate elsewhere.
2. The difficulty in realising infill development within existing mature suburbs is acknowledged. The lack of local capacity in the multiple dwelling market and the fragmented land parcels are working against scaled multiple dwelling development. Clear incentive policies are required to enliven the sector, starting with planning scheme place creation and zoning.
3. Urban Neighbourhood Infill 1 precinct is proposed from the Esplanade to Boat Harbour Drive. This area is identified for higher density multiple dwelling development to be encouraged in proximity to amenity and centres (the Pialba CBD and the Torquay District centre). Building height to 12 storeys in the vicinity of the Scarness and Torquay Tourist Precincts (Activity Nodes 3 and 4) is envisaged within Infill area 1. Outside of these more intensive built form locations, lower height multiple dwelling development is envisaged.
4. Urban Neighbourhood Infill 2 precinct is proposed from Boat Harbour Drive to Doolong Road/Boundary Road. Lower scale infill development in the form of low to medium rise multiple dwellings is envisaged to deliver quality, affordable multiple dwelling product in well located areas – close to major transport routes, retail centres and open space amenity. Built form height will be dependent on final zoning with lower order Low Density Residential development reflecting a predominant 2 storey form increasing up to 5 storeys for Medium Density development.
5. The existing Fraser Coast Administration Centre in Tavistock Street is available for alternate uses once the Council offices are relocated to the Pialba CBD precinct. The site is identified as a catalyst site that can be developed for infill multiple dwelling development at significant scale. Opportunities exist for Council to actively partner with the development industry to deliver an exemplar multiple dwelling development that provides the desired dwelling diversity identified as needed within Fraser Coast.

URANGAN – WONDUNNA

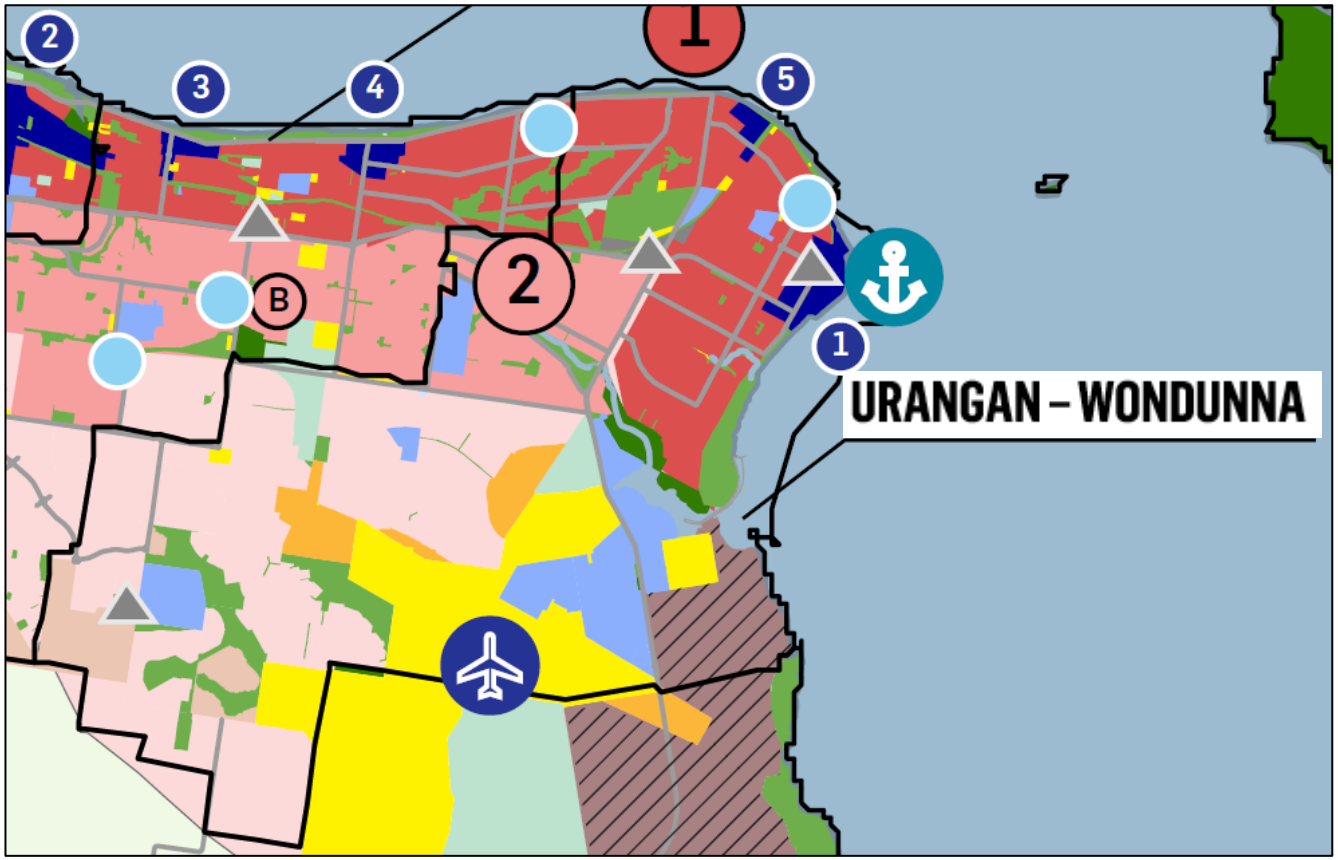
Summary

Urangan – Wondunna is located in the far north-east corner of Hervey Bay, bordered by the ocean to the north and east. The area is largely low density residential, with some mixed use zoning along the eastern coastline. There is also a small area of rural residential land, which adjoins the River Heads area to the south. High density is located to the north, rounding out the two coastline blocks, similar to the adjacent Torquay SA2.

Despite being relatively established, the Urangan SA2 is still projected to hold a sizable population. Under the high growth scenario, the capacity issue is further exacerbated, with potential land supply issues for attached housing. The bulk of growth potential is identified within the Emerging Community zoned land to the south west (with detached dwellings dominating current approvals in the area).

The imperative to maximise development yield from existing developed land through infill development in this location is evident if forecast growth is to be serviced. More intensive development in the vicinity of highly desirable coastal precincts (including Urangan Harbour precinct) should be prioritised.

Strategic Mapping Extract



URANGAN – WONDUNNA

Growth Summary

QGSO Growth Projection: 3,221 dwellings

Growth capacity: 2,997 dwellings

Dwelling deficit: -224 dwellings

The potential lack of scaled infill development opportunities is acknowledged for Urangun-Wondunna given the fragmented land holdings.

Dominant Residential Place Types

Activity Node

The Urangan Harbour precinct is identified as an Activity Node place type – attracting some of the highest intensity of development in Hervey Bay (up to 20 storeys). A focus on tourism, commercial development and high density residential development leveraging the location amenity is envisaged. The Urangan Tourist Precinct (Activity Node 5) provide a lower intensity form (up to 12 storeys) with a focus on ground plane activation and public realm integration.

Urban Neighbourhood Infill

The entire north east precinct is allocated to the Urban Neighbourhood Infill place type – seeking infill development in well located areas to occur over the longer term. Higher density multiple dwelling opportunities are envisaged closer to the Esplanade and Harbour precincts, transitioning down in height and intensity to the south and west.

Enterprise, Education and Employment

A significant industrial area leverages the Hervey Bay Airport location. Schools and District Activity Centres support the surrounding residential densities.

Suburban Neighbourhood

Large areas of existing suburban land south of Boundary Road is unlikely to significantly change into the future.

Strategic Recommendations

1. While the QGSO high series growth is acknowledged, ultimately additional dwellings will be required to realise the growth. Should additional dwellings not be realised, the growth will relocate elsewhere.
2. The difficulty in realising infill development within existing mature suburbs is acknowledged. The lack of local capacity in the multiple dwelling market and the fragmented land parcels are working against scaled multiple dwelling development. Clear incentive policies are required to enliven the sector, starting with planning scheme place creation and zoning.
3. Recommendations from the Urangan Harbour Master Plan are to be enacted to create the Urangan Harbour Activity Node – envisaged as a highly activity, commercial node that operates as a tourist destination and transit point as well as a commercial node in its own right.
4. Urban Neighbourhood Infill 1 precinct is proposed from the Esplanade in the north and Urangan Harbour in the east – through to Boat Harbour Drive and Elizabeth Street. This area is identified for higher density multiple dwelling development to be encouraged in proximity to amenity and centres. Building heights to 20 storeys is envisaged in proximity to the Urangan Harbour – in accordance with recommendations from the Urangan Harbour Master Plan. Building heights at 12 storeys within the Urangan Tourist Precinct (Activity Node 5) further from the Harbour precinct is envisaged. Outside of these more intensive built form locations, lower height multiple dwelling development is envisaged.
5. Urban Neighbourhood Infill 2 precinct is proposed from Boat Harbour Drive/Elizabeth Street to Boundary Road. Lower scale infill development in the form of low to medium rise multiple dwellings is envisaged to deliver quality, affordable multiple dwelling product in well located areas – close to major transport routes, retail centres and open space amenity. Built form height will be dependent on final zoning with lower order Low Density Residential development reflecting a predominant 2 storey form increasing up to 5 storeys for Medium Density development.
6. Rural residential areas in the south east are identified as infill opportunities to increase yield though subdivision of larger lots into minimum lot sizes of 4000m2. Further reductions in minimum lot size for targeted Rural Residential precincts should be considered.
7. Larger scaled development can be achieved within the Emerging Community zoned land to the south west which has the potential to deliver significant dwelling numbers (+500 lots approved with construction started). The bulk of this development is detached dwellings within a suburban place type.
8. Some remaining areas of uncommitted Emerging Community zoned land in the south west is identified as having potential for increased density urban development in proximity to the Wondunna District activity centre. This area is identified as suitable for the more intensive Urban Neighbourhood Expansion place type.

BURRUM – FRASER

Summary

Burrum Fraser is one of the largest SA2's, which includes the lands between Hervey Bay and Maryborough and to the western boundary of the Fraser Coast. The SA2 includes includes K'Gari (Fraser Island) (not included in the mapping extract opposite(.

The majority of this land is rural, with some low density and rural residential around existing townships to the north-west.

K'Gari is largely environmental management zoning.

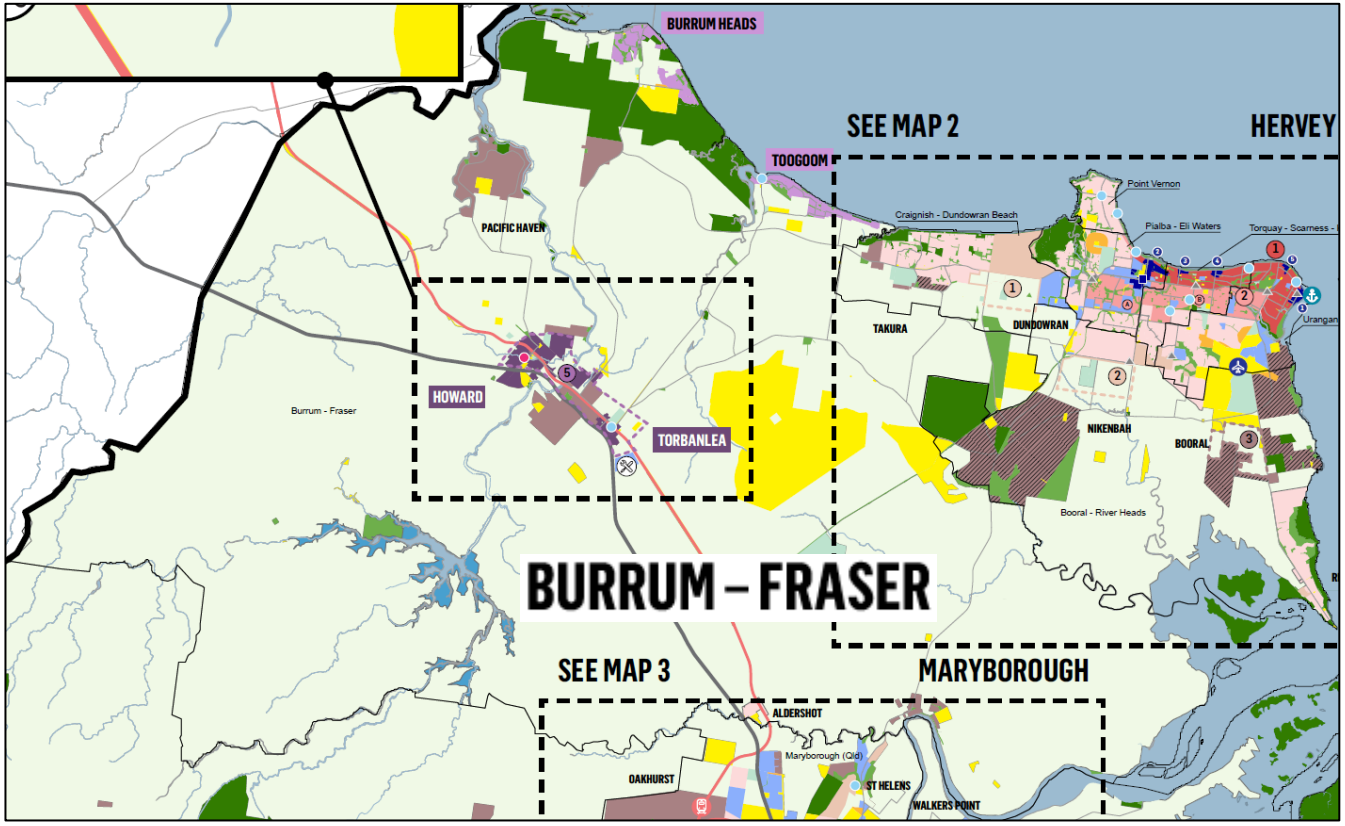
Under the high growth population series, Burrum-Fraser may require 1,803 dwellings to serve projected population growth. With an overall housing capacity of 1,113, there may be a shortfall in land for detached dwellings.

It is noted that the Emerging Community zoned land at Burrum Heads provides the bulk of the capacity for this SA2. Further the majority of this area is currently covered by existing approvals. Additional capacity will be limited by coastal hazard constraining additional development.

It may be that growth in this coastal area will be curtailed over the long term and that projected growth will occur elsewhere – in planned growth areas such as Nikenbah (Booral-River Heads SA2).

The Howard and Torbanlea rural townships lack infrastructure and supporting urban services for a specific growth focus – through changing industrial development in the area may influence growth pressures.

Strategic Mapping Extract



BURRUM – FRASER

Growth Summary

QGSO Growth Projection:	1,803 dwellings
Growth capacity:	1,113 dwellings
Dwelling deficit:	**-690 dwellings**

The potential lack of unconstrained development opportunities is acknowledged for Burrum Fraser. Emerging Community zoned land south of Burrum Heads is committed to standard residential subdivision through existing approvals. Existing approvals at Burrum Heads will deliver 1,158 dwellings and coastal hazard constraints will limited any further intensification of development. Additional capacity may be realised with the Howard/Torbanlea township areas.

Dominant Residential Place Types

Coastal Village

The Burrum Heads and Toogoom coastal villages are to retain their low scale suburban form. While existing approvals may deliver a substantial number of dwellings, they will be low density residential and be integrated to the natural environment. No further development beyond the current approvals is envisaged.

Rural Township

The rural townships of Howard and Torbanlea are the hub for the surrounding rural area. Howard is nominated as a District Activity Centre (Rural). The place character is low density with a traditional rural character that is identified of value and to be preserved as development pressure influences the township character through growth – potentially both industrial and residential.

Strategic Recommendations

1. Coastal Villages of Burrum Heads and Toogoom are recognised as significant coastal communities with existing development commitments on the southern areas of Burrum Heads delivering a potential additional +1000 dwellings. The townships are exposed to significant coastal hazards that will limit a further expansion beyond existing approvals. Development in the immediate proximity of the coast may need to transition to open space through exposure to coastal hazard.
2. The limited Rural residential developments to the south of Burrum Heads are not identified for any further expansion due to their compressive remote location.
3. The rural townships of Howard and Torbanlea are recognised as being exposed to development pressures. A significant lifestyle village on the outskirts of Howard will deliver dwelling diversity into the rural township while providing sewerage infrastructure that may be able to be further leveraged for additional development. A significant State Government investment in a train rolling stock manufacturing base to the immediate south of Torbanlea will be a significant employment generator in the area. Local housing for workers should be a consideration while industrial development that leverages the manufacturing base location may bring transition pressures to the rural township. The changing nature of the two rural townships is noted as is the varied nature of development pressure facing the location. In response, a Rural Township Investigation area is identified across the two townships. A local area planning process will be required to determine future land use distribution considering industrial, commercial and residential growth pressures.

MARYBOROUGH

Summary

Maryborough is one of the main townships within the region. Therefore, the SA2 features the broad spectrum of zoning with the historic Principal Activity centre CBD to the east, with surrounding residential development (mostly low density residential).

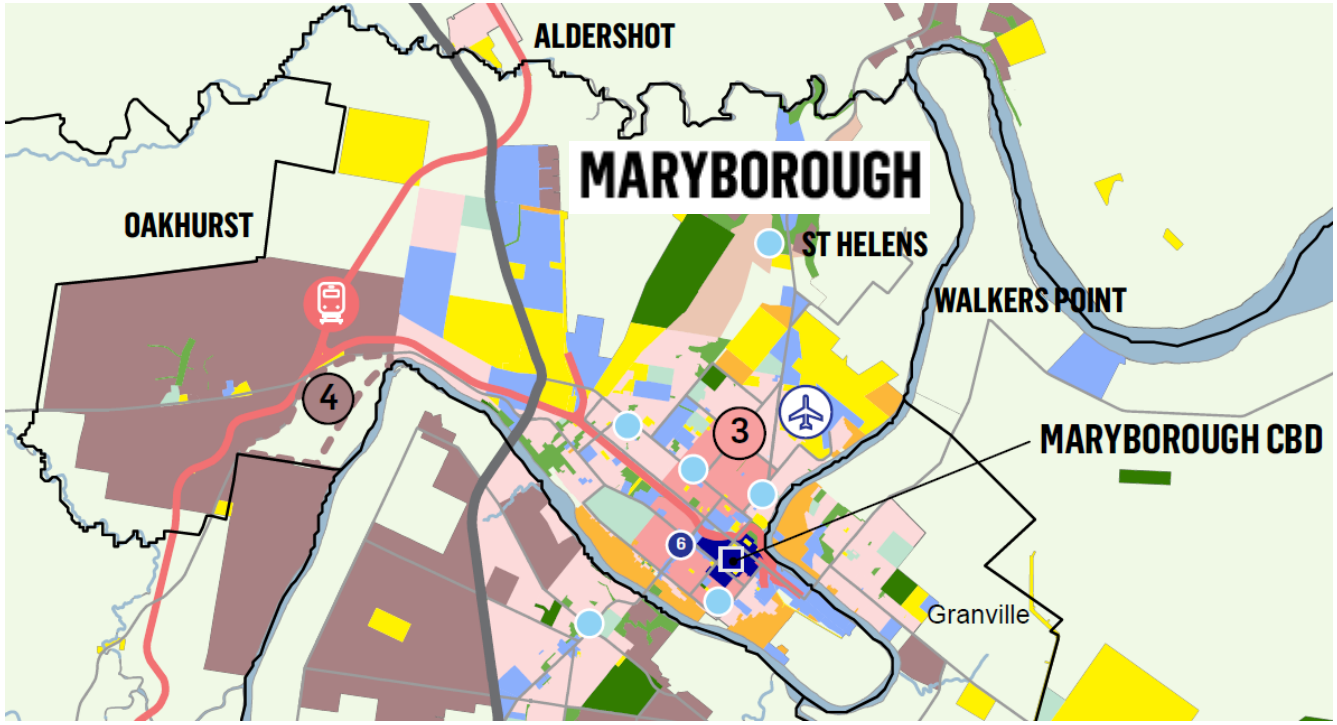
The residential zones provide a radius around the centre, with medium density surrounding the principal centre, and densities declining alongside the zones further out. There are large areas of Rural residential to the south west.

To the north, there are large areas of low density zone, which are generally improved by large single detached dwellings. There is a large undeveloped Emerging Community zoned precinct to the north at St Helens.

The high growth population series projects an additional 3,176 persons over the next 20 years (1,433 dwellings).

However, given the large areas of Emerging Community land at St Helens there is surplus capacity for more dwellings than required.

Strategic Mapping Extract



MARYBOROUGH

Growth Summary

QGSO Growth Projection:	1,433 dwellings
Growth capacity:	3,654 dwellings
Dwelling surplus:	**+2,221 dwellings**

The significant Emerging Community zoned land at St Helens to the north of Maryborough provides the bulk of the dwelling capacity surplus. Additional opportunities for infill development in and around the CBD is highlighted.

Dominant Residential Place Types

Activity Node

The Maryborough CBD Activity Node is a Principle Activity centre and is an important service centre for the Fraser Coast. There is limited existing residential development within the CBD but redevelopment opportunities to transition commercial buildings to residential and build the activation base is a significant opportunity.

Urban Neighbourhood Infill

Leveraging the Maryborough CBD and the employment precincts, higher density infill development is proposed in proximity to the more active employment and commercial centre. Development outcomes that integrate the identified traditional building character that may exist on a re-development site is an important consideration in maintaining the place type values.

Suburban Neighbourhood

Existing suburban neighbourhoods further away from the identified Activity Node and Urban Neighbourhood Infill areas will retain their existing place attributes while seeking infill development opportunities in the form of smaller lot subdivisions, dual occupancies and small-scale townhouses.

Strategic Recommendations

1. The Maryborough CBD fulfills an important roll within the Fraser Coast – as a service and commercial centre for the surrounding rural area and an developing industrial hub. The historical building form is an important feature of the CBD. Residential development however does not feature heavily at present and re-development of older commercial buildings for residential, as vacant sites or through beneficial reuse of historic character buildings is considered an important outcome for activation and the future viability of the CBD. Residential yields available within the CBD should encourage development while maintaining the city's character values. Building heights of 5-10 storeys are considered appropriate depending on local historic attributes.
2. Urban Neighbourhood Infill 3 – within the immediate proximity of the CBD activity node, higher intensity infill multiple dwelling development is encouraged – scaled up to 3 storey townhouse developments. Development focuses on design quality and integration with the surrounding community, amenity areas and traditional character values of the area.
3. The northern Emerging Community of St Helens provides a strong opportunity to deliver an affordable and diverse mix of dwellings to suit the existing and growth needs of the city. It is current identified as a Local Area Plan precinct within the existing planning scheme. A lack of sewerage infrastructure is identified as an impediment to development at present. No development has proceeded to date and development incentives from Council may be required to facilitate development.
4. Rural residential areas in the Oakhurst area on the western edge have potential for additional yield through expansion. An investigation area for limited rural residential expansion is identified in this location to the west of the Mary River.

GRANVILLE

Summary

Granville is an SA2 located to the east of Maryborough and the Mary River, stretching from the north of Maryborough about 14km south. Generally all of the zoned residential land is adjacent to the township, offering mostly low density land, as well as some parcels of medium density land. There are also some pockets of rural residential to the south.

Despite having low population growth, Granville is still expected to have land supply issues.

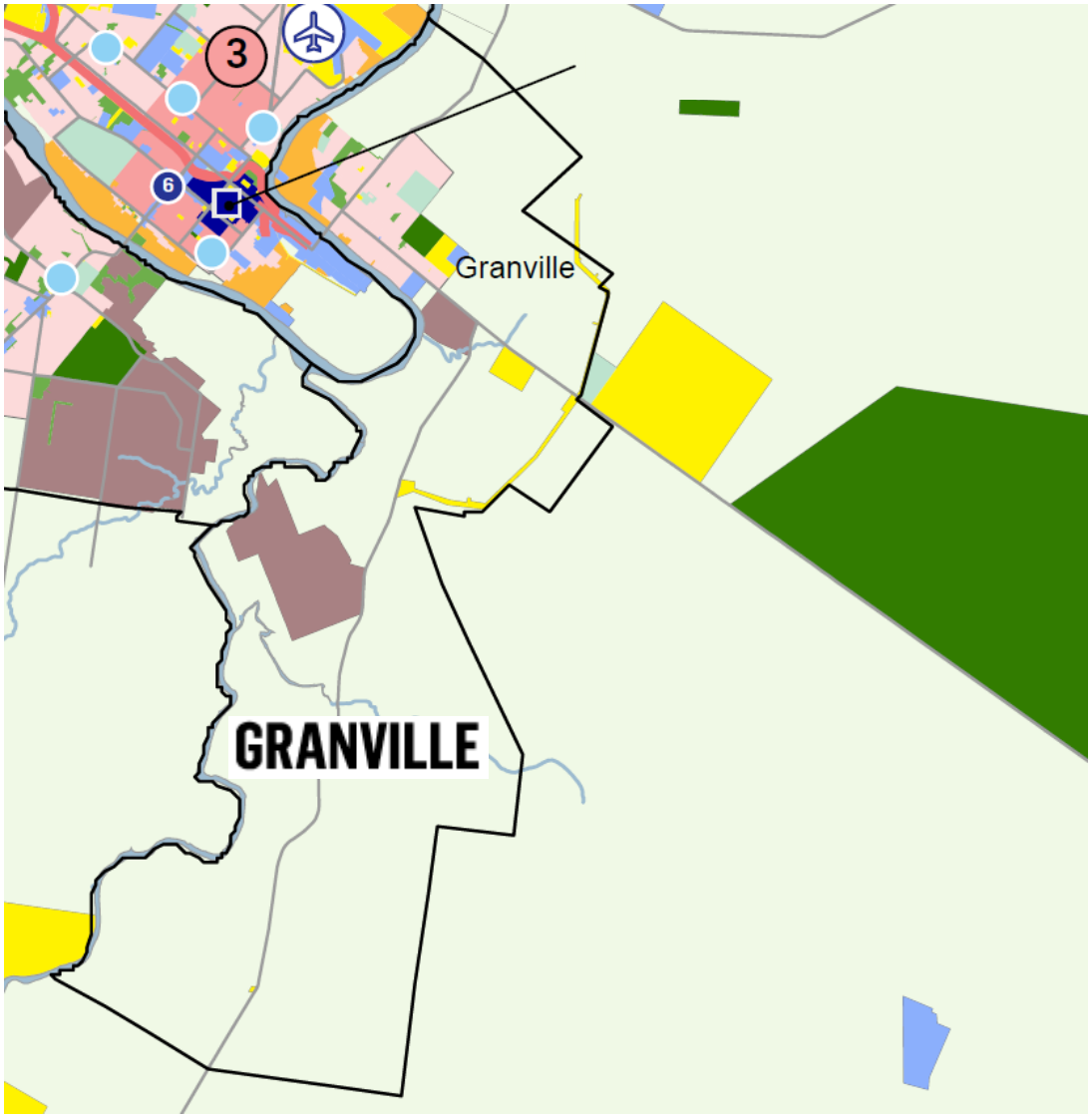
Under the high growth scenario, the dwelling target is 263 dwellings. With a total capacity of just 71 dwellings, there is a land supply shortfall of 192 dwellings over the next 20 years.

Based on client feedback, it is recognised that the existing Emerging Community zoned land is no longer valid for emerging communities. It has therefore been removed from capacity calculations – leading to a shortfall.

Given the large area of Emerging Community zoned land at St. Helens – there is no envisaged overall constraint of supply in Maryborough.

Attached product within infill development remains something to be encouraged.

Strategic Mapping Extract



GRANVILLE

Growth Summary

QGSO Growth Projection:	263 dwellings
Growth capacity:	71 dwellings
Dwelling deficit:	**-192 dwellings**

The removal of the significant Emerging Community zoned land to the east of the Mary River results in a theoretical dwelling deficiency. It is recognised that this site was not viable or feasible as a residential community leading to its removal as a LAP growth area. Given the lack of development in the location in recent years, achievement of the high growth scenario figures may be challenging.

Dominant Residential Place Types

Suburban Neighbourhood

Existing suburban neighbourhoods in Granville are established and unlikely to transition within the planning horizon. Achievement of some modest growth may occur through large residential lot subdivision and dual occupancies while maintaining the suburban attributes of the place.

Strategic Recommendations

1. The Granville Emerging Community area is currently identified within the planning scheme as a Local Area Plan growth area, which was based on a historical approval for residential community centres on a marina facility constructed off the Mary River. This approval has not progressed in the intervening years and in all likelihood, will not progress due to feasibility issues. Rather than bank on that area being available to service future growth (based on a development that is not likely to be realised), it is prudent to remove the area from the growth calculations.
2. Any unrealised growth demand within the Granville area will, in all likelihood, transfer to the St Helens area where surplus land is available.

TINANA

Summary

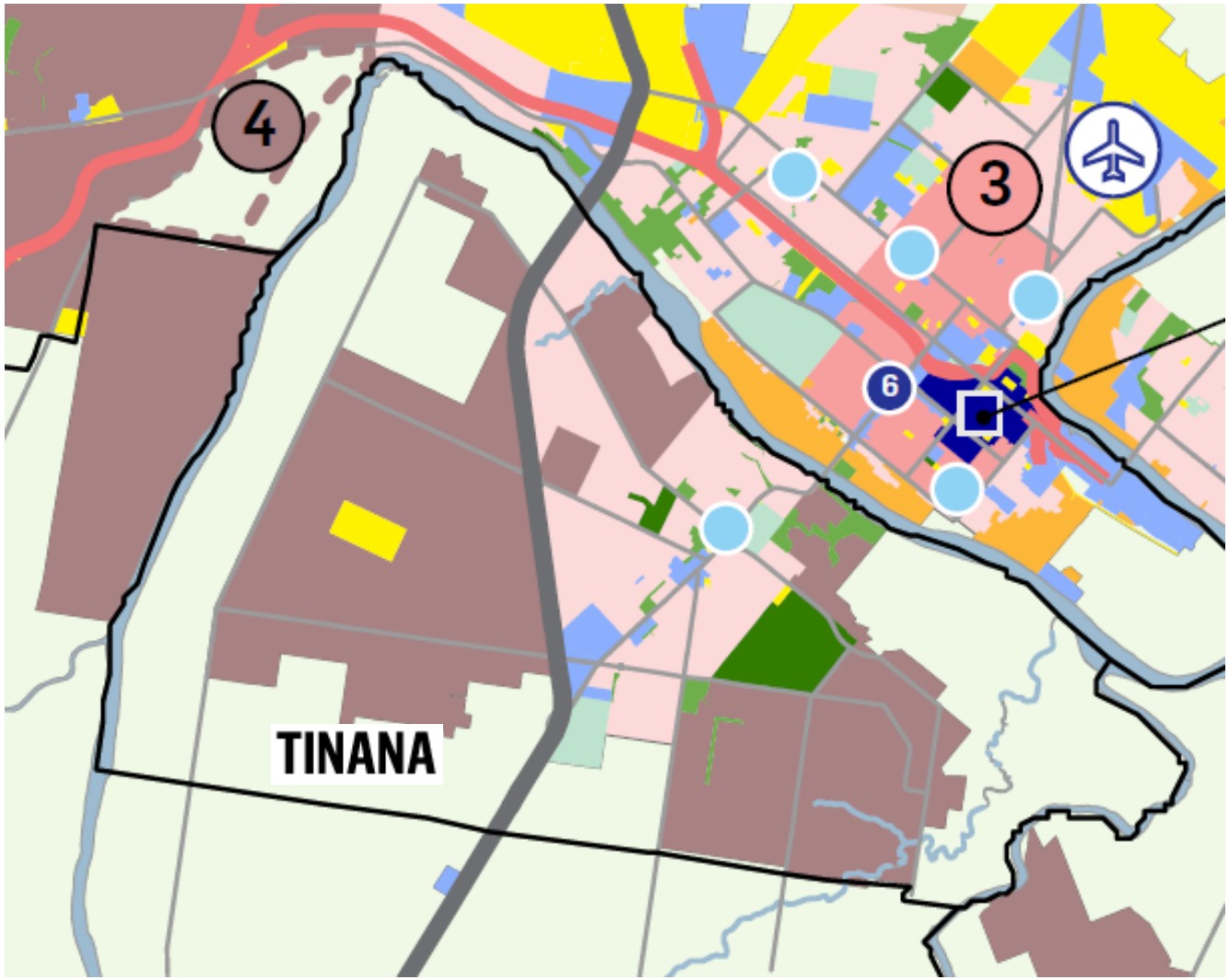
The Tinana SA2 is located to the south of Maryborough. The area is characterised by largely rural residential lands, with some low density development within the central area of the SA2.

Under the high case scenario, there are 1,670 new residents with a dwelling demand of Under the medium case, with a dwelling requirement of 654. There is balanced capacity to provide for these dwellings, noting that the bulk of the dwelling yield will need to be provided as infill in existing low density residential sites.

Recent approvals have yielded 331 dwellings as standard residential subdivision and a mix of retirement and lifestyle villages.

Efficient use of the existing Low Density Residential zoned land for infill development will be important to service the high series growth.

Strategic Mapping Extract



TINANA

Growth Summary

QGSO Growth Projection:	654 dwellings
Growth capacity:	642 dwellings
Dwelling deficit:	**-12 dwellings**

The balanced dwelling supply under the high growth scenario will require infill in existing low density residential sites. Recent approvals have yielded 331 dwellings as standard residential subdivision and a mix of retirement and lifestyle villages. Similar land use efficiency on remaining low density residential sites will be required to meet the high growth dwelling targets.

Dominant Residential Place Types

Suburban Neighbourhood

Existing suburban neighbourhoods in Tinana will retain their existing suburban place attributes while seeking infill development opportunities in the form of smaller lot subdivisions, dual occupancies and retirement and lifestyle villages.

Rural Residential

Rural residential areas to the south and west will maintain their current place characteristics and not be subject to any significant change or development pressures.

Strategic Recommendations

1. No specific strategic interventions are proposed in Tinana. Growth requirements do highlight the need for the suburban place type and standard low-density residential zoned to be available for modest infill development in the form of individual small lot subdivisions from larger residential lots and dual occupancy development. The lack of infill development to date highlights the need to encourage infill development wherever it can be obtained. Small scale, lot by lot redevelopment should be an important component of the growth strategy where existing. Well located neighbourhoods (such as Tinana) increase dwelling yield while leveraging existing infrastructure.

MARYBOROUGH REGION – SOUTH

Summary

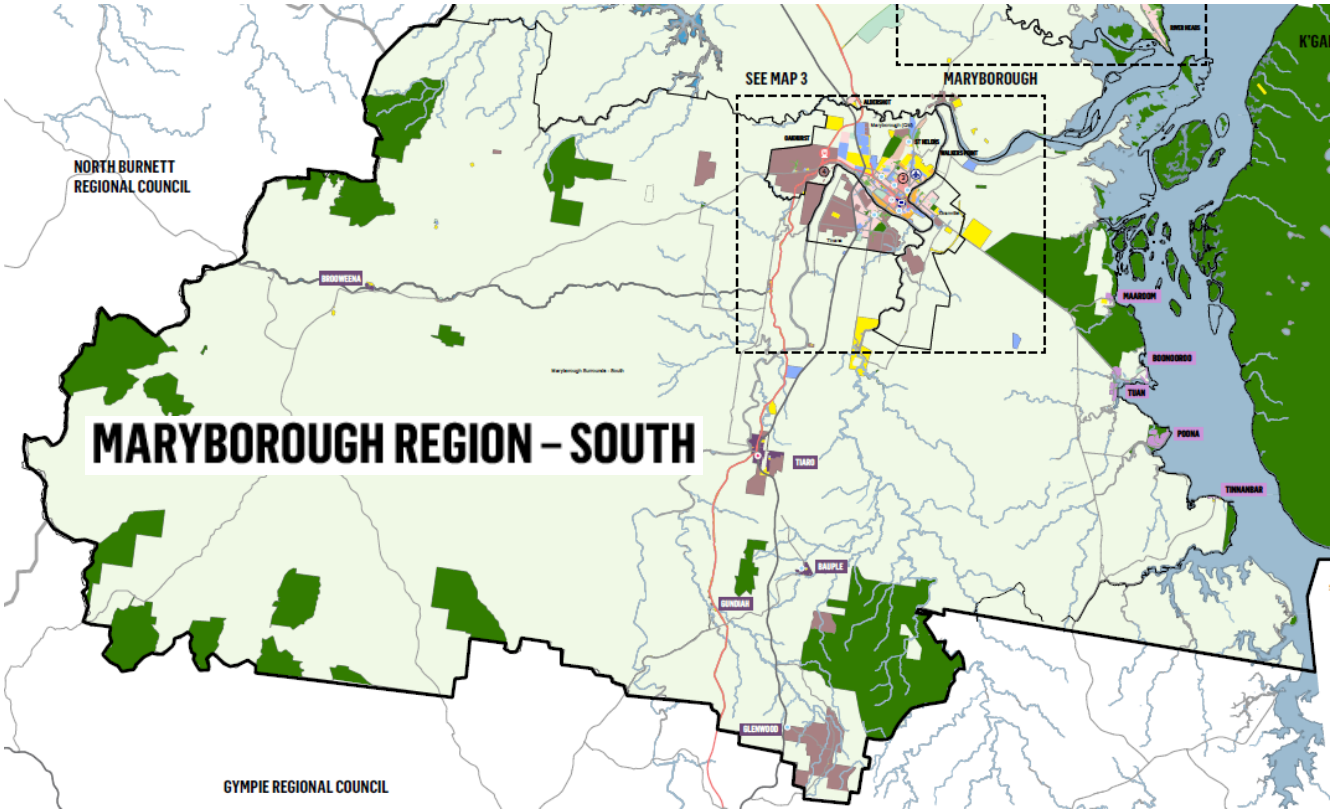
Maryborough Region South is a very large area, encompassing the majority of the southern portion of the Fraser Coast Region. It is largely rural zoned land. There is some residential zoned land in the vicinity of small townships such as Tiaro and Bauple with rural residential on the outskirts as well as a larger rural residential community at Glenwood on the southern boundary. The area contains the Great Sandy Strait townships.

The Maryborough Region South is not expected to see strong population growth. While as a whole, utilising the high growth scenarios to cover recent “sea-change” and regional town growth pressures, high growth pressures are not envisaged for these more rural locations and not tied to demonstrated historic growth.

As such, the region is only set to see a population growth of 910 persons. At this rate, there is not expected to be enough zoned land to provide the required dwellings. A minor dwelling deficit is forecast which would either require growth to be directed to available precincts in Maryborough or considered as part of minor expansion areas around the rural townships.

Coastal township expansion is not a consideration given vulnerability to coastal hazard.

Strategic Mapping Extract



MARYBOROUGH REGION – SOUTH

Growth Summary

QGSO Growth Projection:	855 dwellings (high)
	460 dwellings (medium)
Growth capacity:	291 dwellings
Dwelling deficit:	**-564 dwellings (high)**

The potential lack of unconstrained development opportunities is acknowledged for Maryborough South. This is due to the residential base being concentrated within relatively small coastal and rural townships with limited residential zoned land.

Dominant Residential Place Types

Coastal Village

The Great Sandy Straits townships of Maaroom, Boonooroo, Tuan, Poona and Tinnanbar are place types that are to retain their low scale coastal village form. These places are constrained by coastal hazard and no further development is envisaged.

Rural Township

The small rural townships of Booweena, Bauple and Gundiah are unlikely to be subjected to any growth pressures and given their relative remoteness, no change is envisaged. Tiaro is a hub for the surrounding rural area and is nominated as a District Activity Centre (Rural). The place character is low density with a traditional rural character that is identified of value and to be preserved through any growth change.

Rural Residential

The Rural residential community at Glenwood is very much a rural oriented place type with no connection to reticulated services and in some places only serviced by gravel roads. There are significant areas of rural residential land to the south of Tiaro that remain undeveloped.

Strategic Recommendations

1. The Sandy Coastal Villages of Maaroom, Boonooroo, Tuan, Poona and Tinnanbar are recognised as small coastal communities that serve a local and tourist function. These small townships are exposed to significant coastal hazards that will limit any further expansion. Residential areas under immediate threat of coastal hazard proximity may need to transition to other more appropriate uses in the short to medium term.
2. The Rural residential at Glenwood is recognised as having a low level of urban service infrastructure. Equally, due to its relatively remote location from civic and government locations, it lacks access to some of the social services that would benefit the area and its residents. Further expansion is not recommended.
3. The QGSO growth projections for the SA2 area are not able to be further distributed within the large SA2. Some additional growth may be allocated to the coastal townships, which for coastal hazard issues exposure issues, are not recommended for expansion. Accordingly, it is assumed that the majority of growth for this SA2 will be allocated to the rural township of Tiaro.
4. There are growth opportunities in Tiaro on larger undeveloped allotments of currently zoned low density residential land (identified with the rural township place type). Development of this place type should be sensitive to the rural character of the township with development outcomes, in terms of minimum lot size and built form tailored accordingly. Dwelling diversity to allow affordable housing options and aging in place should also be considered.

STRATEGIC FRAMEWORK SUMMARY RECOMMENDATIONS

The following key policy initiatives are recommended for inclusion with the Strategic Framework:

- An *Efficient land use* model is used to plan for future development – seeking modest improvements to development yield. New development in emerging community and investigation areas provide a mix of product types with the inclusion of small lot options, a range of allotment sizes and some appropriately located and scaled multiple dwelling typology options. A target minimum net development yields of 12 dwellings per Ha (total yield over the developable area) for new communities is recommended.

- The planning scheme and Council policies should be aligned to encourage infill multiple dwelling development around targeted areas – in proximity to centres and amenity locations. The Urban Neighbourhood place type envisages a mix of housing product types delivering diversity and housing choice within communities that integrate with open space, urban services, transit opportunities and pathways.

- Priority areas for Urban Neighbourhood Infill are:
  - Urban Neighbourhood Infill 1 – a higher density infill neighbourhood located across the Hervey Bay Esplanade within the end nodes of the Pialba CBD and Urangan Harbour and incorporating the tourist-oriented activity nodes at Torquay, Scarness and Urangan. The highest intensity infill multiple dwelling development is envisaged within this location.
  - Urban Neighbourhood Infill 2 – located to the south of the Infill area 1, infill development in the form of low to medium rise multiple dwellings is envisaged to deliver quality, affordable multiple dwelling product with proximity to the CBD, key employment nodes and transport opportunities.
  - Urban Neighbourhood Infill 3 – within the immediate proximity of the Maryborough CBD activity node, infill multiple dwelling development is encouraged. Development focuses on appropriately scaled development that integrates with the surrounding community, amenity areas and traditional character values of the area.

- Within the Infill area 2, infill catalyst sites are identified as the Hervey Bay TAFE and the Fraser Coast Council Administration Office (due to be relocated to the Pialba CBD). These sites can be developed for infill multiple dwelling development at significant scale and be a showcase for desirable density within the Fraser Coast.

- The Pialba CBD, the Urangan Harbour and Esplanade tourist-oriented activity nodes have all been identified as important precincts for the Fraser Coast and have undergone prior masterplanning (to various degrees). The recognition of them as Activity Node places within the planning scheme and strategic framework will drive their ongoing implementation.

- The Maryborough CBD fulfills an important role within the Fraser Coast – as a service and commercial centre for the surrounding rural area and a developing industrial hub. The historical building form is an important feature of the CBD. Residential development however does not feature heavily at present and re-development of older commercial buildings for residential, as vacant sites or through beneficial reuse of historic character buildings is considered an important outcome for activation and the future viability of the CBD. Residential yields available within the CBD should encourage development while maintaining the city's character values.

- The northern Emerging Community of St Helens provides a strong opportunity to deliver an affordable and diverse mix of dwellings to suit the existing and growth needs of the city. A lack of sewerage infrastructure is identified as an impediment to development at present. This location is considered important as a source of affordable housing product for key workers within the Maryborough area and may offer a point of difference to the Hervey Bay through alternative products not represented in the existing Hervey Bay market.

STRATEGIC FRAMEWORK SUMMARY RECOMMENDATIONS

The following policy initiatives are recommended for inclusion with the Strategic Framework:

- With existing areas of Emerging Community zoned land remaining undeveloped at Dundowran, Kawungan, Wondunna and St Helens, in combination with targeted infill development increases, there is sufficient land for growth within the life of the planning scheme. Investigation areas for urban expansion are nominated at Nikenbah (south of Chapel Road) and Dundowran (south of Pialba Burrum Heads Road) as prudent planning options should these planned areas fail to be realised for development within the life of the scheme or if development demand exceeds expectations. Clear limits on the circumstances on when it would be appropriate to bring forward these development fronts is required.

- Well located Rural residential areas have potential for additional yield through further subdivision. Strategic changes to the minimum lot sizes to a general 1Ha minimum and 3000m2 for identified, well located precincts may be considered. An investigation area for limited rural residential is identified for the Booral and Oakhurst areas.

- Coastal Villages of Burrum Heads and Toogoom are recognised as significant coastal communities with significant existing development commitments. These townships are exposed to coastal hazards that will limit any further expansion beyond existing approvals.

- The Sandy Coastal Villages of Maaroom, Boonooroo, Tuan, Poona and Tinnanbar are recognised as small coastal communities that serve a local and tourist function. These small townships are exposed to significant coastal hazards that will limit any further expansion. Residential areas under immediate threat of coastal hazard proximity may need to transition to other more appropriate uses in the short to medium term.

- The rural townships of Howard and Torbanlea are recognised as being exposed to development pressures. A significant State Government investment in a train rolling stock manufacturing base to the immediate south of Torbanlea will be a significant employment generator in the area. Local housing for workers should be a consideration while industrial development that leverages the manufacturing base location may bring transition pressures to the rural township. A Rural Township Investigation area is identified across the two townships. A local area planning process will be required to determine future land use distribution considering industrial, commercial and residential growth pressures.

- There are growth opportunities in Tiaro on larger undeveloped allotments of currently zoned low density residential land (identified with the rural township place type). Development of this place type should be sensitive to the rural character of the township with development outcomes, in terms of minimum lot size and built form tailored accordingly. Dwelling diversity to allow affordable housing options and aging in place should also be considered.

- Suburban areas in general (nominated generally as existing developed areas – the Suburban place type) should accommodate some level of density intervention in the form of subdivision, dual occupancy and targeted multiple dwelling outcome – especially where large existing residential lots can accommodate additional dwelling and remaining sensitive to the existing suburban place type.

GROWTH AND DIVERSITY OPPORTUNITIES



ISSUES AND OPPORTUNITIES

Key issues identified in the region:

- The population within the region continues to age, with new RV and lifestyle development continuing to be a prominent product in the region;
- There is little to no housing diversity within the region in terms of built form typology with most residents living in single storey, detached dwellings (irrespective of need), with apartments primarily used for short-term accommodation uses;
- New developments and housing are often of a low quality, with little consideration given to achieve high quality design or neighbourhood integration. Moreover, housing design for contemporary product is homogenous across the region;
- Rural residential style subdivisions continue to be a preferred living option among residents, with many residents still favouring the larger allotments (10,000 to 2,000 sqm lots);
- Limited infill development has occurred in the region over the past decade with zoning that allows for higher density residential development in most cases limited to one-two storey dwellings;
- Fringe expansion continues to be prevalent in townships and communities along the coastline, with much of the expansion and new development in the region occurring in these areas – most in planned expansion areas but at significantly reduced density;
- Out of sequence development continues to be a trend within the region, as does the misalignment between the LGIP and new developments where infrastructure has now been delivered.

Growth & Diversity Opportunities:

Urban growth boundary: Implementation of an urban growth boundary, including hard outer urban footprint boundaries and softer internal boundaries for the exploration of more flexible densities. These boundaries should also allow for designated expansion and investigation areas to support medium to long term growth of the region, which will require further investigation by Council to ensure forward planning is in place should the need arise for additional land supply due to accelerated growth or suppressed yield realisation from current growth areas.

20-minute neighbourhood focus: Support increased densities in spatially defined areas in proximity to centres and public and active transport options. This could be demonstrated through an exemplar project facilitated by Council and/or on Council or State-owned land, such as the Council administration site. The planning scheme review also provides the opportunity to address and incorporate best practice and context suitable provisions from the Model Code for Neighbourhood Design to help improve development and neighbourhood outcomes.

Design guidelines: Preparation and implementation of potentially local/community led design guidance that would explore and encourage diverse housing typologies that are of a high quality, meet accessible housing standards, and are designed to be responsive by demonstrating coastal and climate resilience.

Policy controls/planning scheme review: Support mixed housing product and higher densities through planning scheme amendments including rezoning, changes to categories of assessment, revision to the overall outcomes of the zone intent, mandate of dwelling mix or density targets, or a housing diversity overlay.

Housing tenure mix: Encourage a greater mix of housing tenure including affordable and social housing, to meet the housing needs of lower socio-economic and vulnerable groups of the community. This should be explored further through public private partnerships and partnering with housing providers. Build to Rent (BTR) is also worth considering, particularly for its potential to provide suitable and affordable housing for key workers in the health, aged care and education sectors. Council could sponsor or coordinate a BTR proposal with the hospitals to serve key workers or explore the potential to engage with the State Government around a potential BTR pilot project.

Infrastructure delivery: Council should explore opportunities to establish infrastructure incentives including reduced infrastructure charges, reduced development fees or other incentives to support the delivery of particular typologies. Appropriate locations and conditions that would need to be met to be eligible for potential incentives and to ensure high quality outcomes would need to be developed.

APPENDIX A:
SA2 ANALYSIS – DWELLING CAPACITY – BUSINESS AS USUAL

NOTE: METHODOLOGY AS PER STAGE 4 REPORT

METHODOLOGY

The following section outlines the total dwelling capacity, as well as supply and demand of housing within each SA2, based on a ***Business as usual*** approach.

The *Business as usual* approach follows the same methodology as the previous approach used in Stage 4 of this project, with the exception of assumed densities.

The *Business as usual* density assumptions for each zoning were as followed:

- LDR
  - Detached: 8 dw/ha
  - Attached: 15 dw/ha
- MDR
  - Detached: 8 dw/ha
  - Attached: 25 dw/ha
- HDR
  - Detached: 8 dw/ha
  - Attached: 30 dw/ha
- EC
  - Detached: 8 dw/ha
  - Attached: 15 dw/ha

BOORAL – RIVER HEADS DWELLING CAPACITY: BUSINESS AS USUAL

Dwelling Capacity

	Existing Variables						Projected Housing Capacity			
Zone/Housing Type	**Total Area**	**Total Dwellings**	**Dwelling Split**	**Existing Density**	**Realistically Available Land**	**Realistically Viable Land**	**Adjusted Split**	**Adjusted Available Land**	**Increased Density**	**Total Dwelling Capacity**
	Ha	No.	%	dw/Ha	Ha	Ha	%	Ha	dw/Ha	No.
Total	2,977	999			272.2	236.9				1,978
LDR	378.7	905								
Detached	183.2	897	99.1%	4.9			95%	0.0	8.0	0
Attached	0.1	8	0.9%	115.3			5%	0.0	15.0	0
Other	195.5									
Rural Res	2,276.3	989			532.9	396.7				
Detached	1,870.8	947	95.8%	0.5	414.9	290.5	100%	396.7		0
Attached	62.2	42	4.2%	0.7	16.2	14.6	0%	0.0		0
Other	343.3		0.0%		101.8	91.6				
Emerging Community	321.8	94			272.2	236.9				
Detached	30.4	94	100.0%	3.1	20.4	10.2	95%	225.0	8.0	1,800
Attached							5%	11.8	15.0	178
Other	291.4				251.9	226.7				

As noted, within Booral Heads – River Heads, the majority of development will occur within the Emerging Community land to the north. There is 237ha of this land which is available for development after considering constraints and fragmentation.

If the typology proportions are adjusted, the dwelling capacity of the area sits at 1,978 with densities as they are currently.

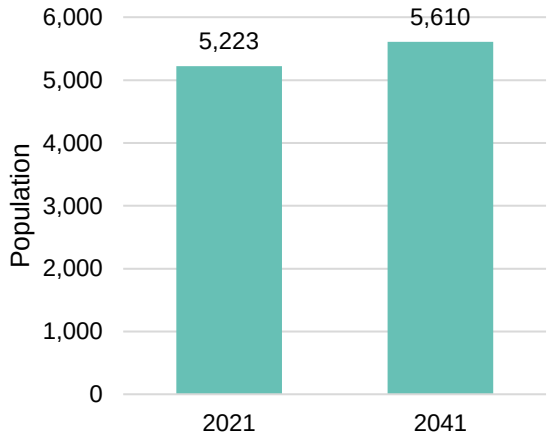
Under the increased densities scenario, the dwelling capacity increased to 2,605, highlighting the significant potential the area has.

BOORAL – RIVER HEADS DEMAND AND SUPPLY

Insights

Under the medium case population series, there is just 388 new persons projected to live within the area, equating to 146 dwellings. With an overall housing capacity of 1,978, there is greater available land than required. The high growth population series has a much more aggressive growth rate, increasing the additional persons to 963 over the next 20 years. Requirements increase to more than 363 dwellings. However, given the large areas of Emerging Communities land available with the potential to increase density, **there is still land capacity for more dwellings than required.**

Medium Population Growth Series 2021-2041

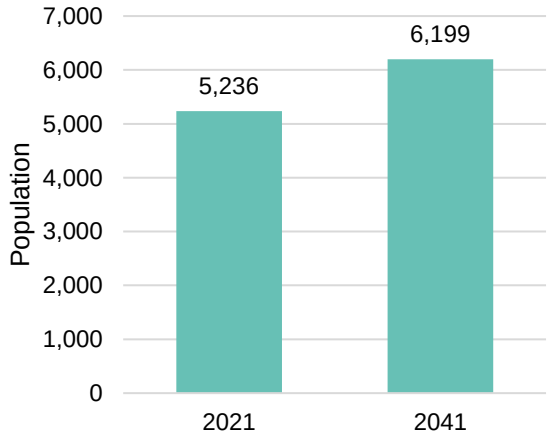


Source: QGSO Med Ed.

	Projected Dwelling Surplus
Total Population Growth	388
Dwelling Requirements	
Detached	144
Attached	2
Capacity Surplus*	
Detached	1,656
Attached	176

*Positive figures result in greater capacity of dwellings relative to the required dwellings

High Population Growth Series 2021-2041



Source: QGSO High Ed.

	Projected Dwelling Surplus
Total Population Growth	963
Dwelling Requirements	
Detached	357
Attached	6
Capacity Surplus*	
Detached	1,443
Attached	172

*Positive figures result in greater capacity of dwellings relative to the required dwellings

MARYBOROUGH DWELLING CAPACITY

Dwelling Capacity

Zone/Housing Type	Existing Variables						Projected Housing Capacity			
	Total Area	Total Dwellings	Dwelling Split	Existing Density	Realistically Available Land	Realistically Viable Land	Adjusted Split	Adjusted Available Land	Increased Density	Total Dwelling Capacity
	Ha	No.	%	dw/Ha	Ha	Ha	%	Ha	dw/Ha	No.
Total	1,227	7,011			489.5	327.4				2,803
LDR	590	4,841			135.8	43.8				
Detached	470	4,593	95%	9.8	60.3	6.0	100%	43.8	8.0	350
Attached	7	247	5%	34.1			0%	0.0	15.0	0
Other	113				75.6	37.8				
MDR	150	2,123			25.4	5.1				
Detached	113	1,401	66%	12.4	18.2	3.6	0%	0.0	8.0	0
Attached	15	722	34%	48.0			100%	5.1	25.0	127
Other	22				7.2	1.4				
Rural Residential	885	486			424.8	319.3				
Detached	695	484	100%	0.7	315.0	220.5	100%	319.3		0
Attached	11	2	0%	0.2	10.6	9.5	0%	0.0		0
Other	179				99.2	89.3				
Emerging Community	487	48			328.3	278.5				
Detached	127	42	88%	0.3	84.9	59.4	95%	264.6	8.0	2,117
Attached	5	6	13%	1.1			5%	13.9	15.0	209
Other	354				243.5	219.1				

As noted, there are large areas of available land which are zoned rural residential, and emerging communities. With majority of this land available and viable, the dwelling capacity does remain high. Overall, there is capacity for an additional 2,803 dwellings based on the existing densities, of which majority are expected to be located within the emerging communities zone.

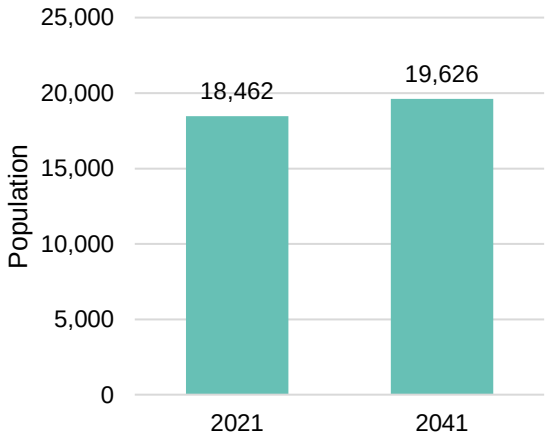
Under the increased densities scenario, there is potential for 3,654 dwellings.

MARYBOROUGH DEMAND AND SUPPLY

Insights

Under the medium case population series, Maryborough may see almost 1,200 new residents, equating to 526 dwellings. With an overall housing capacity of 2,803, there is greater available land than required. The high growth population series has a much more aggressive growth rate, increasing the additional persons to 3,176 over the next 20 years. Requirements increase to more than 1,433 dwellings. However, given the large areas of Emerging Communities land available, **there is still land capacity for more dwellings than required.**

Medium Population Growth Series 2021-2041

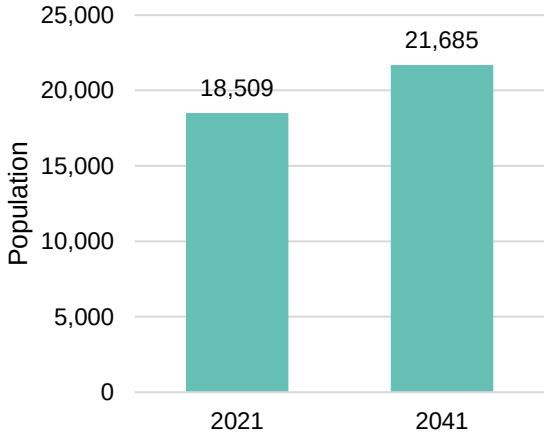


Source: QGSO Med Ed.

	Projected Dwelling Surplus
Total Population Growth	1,164
Dwelling Requirements	
Detached	413
Attached	113
Capacity Surplus*	
Detached	2,054
Attached	223

*Positive figures result in greater capacity of dwellings relative to the required dwellings

High Population Growth Series 2021-2041



Source: QGSO High Ed.

	Projected Dwelling Surplus
Total Population Growth	3,176
Dwelling Requirements	
Detached	1,127
Attached	306
Capacity Surplus*	
Detached	1,340
Attached	30

*Positive figures result in greater capacity of dwellings relative to the required dwellings

BURRUM - FRASER DWELLING CAPACITY

Dwelling Capacity

Zone/Housing Type	Existing Variables						Projected Housing Capacity			
	Total Area	Total Dwellings	Dwelling Split	Existing Density	Realistically Available Land	Realistically Viable Land	Adjusted Split	Adjusted Available Land	Increased Density	Total Dwelling Capacity
	Ha	No.	%	dw/Ha	Ha	Ha	%	Ha	dw/Ha	No.
Total	824	3,551			148.4	102.2				854
LDR	698	3,551			54.1	18.7				
Detached	402	3,302	93%	8.2	20.7	2.1	100%	18.7	8.0	150
Attached	7	249	7%	37.1			0%	0.0	15.0	0
Other	289				33.3	16.7				
MDR	6				2.1	0.4				
Detached							0%	0.0	8.0	0
Attached							100%	0.4	25.0	10
Other	6				2.1	0.4				
Rural Residential	1,527	657			250.2	213.8				
Detached	1,102	652	99%	0.6	193.7	174.3	100%	213.8		0
Attached	11	5	1%	0.5			0%	0.0		0
Other	415				56.5	39.6				
Emerging Community	121				92.2	83.0				
Detached							95%	78.9	8.0	631
Attached							5%	4.2	15.0	62
Other	121				92.2	83.0				

Given the more rural nature of this SA2, there is limited capacity of just 854 dwellings, of which the majority are within the emerging communities zone. There is not likely to be many attached dwellings, with circa 70 expected across the whole SA2.

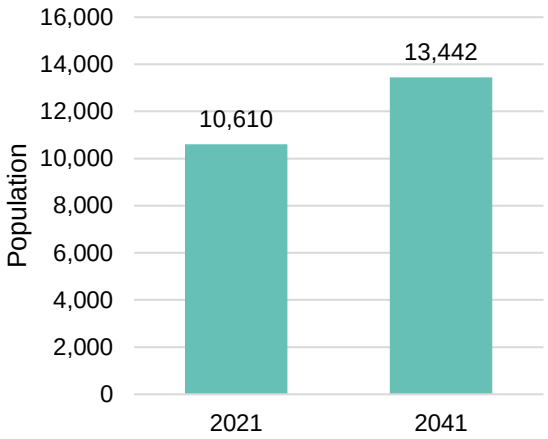
It is noted that the densities within this SA2 may be considered aggressive given the more rural nature, particularly for attached product.

BURRUM - FRASER DEMAND AND SUPPLY

Insights

Under the medium case population series, Burrum-Fraser may be home to more than 2,800 new residents in the next 20 years, equating to 1,445 dwellings. With an overall housing capacity of just 854, **there may be a shortfall in land for detached dwellings. With higher population growth, this is only set to exuberate the issue.**

Medium Population Growth Series 2021-2041

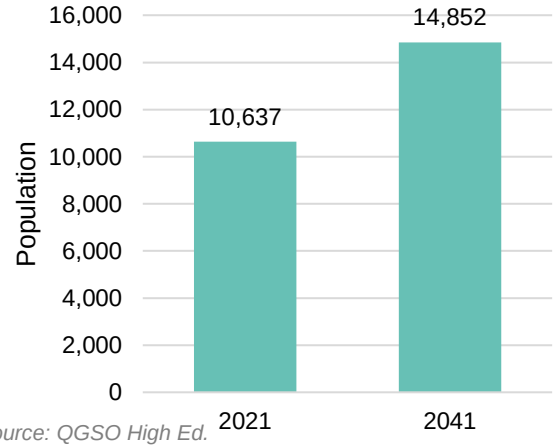


Source: QGSO Med Ed.

	Projected Dwelling Surplus
Total Population Growth	2,832
Dwelling Requirements	
Detached	1,321
Attached	124
Capacity Surplus*	
Detached	-540
Attached	-51

*Positive figures result in greater capacity of dwellings relative to the required dwellings

High Population Growth Series 2021-2041



Source: QGSO High Ed.

	Projected Dwelling Surplus
Total Population Growth	4,215
Dwelling Requirements	
Detached	1,649
Attached	154
Capacity Surplus*	
Detached	-868
Attached	-81

*Positive figures result in greater capacity of dwellings relative to the required dwellings

POINT VERNON DWELLING CAPACITY

Dwelling Capacity

Zone/Housing Type	Existing Variables						Projected Housing Capacity			
	Total Area	Total Dwellings	Dwelling Split	Existing Density	Realistically Available Land	Realistically Viable Land	Adjusted Split	Adjusted Available Land	Increased Density	Total Dwelling Capacity
	Ha	No.	%	dw/Ha	Ha	Ha	%	Ha	dw/Ha	No.
Total	263	2,504			23.6	5.2				49
LDR	256	2,504			23.6	5.2				
Detached	199	2,389	95%	12.0	9.5	1.0	80%	4.1	8.0	33
Attached	5	115	5%	24.7			20%	1.0	15.0	16
Other	52				14.1	4.2				
MDR	6									
Detached							0%	0.0	8.0	0
Attached							100%	0.0	25.0	0
Other	6									

Given Point Vernon is well established and covers just 263ha of land, there is minimal capacity for additional development. Whilst there may be almost 24ha of available land, it is heavily fragmented across several parcels of land, with just 5ha of that being viable for development. As a result, there is capacity for a further 49 dwellings.

POINT VERNON DEMAND AND SUPPLY

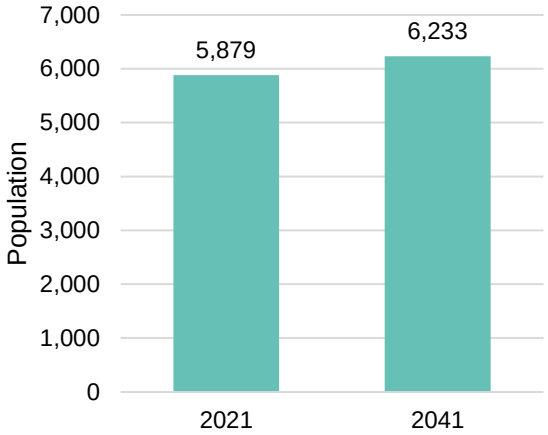
Insights

With limited opportunities for new development, Point Vernon is not expected to see any major population growth.

Under the medium case population series, there are just 354 persons expected over the 20 years. Under this scenario, the area may see a shortfall of detached housing supply.

With a higher rate of population, the shortfall in available land will become more prominent, with more than 350 dwellings needed to house the population.

Medium Population Growth Series 2021-2041

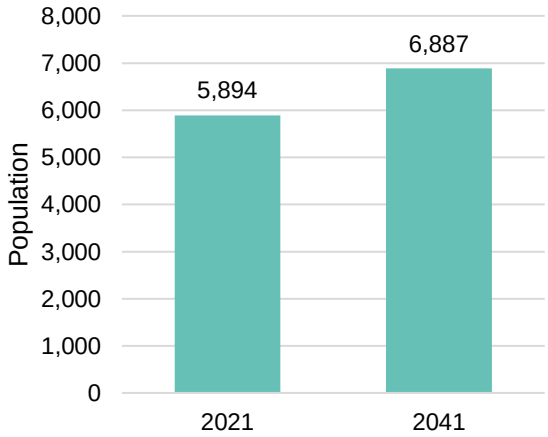


Source: QGSO Med Ed.

	Projected Dwelling Surplus
Total Population Growth	354
Dwelling Requirements	
Detached	138
Attached	13
Capacity Surplus*	
Detached	-105
Attached	3

*Positive figures result in greater capacity of dwellings relative to the required dwellings

High Population Growth Series 2021-2041



Source: QGSO High Ed.

	Projected Dwelling Surplus
Total Population Growth	993
Dwelling Requirements	
Detached	385
Attached	33
Capacity Surplus*	
Detached	-352
Attached	-17

*Positive figures result in greater capacity of dwellings relative to the required dwellings

TORQUAY - SCARNESS – KAWUNGAN DWELLING CAPACITY

Dwelling Capacity

	Existing Variables						Projected Housing Capacity			
Zone/Housing Type	**Total Area**	**Total Dwellings**	**Dwelling Split**	**Existing Density**	**Realistically Available Land**	**Realistically Viable Land**	**Adjusted Split**	**Adjusted Available Land**	**Increased Density**	**Total Dwelling Capacity**
	Ha	No.	%	dw/Ha	Ha	Ha	%	Ha	dw/Ha	No.
Total	710	6,827			177.1	117.0				1,091
LDR	429	4,631			26.3	2.6				
Detached	393	4,379	95%	11.2	21.0	2.1	70%	1.8	8.0	15
Attached	13	252	5%	18.9			30%	0.8	15.0	12
Other	24				5.3	0.5				
MDR	84	1,018			22.1	4.4				
Detached	34	334	33%	10.0	16.7	3.3	0%	0.0	8.0	0
Attached	13	684	67%	52.3			100%	4.4	25.0	110
Other	37				5.4	1.1				
HD	58	1,156			8.2	1.6				
Detached	22	221	19%	10.0	4.5	0.9	0%	0.0	8.0	0
Attached	9	935	81%	107.8			100%	1.6	30.0	49
Other	27				3.8	0.8				
Emerging Community	139	22			120.5	108.3				
Detached	2	22	100%	11.5	0.3	0.1	95%	102.9	8.0	823
Attached							5%	5.4	15.0	81
Other	137				120.2	108.2				

The SA2 includes large areas of land which are zoned medium and high density – covering 142ha of land. As a result, the SA2 holds the highest number of units at circa 2,100. Despite being so heavily built up, there are large areas of emerging community to the south which do have a higher capacity for additional dwellings. Overall, there is a capacity for 1,091 dwellings, of which 83% is located within the emerging communities zone.

With increased densities, there would be capacity for 1,492 – the difference being equally split between both detached and attached product.

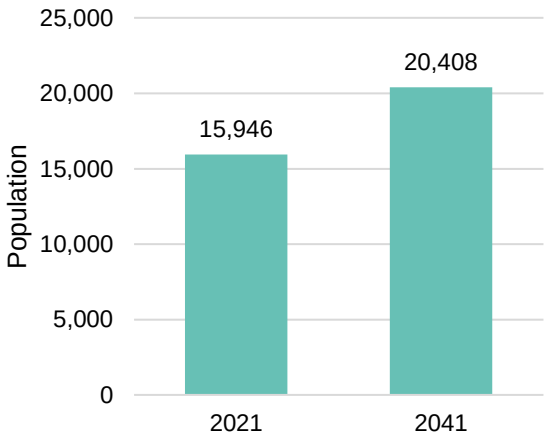
TORQUAY - SCARNESS – KAWUNGAN DEMAND AND SUPPLY

Insights

Despite being relatively established, the Torquay SA2 is still projected to hold a sizable population. Under the medium case population series, there are forecast to be an additional 4,462 persons over the 20 years. Given this strong growth and established nature, there is likely to be a capacity issue to provide housing.

Under the high growth scenario, the capacity issue is further exuberated, with nearly 2,000 dwellings not being able to be provided for.

Medium Population Growth Series 2021-2041

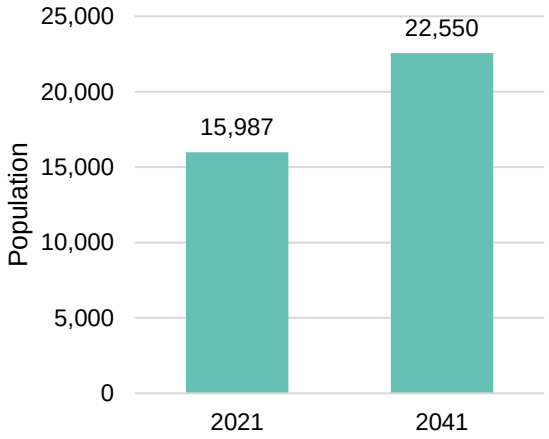


Source: QGSO Med Ed.

	Projected Dwelling Surplus
Total Population Growth	4,462
Dwelling Requirements	
Detached	1,283
Attached	813
Capacity Surplus*	
Detached	-445
Attached	-560

*Positive figures result in greater capacity of dwellings relative to the required dwellings

High Population Growth Series 2021-2041



Source: QGSO High Ed.

	Projected Dwelling Surplus
Total Population Growth	6,563
Dwelling Requirements	
Detached	1,887
Attached	1,196
Capacity Surplus*	
Detached	-1,049
Attached	-943

*Positive figures result in greater capacity of dwellings relative to the required dwellings

CRAIGNISH - DUNDOWRAN BEACH DWELLING CAPACITY

Dwelling Capacity

Zone/Housing Type	Existing Variables						Projected Housing Capacity			
	Total Area	Total Dwellings	Dwelling Split	Existing Density	Realistically Available Land	Realistically Viable Land	Adjusted Split	Adjusted Available Land	Increased Density	Total Dwelling Capacity
	Ha	No.	%	dw/Ha	Ha	Ha	%	Ha	dw/Ha	No.
Total	1,323	1,928			216.1	190.6				1,658
LDR	704	1,925			2.5	1.2				
Detached	597	1,903	99%	3.2			100%	1.2	8.0	10
Attached	3	22	1%	7.3			0%	0.0	15.0	0
Other	104				2.5	1.2				
Rural Residential	194	90			9.1	6.3				
Detached	166	82	91%	0.5			100%	9.1		0
Attached	9	8	9%	0.8			0%	0.0		0
Other	18				9.1	6.3				
Emerging Community	426	3			213.7	189.4				
Detached	16	3	100%	0.2	14.5	10.1	90%	170.5	8.0	1,364
Attached							10%	18.9	15.0	284
Other	409				199.2	179.3				

The areas zoned low density are largely developed, with very few parcels remaining. Within this area, only circa 1ha remains viable for development.

However, as noted, there are large areas of emerging communities land to the east, offering circa 190ha of viable, developable land. As a result, the SA2 overall has a total dwelling capacity of 1,658, with that largely being within this zoning.

With increased densities, the capacity increased to 2,285, which was largely a mix of attached and some detached within the emerging communities zone.

CRAIGNISH - DUNDOWRAN BEACH DEMAND AND SUPPLY

Insights

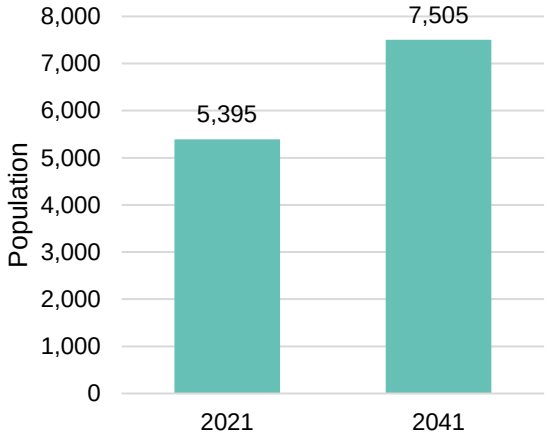
Although the area has a large amount of land available, population growth is relatively low. This is likely due to the low density attributes, which may continue into the future.

Under the medium case scenario, there will be circa 7,500 residents by 2041, with an additional 800 dwellings needed to house the incoming population.

Should the high case population be achieved, dwelling requirements will increase to 1,075.

However with the significant land available, there is adequate capacity to support growth within this area.

Medium Population Growth Series 2021-2041

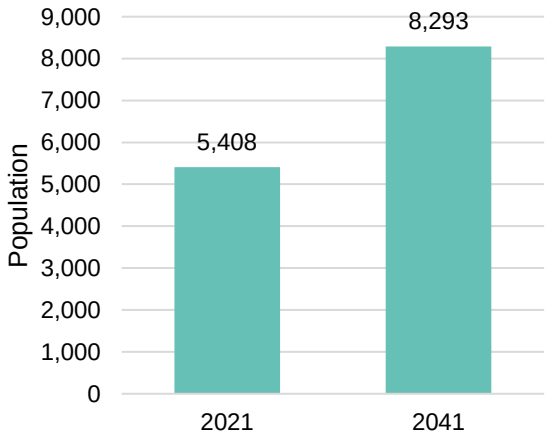


Source: QGSO Med Ed.

	Projected Dwelling Surplus
Total Population Growth	2,111
Dwelling Requirements	
Detached	789
Attached	8
Capacity Surplus*	
Detached	585
Attached	276

*Positive figures result in greater capacity of dwellings relative to the required dwellings

High Population Growth Series 2021-2041



Source: QGSO High Ed.

	Projected Dwelling Surplus
Total Population Growth	2,884
Dwelling Requirements	
Detached	1,065
Attached	10
Capacity Surplus*	
Detached	309
Attached	274

*Positive figures result in greater capacity of dwellings relative to the required dwellings

PIALBA - ELI WATERS DWELLING CAPACITY

Dwelling Capacity

Zone/Housing Type	Existing Variables						Projected Housing Capacity			
	Total Area	Total Dwellings	Dwelling Split	Existing Density	Realistically Available Land	Realistically Viable Land	Adjusted Split	Adjusted Available Land	Increased Density	Total Dwelling Capacity
	Ha	No.	%	dw/Ha	Ha	Ha	%	Ha	dw/Ha	No.
Total	721	5,597		7.8	187.7	84.9				808
LDR	544	4,772			106.4	35.0				
Detached	405	4,514	95%	11.1	45.0	4.5	80%	28.0	10.0	224
Attached	8	258	5%	32.0	0.5	0.0	20%	7.0	30.0	105
Other	131				60.9	30.5				
MD	76	732			23.5	4.7				
Detached	30	244	33%	8.2	14.1	2.8	20%	0.9	10.0	8
Attached	9	488	67%	56.3			80%	3.8	40.0	94
Other	38				9.5	1.9				
HD	7	91			1.3	0.3				
Detached	2	20	22%	9.6	0.4	0.1	0%	0.0	10.0	0
Attached	1	71	78%	128.6			100%	0.1	50.0	2
Other	4				0.9	0.2		0.0		
Emerging Community	94	2			56.5	45.0				
Detached	29	2	100%	0.1	26.9	24.2	95%	42.7	10.0	342
Attached							5%	2.2	30.0	34
Other	65				29.7	20.8				

There are 5,597 dwellings currently in the SA2, equating to a relatively high density overall. There is also a large portion of the land which is available for development, however this is highly fragmented. As a result, just 85ha of land is viable for development. There is capacity for just 808 additional dwellings across this space, which is spread between the low density zone, and the emerging communities zone.

Increasing densities would result in a capacity of 1,148 dwellings, which is largely attached product scattered throughout the SA2.

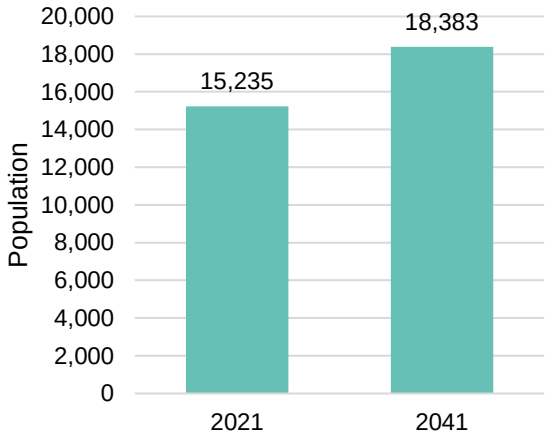
PIALBA - ELI WATERS DEMAND AND SUPPLY

Insights

Despite being relatively established, the Pialba SA2 is still projected to hold a sizable population. Under the medium case population series, there are forecast to be an additional 3,148 persons over the 20 years. Given this strong growth and established nature, there may be a capacity issue to provide housing.

Under the high growth scenario, the capacity issue is further exacerbated, with about 1,400 dwellings not being able to be provided for.

Medium Population Growth Series 2021-2041

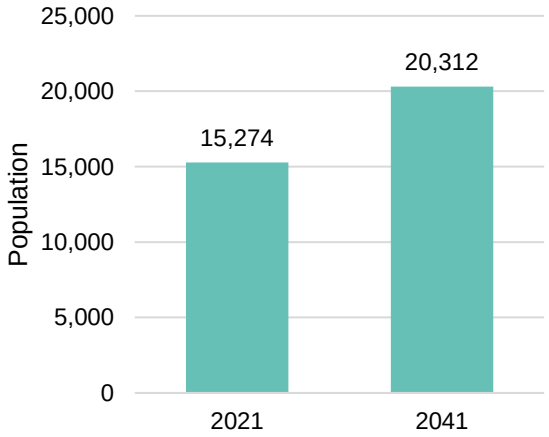


Source: QGSO Med Ed.

	Projected Dwelling Surplus
Total Population Growth	3,148
Dwelling Requirements	
Detached	1,361
Attached	317
Capacity Surplus*	
Detached	-788
Attached	-84

*Positive figures result in greater capacity of dwellings relative to the required dwellings

High Population Growth Series 2021-2041



Source: QGSO High Ed.

	Projected Dwelling Surplus
Total Population Growth	5,038
Dwelling Requirements	
Detached	1,766
Attached	410
Capacity Surplus*	
Detached	-1,193
Attached	-175

*Positive figures result in greater capacity of dwellings relative to the required dwellings

URANGAN – WONDUNNA DWELLING CAPACITY

Dwelling Capacity

	Existing Variables						Projected Housing Capacity			
Zone/Housing Type	**Total Area**	**Total Dwellings**	**Dwelling Split**	**Existing Density**	**Realistically Available Land**	**Realistically Viable Land**	**Adjusted Split**	**Adjusted Available Land**	**Increased Density**	**Total Dwelling Capacity**
	Ha	No.	%	dw/Ha	Ha	Ha	%	Ha	dw/Ha	No.
Total	1,206	6,006		5.0	417.9	250.3				2,207
LDR	714	4,521			140.5	31.4				
Detached	608	4,302	95%	7.1	97.0	9.7	80%	25.2	8.0	201
Attached	15	219	5%	14.9			20%	6.3	15.0	94
Other	91				43.5	21.7				
MD	61	720			14.2	2.8				
Detached	17	145	20%	8.5	8.3	1.7	0%	0.0	8.0	0
Attached	8	575	80%	69.6	0.1	0.0	100%	2.8	25.0	71
Other	35				5.8	1.2				
HD	39	743			8.7	1.7				
Detached	16	180	24%	10.9	3.8	0.8	0%	0.0	8.0	0
Attached	5	563	76%	105.5			100%	1.7	30.0	52
Other	17				4.9	1.0				
Rural Res	88	29			34.4	17.2				
Detached	55	27	93%	0.5	18.0	9.0	100%	17.2		0
Attached	2	2	7%	1.0			0%	0.0		0
Other	30				16.4	8.2				
Emerging Community	305	22			254.5	214.2				
Detached	42	19	86%	0.5	37.1	18.6	95%	203.5	8.0	1,628
Attached	4	3					5%	10.7	15.0	161
Other	259				217.4	195.7				

Despite being well established, there are large areas of this SA2 which remain both available, and viable. In total, there is 250ha which is viable for additional development, of which 214ha is located in the emerging communities zone to the south-west.

Overall, there is capacity for an additional 2,207 dwellings. However as noted, these are generally located within the south-west corner, with limited capacity for infill development closer to the coastline.

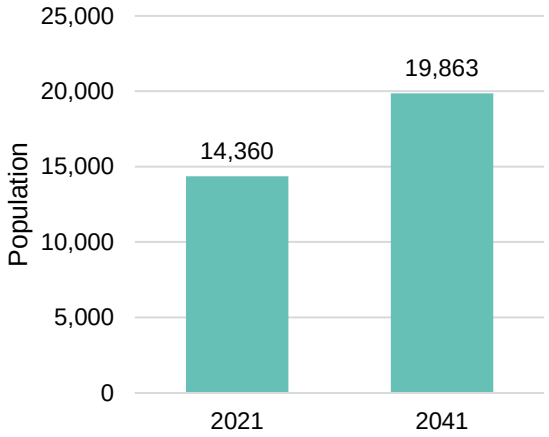
URANGAN – WONDUNNA DEMAND AND SUPPLY

Insights

Despite being relatively established, the Urangan SA2 is still projected to hold a sizable population. Under the medium case population series, there are forecast to be an additional 5,503 persons over the 20 years. With such strong growth, and limited capacity within the medium and high density zones, there may be land supply issues for attached product.

Under the high growth scenario, the capacity issue is further exacerbated, with potential land supply issues for both attached and detached housing.

Medium Population Growth Series 2021-2041

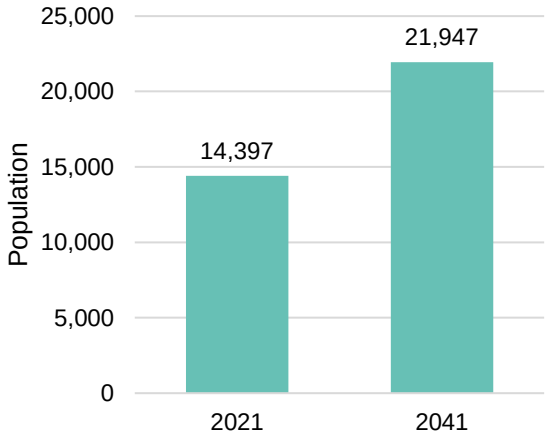


Source: QGSO Med Ed.

	Projected Dwelling Surplus
Total Population Growth	5,503
Dwelling Requirements	
Detached	1,683
Attached	689
Capacity Surplus*	
Detached	146
Attached	-311

*Positive figures result in greater capacity of dwellings relative to the required dwellings

High Population Growth Series 2021-2041



Source: QGSO High Ed.

	Projected Dwelling Surplus
Total Population Growth	7,550
Dwelling Requirements	
Detached	2,285
Attached	936
Capacity Surplus*	
Detached	-456
Attached	-558

*Positive figures result in greater capacity of dwellings relative to the required dwellings

GRANVILLE DWELLING CAPACITY

Dwelling Capacity

Zone/Housing Type	Existing Variables						Projected Housing Capacity			
	Total Area	Total Dwellings	Dwelling Split	Existing Density	Realistically Available Land	Realistically Viable Land	Adjusted Split	Adjusted Available Land	Increased Density	Total Dwelling Capacity
	Ha	No.	%	dw/Ha	Ha	Ha	%	Ha	dw/Ha	No.
Total	515	1,032		2.0	115.2	68.8				59
LDR	148	1,024			46.1	6.7				
Detached	122	931	91%	7.6	35.8	3.6	90%	6.0	8.0	48
Attached	2	93	9%	37.6			10%	0.7	15.0	10
Other	23				10.4	3.1				
MD	6	8			0.1	0.0				
Detached							0%	0.0	8.0	0
Attached	0	8	100%	74.8			100%	0.0	25.0	1
Other	6				0.1	0.0				
Rural Res	220	155			45.7	31.0				
Detached	172	155	100%	0.9	25.4	12.7	100%	31.0		0
Attached							0%	0.0		0
Other	47				20.3	18.3				
Emerging Community	141				69.0	62.1				
Detached							95%	59.0	8.0	0
Attached							5%	3.1	15.0	0
Other	141				69.0	62.1				

It is noted that the client has requested to remove the capacity figures for land zoned emerging community within Granville. It is understood this was zoned as such for a single development and is no longer valid for emerging communities.

Therefore, by discounting this land, there is very little capacity to accommodate any future development. Given all new housing is to be within infill locations, just 59 dwellings are expected to be supportable within the existing zones.

GRANVILLE DEMAND AND SUPPLY

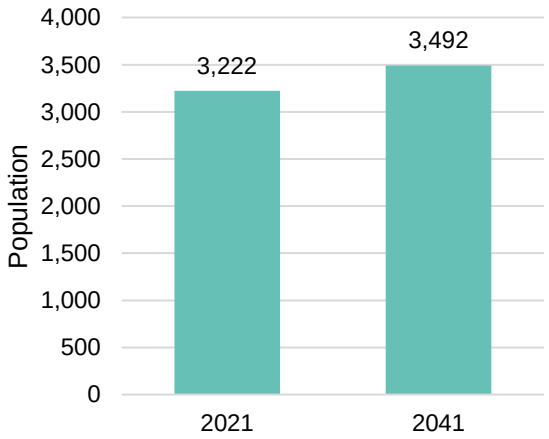
Insights

Despite having low population growth, Granville is still expected to have land supply issues.

Under the medium case population growth, there is 114 dwellings required to house the 269 residents. Under the high case, this increases to 263 dwellings.

With a total capacity of just 59 dwellings, there is a land supply shortfall of 55 to 200 dwellings over the next 20 years.

Medium Population Growth Series 2021-2041

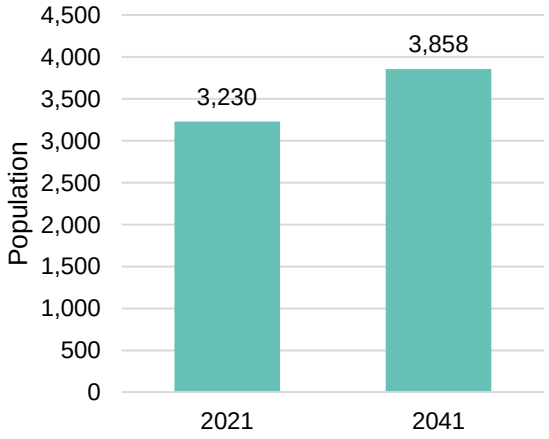


Source: QGSO Med Ed.

	Projected Dwelling Surplus
Total Population Growth	269
Dwelling Requirements	
Detached	97
Attached	17
Capacity Surplus*	
Detached	-49
Attached	-6

*Positive figures result in greater capacity of dwellings relative to the required dwellings

High Population Growth Series 2021-2041



Source: QGSO High Ed.

	Projected Dwelling Surplus
Total Population Growth	628
Dwelling Requirements	
Detached	225
Attached	38
Capacity Surplus*	
Detached	-177
Attached	-27

*Positive figures result in greater capacity of dwellings relative to the required dwellings

TINANA DWELLING CAPACITY

Dwelling Capacity

Zone/Housing Type	Existing Variables						Projected Housing Capacity			
	Total Area	Total Dwellings	Dwelling Split	Existing Density	Realistically Available Land	Realistically Viable Land	Adjusted Split	Adjusted Available Land	Increased Density	Total Dwelling Capacity
	Ha	No.	%	dw/Ha	Ha	Ha	%	Ha	dw/Ha	No.
Total	1,655	1,207		0.7	198.9	60.9				532
LDR	441	1,207			198.3	60.7				
Detached	238	1,170	97%	4.9	96.0	9.6	90%	54.7	8.0	437
Attached	7	37	3%	5.1			10%	6.1	15.0	91
Other	195				102.3	51.2				
MD	3				0.6	0.1				
Detached							0%	0.0	8.0	0
Attached							100%	0.1	25.0	3
Other	3				0.6	0.1				
Rural Res	1,212	759			540.3	419.0				
Detached	909	758	100%	0.8	336.8	235.7	100%	419.0		0
Attached	1	1	0%	0.8			0%	0.0		0
Other	301				203.6	183.2				

Whilst Tinana has a relatively large area available for development, this is heavily fragmented. As a result, there is just 61ha of land which is viable. Given there is no emerging communities land within Tinana, this land is located within the low density zone. In total, there is capacity for an additional 532 dwellings, of which essentially all will be within the existing low density areas.

TINANA DEMAND AND SUPPLY

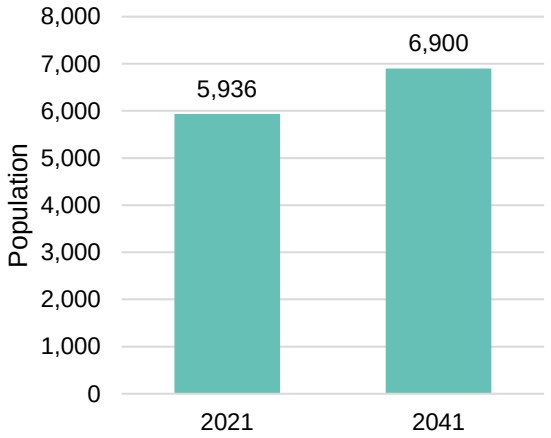
Insights

Tinana is not expected to see very strong growth over the 20 years. Under the medium case scenario, there are just under 1,000 new residents. This increases to 1,670 under the high case scenario to reach a population above 7,600.

Under the medium case, with a dwelling requirement of 377, there is enough capacity to provide these dwellings.

Under the high case however, there is not enough capacity within the zoned land to provide 600 detached dwellings. Though there is a small attached surplus.

Medium Population Growth Series 2021-2041

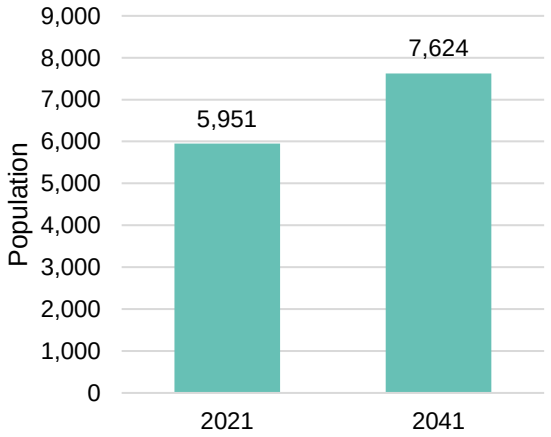


Source: QGSO Med Ed.

	Projected Dwelling Surplus
Total Population Growth	964
Dwelling Requirements	
Detached	201
Attached	64
Capacity Surplus*	
Detached	91
Attached	63

*Positive figures result in greater capacity of dwellings relative to the required dwellings

High Population Growth Series 2021-2041



Source: QGSO High Ed.

	Projected Dwelling Surplus
Total Population Growth	1,673
Dwelling Requirements	
Detached	600
Attached	54
Capacity Surplus*	
Detached	-163
Attached	40

*Positive figures result in greater capacity of dwellings relative to the required dwellings

MARYBOROUGH REGION - SOUTH DWELLING CAPACITY

Dwelling Capacity

	Existing Variables						Projected Housing Capacity			
Zone/Housing Type	**Total Area**	**Total Dwellings**	**Dwelling Split**	**Existing Density**	**Realistically Available Land**	**Realistically Viable Land**	**Adjusted Split**	**Adjusted Available Land**	**Increased Density**	**Total Dwelling Capacity**
	Ha	No.	%	dw/Ha	Ha	Ha	%	Ha	dw/Ha	No.
Total	3,961	1,137		0.3	29.4	26.5				221
LDR	411	1,137								
Detached	217	1,124	99%	5.2			90%	0.0	8.0	0
Attached	7	13	1%	1.8			10%	0.0	15.0	0
Other	187									
MD	7									
Detached							30%	0.0	8.0	0
Attached							70%	0.0	25.0	0
Other	7									
Rural Res	3,505	1,419			1,346.7	1,212.0				
Detached	1,684	1,417	100%	0.8	508.2	457.3	100%	1212.0		0
Attached	0	2	0%	23.4			0%	0.0		0
Other	1,821				838.5	754.7				
Emerging Community	39				29.4	26.5				
Detached							95%	25.1	8.0	201
Attached							5%	1.3	15.0	20
Other	39				29.4	26.5				

Given the limited residential zoned land, there is subsequently limited land available for development. Across the whole SA2, just 26.5ha of land remains viable for further development. At a relatively high density for the SA2, this equates to a total of 221 dwellings, which is located entirely in the emerging communities zone.

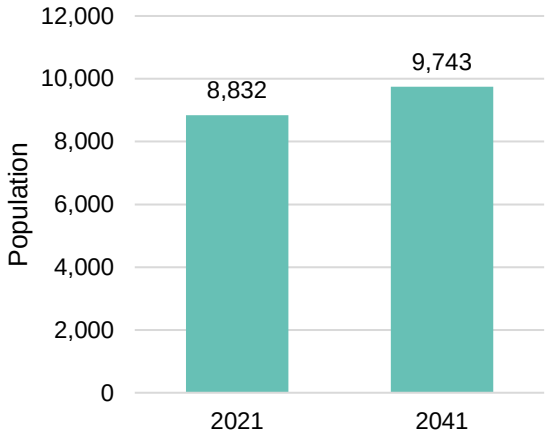
MARYBOROUGH REGION – SOUTH DEMAND AND SUPPLY

Insights

The Maryborough Region South is not expected to see strong population growth. Under the medium scenario, the region is only set to see a population growth of 910 persons. Even with this low level of growth there is not expected to be enough zoned land to provide the required dwellings.

If the population increases further similar to the high series, there will be further land supply issues.

Medium Population Growth Series 2021-2041

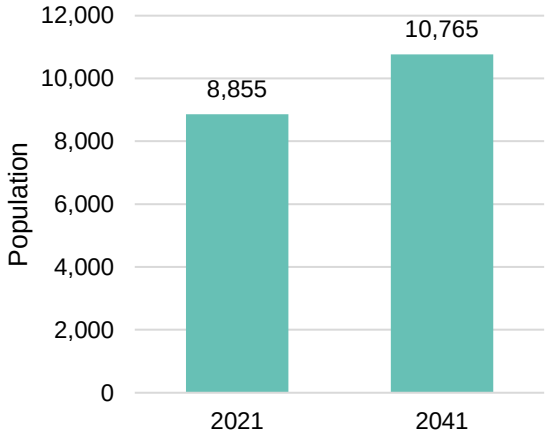


Source: QGSO Med Ed.

	Projected Dwelling Surplus
Total Population Growth	910
Dwelling Requirements	
Detached	447
Attached	13
Capacity Surplus*	
Detached	-246
Attached	7

*Positive figures result in greater capacity of dwellings relative to the required dwellings

High Population Growth Series 2021-2041



Source: QGSO High Ed.

	Projected Dwelling Surplus
Total Population Growth	1,910
Dwelling Requirements	
Detached	832
Attached	23
Capacity Surplus*	
Detached	-631
Attached	-3

*Positive figures result in greater capacity of dwellings relative to the required dwellings

APPENDIX B: SA2 ANALYSIS – SUPPLY AND TAKE UP OF DWELLINGS

BOORAL – RIVER HEADS SUPPLY METRICS

Insights

Over the last two years there has been a significant increase in lot registrations, which is predominantly standard lots. Within Booral – River Heads the 2 year average lot registrations is 97 per year which is a significant increase on long term average.

Despite being a more rural residential area, the supply of larger lots remains low. Therefore, it's assumed majority of these registrations have been within the emerging communities land to the north of the SA2.

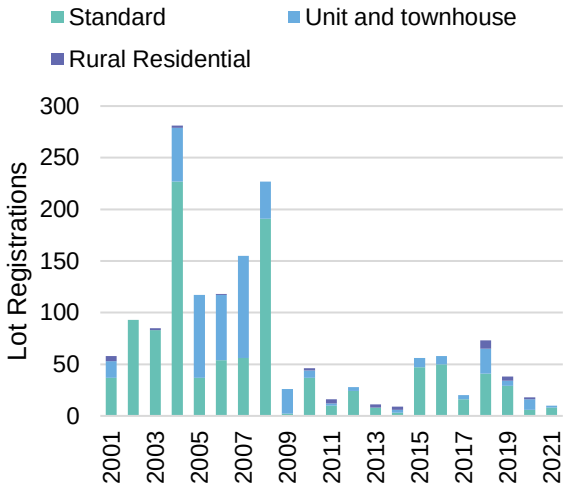
Building approvals have followed the same trend recording a significant increase over the last 2 years. The 2 year average is sitting at 211 approvals per year, an almost 60% increase on the 5 year average.

Given the high number of building approvals, there is potential for the lot registrations to remain high. It's expected that the more recent peak in registrations in 2021 was a result of accumulated approvals from 2013-2020. Therefore, those approved in 2021 are likely to provide supply for the next few years.

Under the high population growth scenarios, **363 dwellings are needed over the next 20 years. Should the lot registrations continue at the same rate of circa 105 per year, the actual population growth will be much lower.**

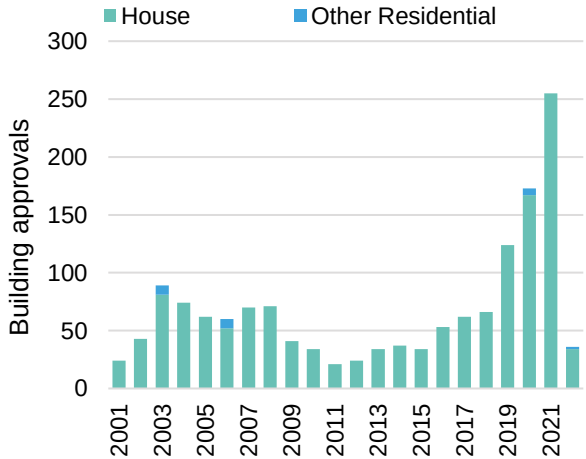
With an overall capacity of 2,250 detached dwellings, there may be 21 years supply at the current rate.

Lot Registrations



Source: QGSO

Building Approvals



Source: ABS

Lot Registrations

Period	Standard	Unit and Townhouse	Rural Residential
10-Year Average	35	0	6
5-Year Average	67	0	7
2-Year Average	97	0	10

Source: QGSO
Standard = 60-2,500sqm
Unit and Townhouse = <60sqm
Rural Residential = >2,500sqm

Building Approvals

Period	House	Other Residential
10-Year Average	86	1
5-Year Average	135	1
2-Year Average	211	3

Source: ABS

MARYBOROUGH SUPPLY METRICS

Insights

Maryborough has seen a significant decline in the level of registered lots over the last decade, and has not seen any growth in the last 2 years.

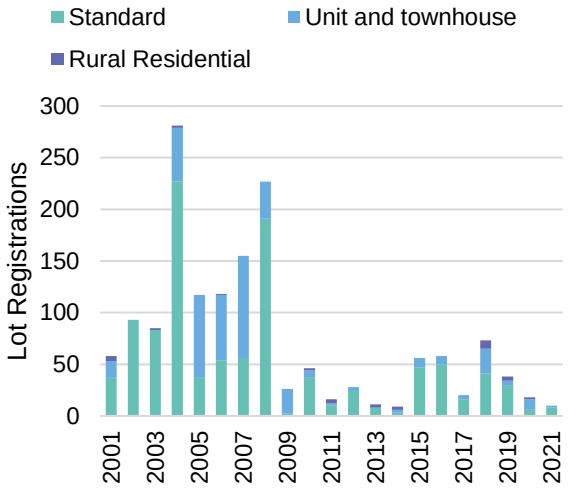
The lack of development may be attributed to several factors. Maryborough does not have the similar amenity that Hervey Bay offers, and is much more established with older homes.

House building approvals have largely followed the same trend with the last 10 years registering low approvals with circa 30 annually. Despite having up to 45 unit approvals in the late 2000's, there has been next to no unit approvals in the last decade.

With stable levels of approvals, the area may continue to see circa 10 lot registrations each year.

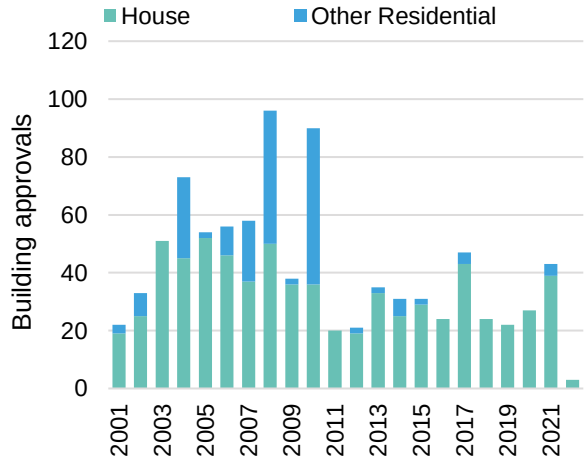
Under the high population growth scenarios, 1,433 dwellings will be needed over the next 20 years. However, to meet this, registrations would need to increase to 72 registrations per year – about 10 times the current rate.

Lot Registrations



Source: QGSO

Building Approvals



Source: ABS

Lot Registrations

Period	Standard	Unit and Townhouse	Rural Residential
10-Year Average	9	3	1
5-Year Average	8	4	0
2-Year Average	8	0	0

Source: QGSO
Standard = 60-2,500sqm
Unit and Townhouse = <60sqm
Rural Residential = >2,500sqm

Building Approvals

Period	House	Other Residential
10-Year Average	29	2
5-Year Average	31	2
2-Year Average	33	2

Source: ABS

BURRUM – FRASER SUPPLY METRICS

Insights

The last four years to 2021 has seen year on year increase in lot registrations. Despite this increase, the levels are still considerably lower than seen in the mid 2000's. Additionally, there has not been a significant spike over 2021 as seen elsewhere.

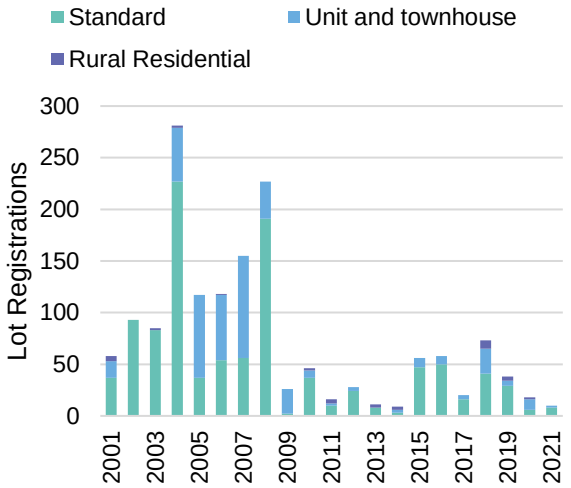
Building approvals have followed a slightly different trend with approvals seeing an increase over the last four years.

Given this, there may be a continued increase in lot registrations as the approvals convert to product.

Under the high population growth scenario, 1,803 dwellings are needed over the next 20 years, equating to 90 annual lot registrations. **Should the current rate of lot registrations continue at current rates, population growth will be half that projected.**

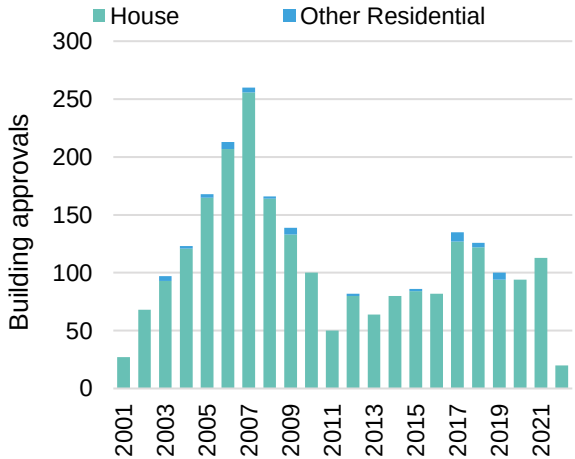
At the current rate of circa 45 annual registrations, the total housing capacity may be exhausted within 19 years.

Lot Registrations



Source: QGSO

Building Approvals



Source: ABS

Lot Registrations

Period	Standard	Unit and Townhouse	Rural Residential
10-Year Average	22	3	1
5-Year Average	30	4	1
2-Year Average	38	3	3

Source: QGSO
Standard = 60-2,500sqm
Unit and Townhouse = <60sqm
Rural Residential = >2,500sqm

Building Approvals

Period	House	Other Residential
10-Year Average	94	2
5-Year Average	110	4
2-Year Average	104	0

Source: ABS

POINT VERNON SUPPLY METRICS

Insights

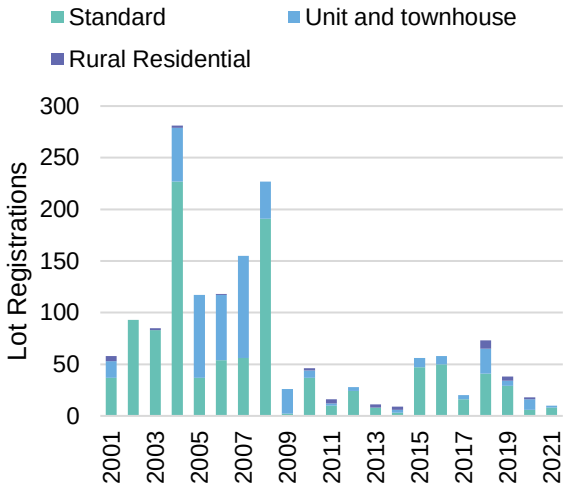
Over the last two years there has been a increase in lot registrations, with 2020 recording the highest levels since 2008.

Point Vernon is one of the smaller SA2's, is well established and is constrained by the coastline, meaning there are minimal areas for development. Given this, it is unsurprising there are low levels of building approvals given the lack of developable land.

With just an average of circa 20 building approvals annually, it's unlikely the rise in lot registrations will continue into the long term.

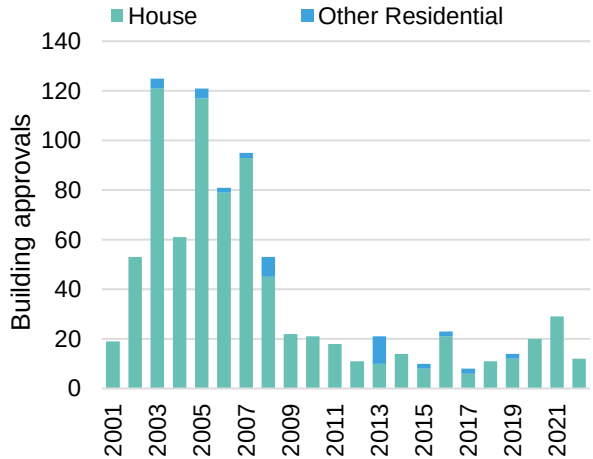
Under the high population growth scenarios, 418 dwellings are needed over the next 20 years, equating to 21 annually. Over the last boom, registrations increased to 17 annually – almost meeting the requirements. This level will need to continue to ensure the population growth is supported.

Lot Registrations



Source: QGSO

Building Approvals



Source: ABS

Lot Registrations

Period	Standard	Unit and Townhouse	Rural Residential
10-Year Average	7	1	0
5-Year Average	8	1	0
2-Year Average	16	1	0

Source: QGSO
Standard = 60-2,500sqm
Unit and Townhouse = <60sqm
Rural Residential = >2,500sqm

Building Approvals

Period	House	Other Residential
10-Year Average	14	2
5-Year Average	16	1
2-Year Average	25	0

Source: ABS

TORQUAY - SCARNESS – KAWUNGAN SUPPLY METRICS

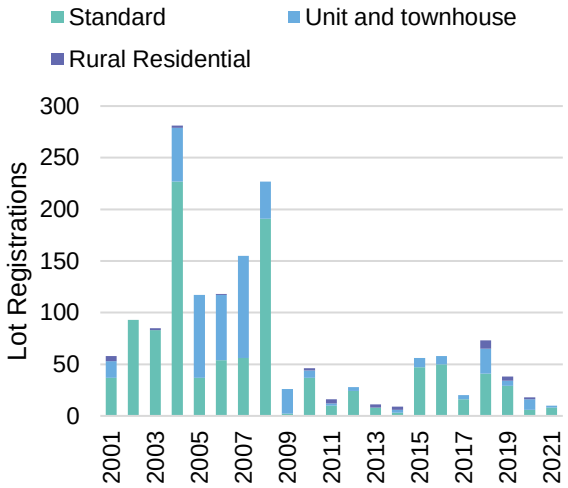
Insights

The last decade has seen two cycles of development, peaking in mid 2010's and declining again recently. The Torquay SA2 is one of the main areas with unit and townhouse development, although with more subdued activity over the last few years in that space.

However, over the past year, there has been a considerable increase in building approvals – for both houses and other residential. This may flow through to registrations in the coming few years.

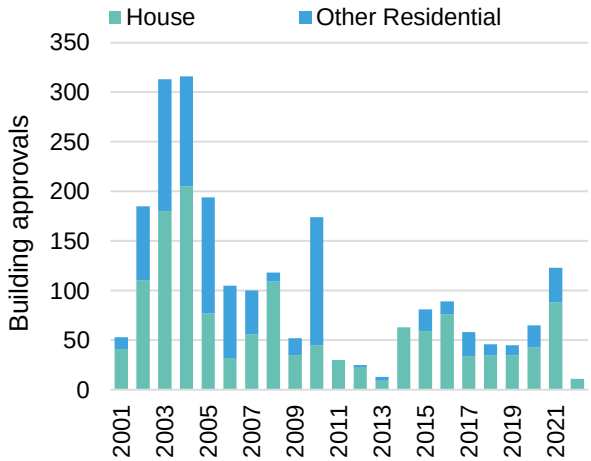
Under the high population growth scenario, 3,083 dwellings are needed over the next 20 years. In order to meet this, there would need to be a significant increase in delivery, to reach at least 155 dwelling registrations annually. Currently, at a rate of just 14 registrations, the delivery is not supporting the population growth.

Lot Registrations



Source: QGSO

Building Approvals



Source: ABS

Lot Registrations

Period	Standard	Unit and Townhouse	Rural Residential
10-Year Average	23	7	2
5-Year Average	20	9	3
2-Year Average	7	6	1

Source: QGSO
Standard = 60-2,500sqm
Unit and Townhouse = <60sqm
Rural Residential = >2,500sqm

Building Approvals

Period	House	Other Residential
10-Year Average	47	14
5-Year Average	47	20
2-Year Average	66	29

Source: ABS

CRAIGNISH - DUNDOWRAN BEACH

Insights

The Craignish area has seen very limited activity over the last 5-10 years, with the exception of a small spike in 2018.

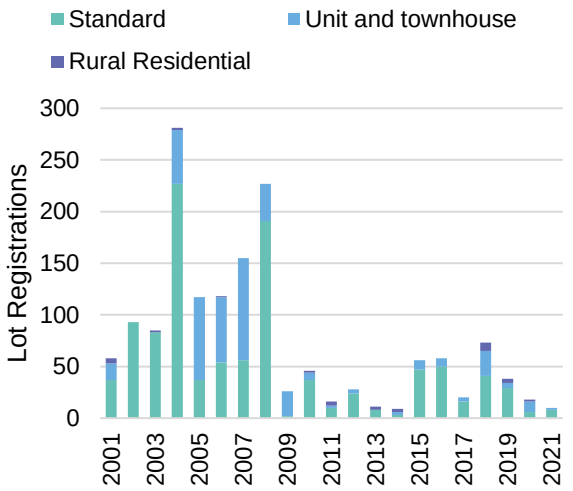
Over the last 2 years there has been a decrease in lot registrations, predominantly due to a reduction in standard lot registrations.

Building approvals have seen the opposite, progressively increasing for the last 3 years. Although an increase, the figure is akin to the medium and long term average.

Given the increasing number of building approvals, there is potential for the lot registrations to increase over the next 1-2 years.

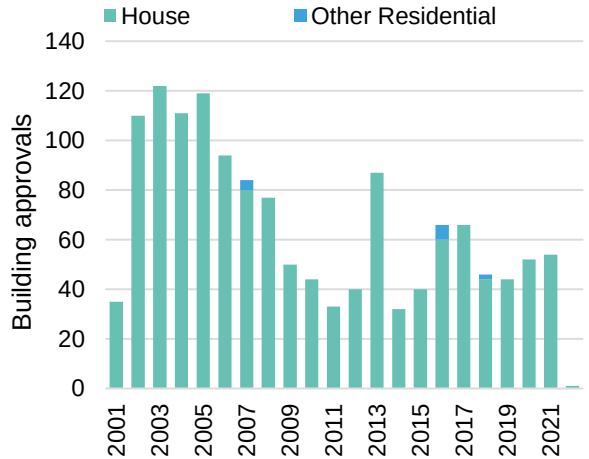
Under the high population growth scenarios, 1,075 dwellings are needed over the next 20 years. At the current registration rate, there is more than 50 years of supply, and the projected population will be much lower than forecast.

Lot Registrations



Source: QGSO

Building Approvals



Source: ABS

Lot Registrations

Period	Standard	Unit and Townhouse	Rural Residential
10-Year Average	7	0	4
5-Year Average	13	0	6
2-Year Average	5	0	6

Source: QGSO
Standard = 60-2,500sqm
Unit and Townhouse = <60sqm
Rural Residential = >2,500sqm

Building Approvals

Period	House	Other Residential
10-Year Average	52	1
5-Year Average	52	0
2-Year Average	53	0

Source: ABS

PIALBA - ELI WATERS

Insights

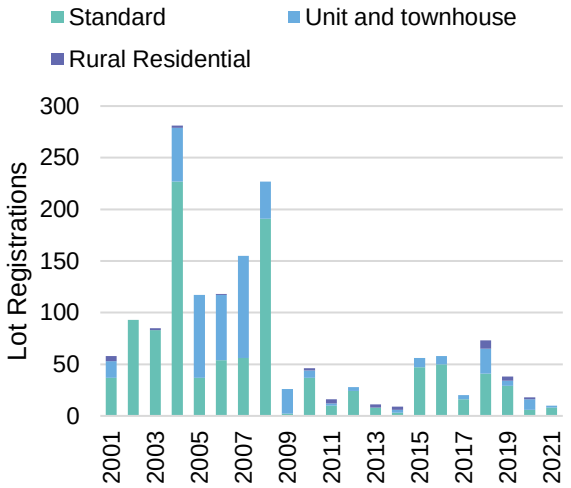
The last two years has seen an increase in the number of units and townhouses delivered, and a slight decline in the number of detached houses. Given the geographical constraints of the area, it's expected the shift towards more units and townhouses will continue.

That being said, there was an increase in the number of house approvals in 2021, which may flow through to delivery in the next 1 to 2 years.

Under the high population growth scenario, 2,176 dwellings are needed over the next 20 years, equating to 109 annually. Pialba is one of the few SA2's which is currently delivering enough product to meet the expected population growth. The last two years have seen an average of 159 registrations, with a long term average of 132.

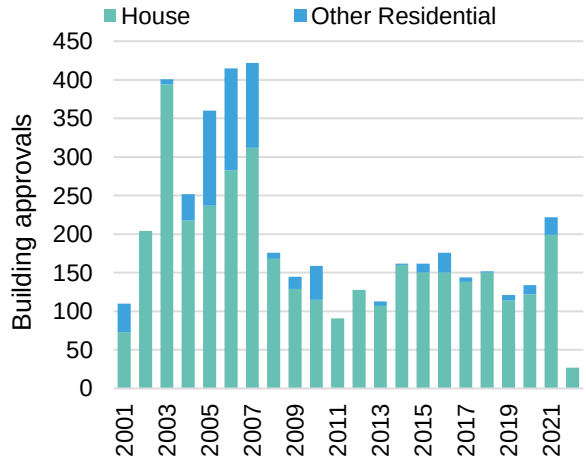
That being said, with a capacity of just 1,148 dwellings, the area may be limited by the availability of land, and reach that physical capacity within 7 to 8 years.

Lot Registrations



Source: QGSO

Building Approvals



Source: ABS

Lot Registrations

Period	Standard	Unit and Townhouse	Rural Residential
10-Year Average	114	16	2
5-Year Average	128	16	3
2-Year Average	124	33	2

Source: QGSO
Standard = 60-2,500sqm
Unit and Townhouse = <60sqm
Rural Residential = >2,500sqm

Building Approvals

Period	House	Other Residential
10-Year Average	142	10
5-Year Average	145	10
2-Year Average	161	18

Source: ABS

URANGAN – WONDUNNA

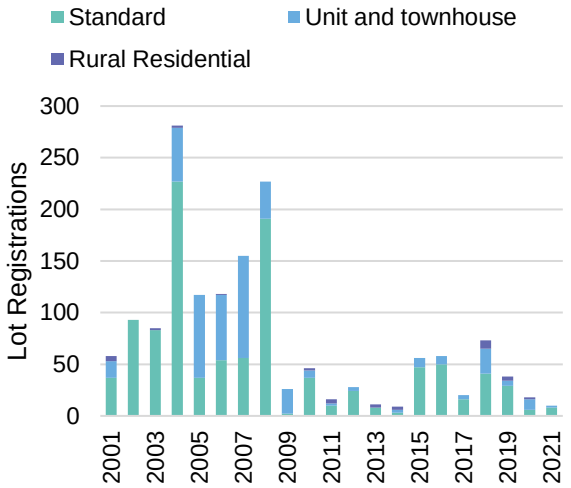
Insights

The last three years have seen a decline in lot registrations for land, and a very slight increase in unit and townhouse registrations. Given the characteristics of the area, it's expected that the unit and townhouse market will see an increase in registrations to continue to reflect the high density.

Building approvals have followed a more pronounced trend than the lot registrations seeing significant increases for two years in a row. The 2 year average for house approvals is currently 30% higher than the 5 year average. Additionally, 2021 saw an increase to 42 unit/townhouse approvals which may flow through to registrations in the coming years.

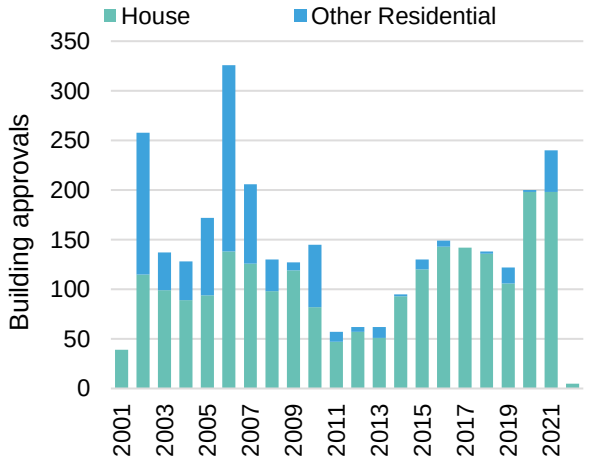
Under the high population growth scenario 3,221 dwellings are needed over the next 20 years. With an annual requirement of 160 dwellings, and registrations at 124 at the peak, there will need to be increased levels of delivery to meet population demands.

Lot Registrations



Source: QGSO

Building Approvals



Source: ABS

Lot Registrations

Period	Standard	Unit and Townhouse	Rural Residential
10-Year Average	107	12	5
5-Year Average	124	5	6
2-Year Average	113	6	4

Source: QGSO
Standard = 60-2,500sqm
Unit and Townhouse = <60sqm
Rural Residential = >2,500sqm

Building Approvals

Period	House	Other Residential
10-Year Average	124	10
5-Year Average	156	12
2-Year Average	198	22

Source: ABS

GRANVILLE

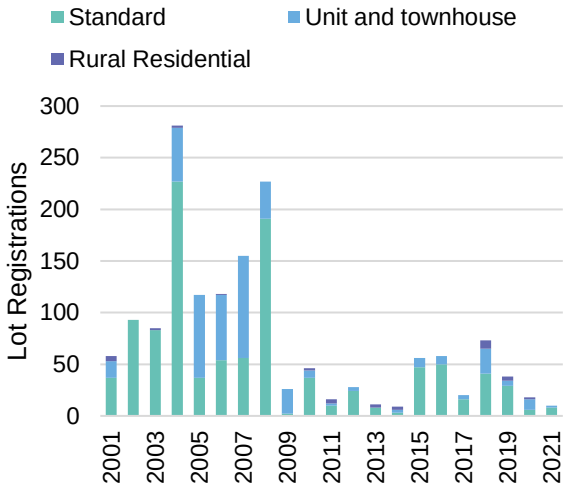
Insights

Granville has seen very limited activity over the last decade. Little to no delivery of product has been provided to support any growth of population.

Despite the lack of delivery, there has been consistent levels of building approvals. In 2021, there were 6 house approvals and 4 unit/townhouse approvals.

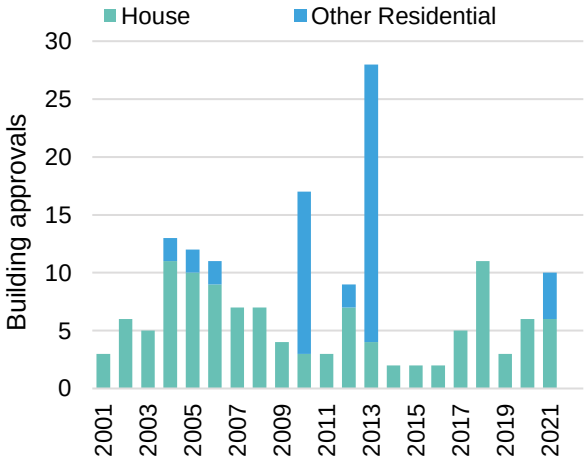
Despite the lack of development, population is still forecast to increase, with an additional 263 dwellings needed over the next 20 years. Given the complete lack of development, an increase to delivering 13 dwellings may be unachievable, especially given the limited land for development.

Lot Registrations



Source: QGSO

Building Approvals



Source: ABS

Lot Registrations

Period	Standard	Unit and Townhouse	Rural Residential
10-Year Average	0	0	1
5-Year Average	0	0	0
2-Year Average	0	0	0

Source: QGSO
Standard = 60-2,500sqm
Unit and Townhouse = <60sqm
Rural Residential = >2,500sqm

Building Approvals

Period	House	Other Residential
10-Year Average	5	3
5-Year Average	6	1
2-Year Average	6	2

Source: ABS

TINANA

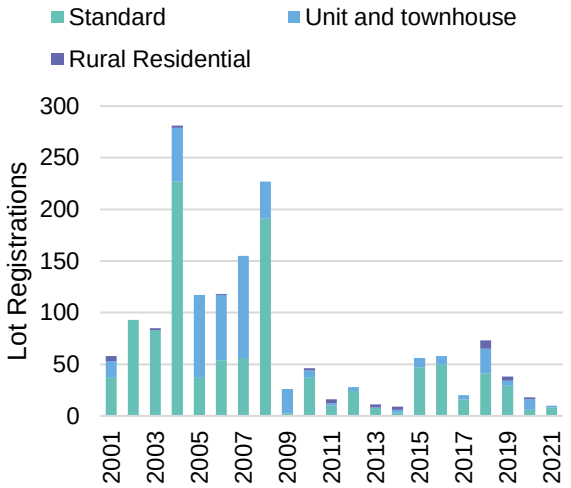
Insights

Tinana has seen limited development over the last five years. The only development that has occurred has been for rural residential lots – which has increased over the short term.

Although there have been circa 30-35 building approvals each year, these have not translated into delivery of product.

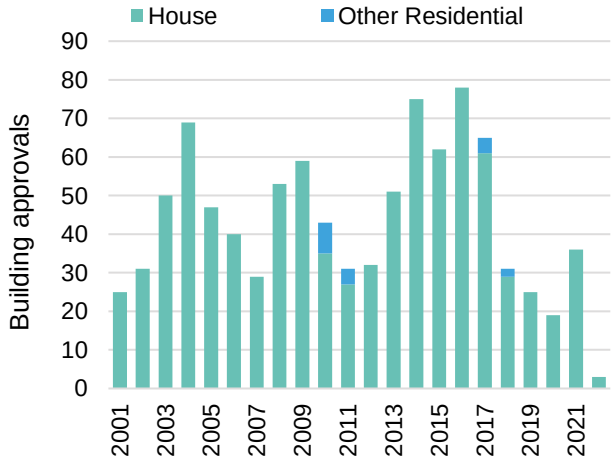
Under the high population growth scenario, 654 dwellings are needed over the next 20 years. In order to meet this level of population growth, a significant increase in the delivery of product will be necessary.

Lot Registrations



Source: QGSO

Building Approvals



Source: ABS

Lot Registrations

Period	Standard	Unit and Townhouse	Rural Residential
10-Year Average	8	1	4
5-Year Average	3	0	6
2-Year Average	0	0	8

Source: QGSO
Standard = 60-2,500sqm
Unit and Townhouse = <60sqm
Rural Residential = >2,500sqm

Building Approval

Period	House	Other Residential
10-Year Average	47	1
5-Year Average	34	1
2-Year Average	28	0

Source: ABS

MARYBOROUGH SURROUNDS

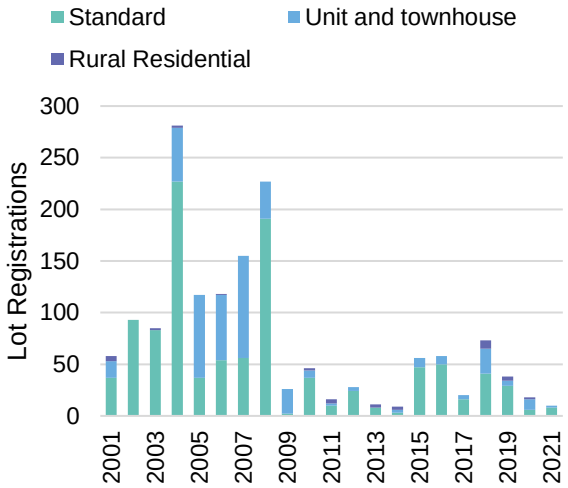
Insights

The Maryborough Surrounds has also seen very limited development over the last decade. The only development that has occurred has been for rural residential lots – which has increased over time.

Interestingly, the level of building approvals has been consistently high with typically 70-100 annual approvals. These have not been registered, so may be buildings on existing lots, or second dwellings.

To meet the forecast population, an additional 43 dwellings are required each year. With just 7 rural residential lots being developed annually, the population projection is unlikely to be realised.

Lot Registrations



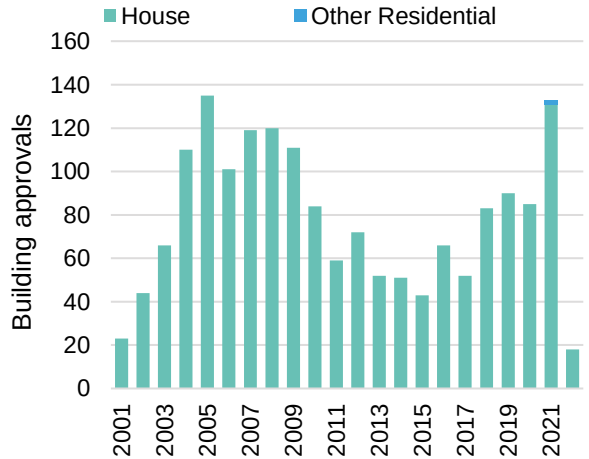
Source: QGSO

Lot Registrations

Period	Standard	Unit and Townhouse	Rural Residential
10-Year Average	0	0	6
5-Year Average	0	0	5
2-Year Average	0	0	7

Source: QGSO
Standard = 60-2,500sqm
Unit and Townhouse = <60sqm
Rural Residential = >2,500sqm

Building Approvals



Source: ABS

Building Approvals

Period	House	Other Residential
10-Year Average	73	0
5-Year Average	88	0
2-Year Average	108	1

Source: ABS

APPENDIX C: CALIBRE: WATER AND WASTEWATER SERVICING INVESTIGATION

Technical Memorandum

Date:	Friday, 15 July 2022	**Pages:**	18
To:	Steve Buhmann	**Copy:**	
From:	Calibre Professional Services	**Ref:**	22-000076.WTM01

Subject: **Fraser Coast Land Supply Study – Water & Wastewater Servicing Investigation**

1. Introduction

Calibre Professional Services have been engaged by Urbis Pty Ltd to undertake a high-level water and wastewater servicing investigation in relation to their land supply study completed on behalf of Fraser Coast Regional Council (FCRC). This technical memo provides a high-level investigation of the planned growth, planned servicing capacity and existing network infrastructure for each of the growth areas identified within the Urbis Housing and Land Audit Report (Urbis, March 2022).

1.1 Study Objectives

The primary objectives of this investigation are:

- Review Urbis land audit information with consideration to water & wastewater infrastructure.
- Identify planned water & wastewater network growth through previous FCRC planning studies.
- Consider priority of developable areas based on planned growth and existing network infrastructure.

1.2 Reference Information

The following information has been provided by external parties and informed this investigation.

- Fraser Coast Water Supply Strategy and Sewerage Strategy reports August 2015.
- Urbis Housing and Land Audit Analysis March 2022.
- GIS shape files for the Fraser Coast Planning Scheme - Planning Zones and Water and Sewer trunk infrastructure.
- Fraser Coast Schedule of Works (SOW) Model and Fraser Coast Local Government Infrastructure Plan (LGIP).
- Fraser Coast Planning Scheme 2014 version 11.0.1.
- Fraser Coast Regional Council Online Planning Scheme Maps.

1.3 Limitations of the study

- This study is focused on SPAs identified in Fraser Coast Water and Sewerage Strategy reports. These SPAs are within Statistical areas identified in Urbis study.
- No water and sewer modellings were received or carried out in this study.
- The potential yield for only SPAs is considered and any potential yields out of SPAs and within SA2s isn't investigated in this study.

2. Service Areas & Demand Projections

The Housing and Land Audit Report prepared by Urbis identified Maryborough and Hervey Bay as the primary growth areas within Fraser Coast, with 11 Statistical Areas (SA2) assessed in further detail. Table 1 outlines the 11 different SA2 and details the existing and projected yields for each area.

Table 1. SA2 Existing and Projected Dwellings (Source Urbis, 2022)

Growth Area	Existing Total Dwellings	Projected Total Dwellings
Booral – River Heads	999	3,604
Craignish - Dundowran Beach	1,928	4,213
Pialba – Eli Water	5,597	6,745
Urangan – Wondunna	6,006	9,003
Torquay – Scarness - Kawungan	6,827	8,319
Point Vernon	2,504	2,576
Burrum - Fraser	3,551	4,664
Tinana	1,207	1,849
Granville	1,032	1,103
Maryborough	7,011	10,665
Maryborough Region - South	1,137	1,428

Notes: Existing total dwellings exclude Rural Residential dwellings; Project additional dwelling capacity based on Urbis development assumptions (Refer Stage 4 Report dated 26 May 2022).

Table 2 provides a summary of the Equivalent Dwellings (ED) growth projected for each SA2 over the next 20 years obtained by Queensland Government Statistician's Office (QGSO).

Table 2: SA2 Medium and High Population Growth Over 20 Years (2041) (Source Urbis, 2022 - QGSO)

Growth Area	Medium Population Growth (Dwellings)	High Population Growth (Dwellings)
Booral – River Heads	146	363
Craignish - Dundowran Beach	797	1,075
Pialba – Eli Water	1,678	2,176
Urangan – Wondunna	2,372	3,221
Torquay – Scarness - Kawungan	2,096	3,083
Point Vernon	151	418
Burrum - Fraser	1,445	1,803
Tinana	265	654
Granville	114	263
Maryborough	526	1,433
Maryborough Region - South	460	855

3. Growth Area Infrastructure Review

Review of the SA2 water and wastewater servicing was undertaken against the Fraser Coast Water Supply Strategy and Sewerage Strategy reports (FCRC, 2015) along with the Fraser Coast Planning Scheme 2014 version 11.0.1 and supporting GIS shapefiles provided by council. Each of the sub-regions have been reviewed separately. The focus of this review being emerging community zones within each SA2 and projected development over the next 20 years. The following sections provide a summary of the review findings for each SA2.

3.1. Booral – River Heads

The Booral – River Heads SA2 is characterised by rural residential lands bordering the area to the west and east, and emerging community land located to the north. This emerging community zone to the north is defined as Nikenbah, which is the primary growth area within the Booral – River Heads SA2. Initial development within this growth area is evident with some existing trunk infrastructure constructed and shown in Figure 1.

Urbis have estimated a total yield capacity of 3,604 ED for the Booral – River Heads sub-region which consists of 999 existing dwellings and 2,605 additional projected dwellings. A high growth projection of 363 dwellings over the next 20 years was predicted by QGSO for this sub-region. In the Fraser Coast Water Strategy report 4,000 ED and in Fraser Coast Sewerage Strategy report 3,860 ED are reported as potential yield for just Nikenbah SPA within Booral – River Heads region.

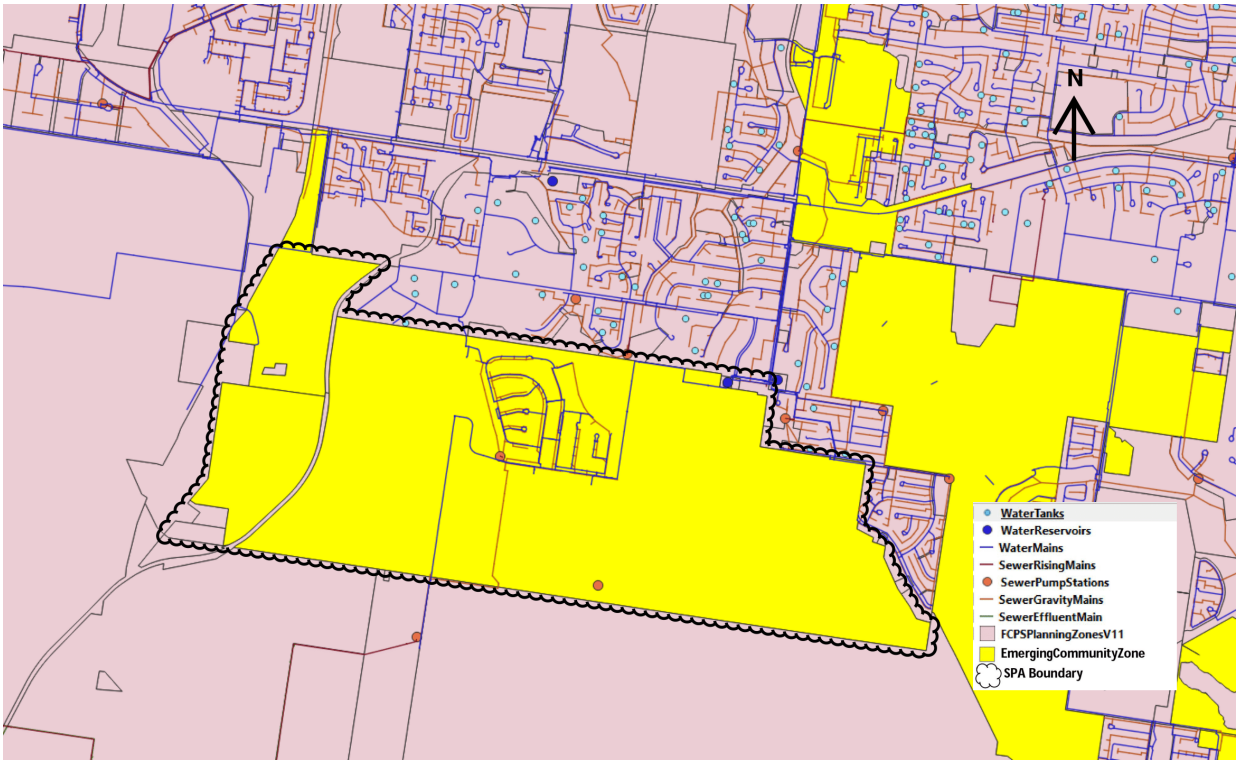


Figure 1: Nikenbah trunk infrastructure (Fraser Coast Planning Scheme GIS shape files 2022)

Council mapping shows an existing DN225 gravity sewer and pump station servicing the existing development within the Nikenbah area, with flows directed south. An existing water network is also present with connection to the existing network north of the growth area.

Future development within Nikenbah will likely be serviced through extension of the existing network to the north and south, consistent with existing growth in the emerging community zone. The total yield capacity of 3,604 ED reported in

Urbis report is for the greater Booral – River Heads sub-region while 4,000 ED and 3,860 ED reported in Fraser coast water and sewer strategy reports are for Nikenbah SPA, However the total yields for water and sewerage strategy in Fraser Coast report both being higher than total capacity reported in Urbis study, It is anticipated that planned water and sewer augmentations within Nikenbah will remain suitable for servicing the yield capacity of 3,604 ED identified by Urbis.

3.1.1 Urban Expansion Investigation Area:

As part of the Urbis study, an additional area was identified as potential urban expansion should demand exceed the projected capacity within the Nikenbah emerging community zone. As illustrated in Figure 2, the identified area is immediately south of Nikenbah.

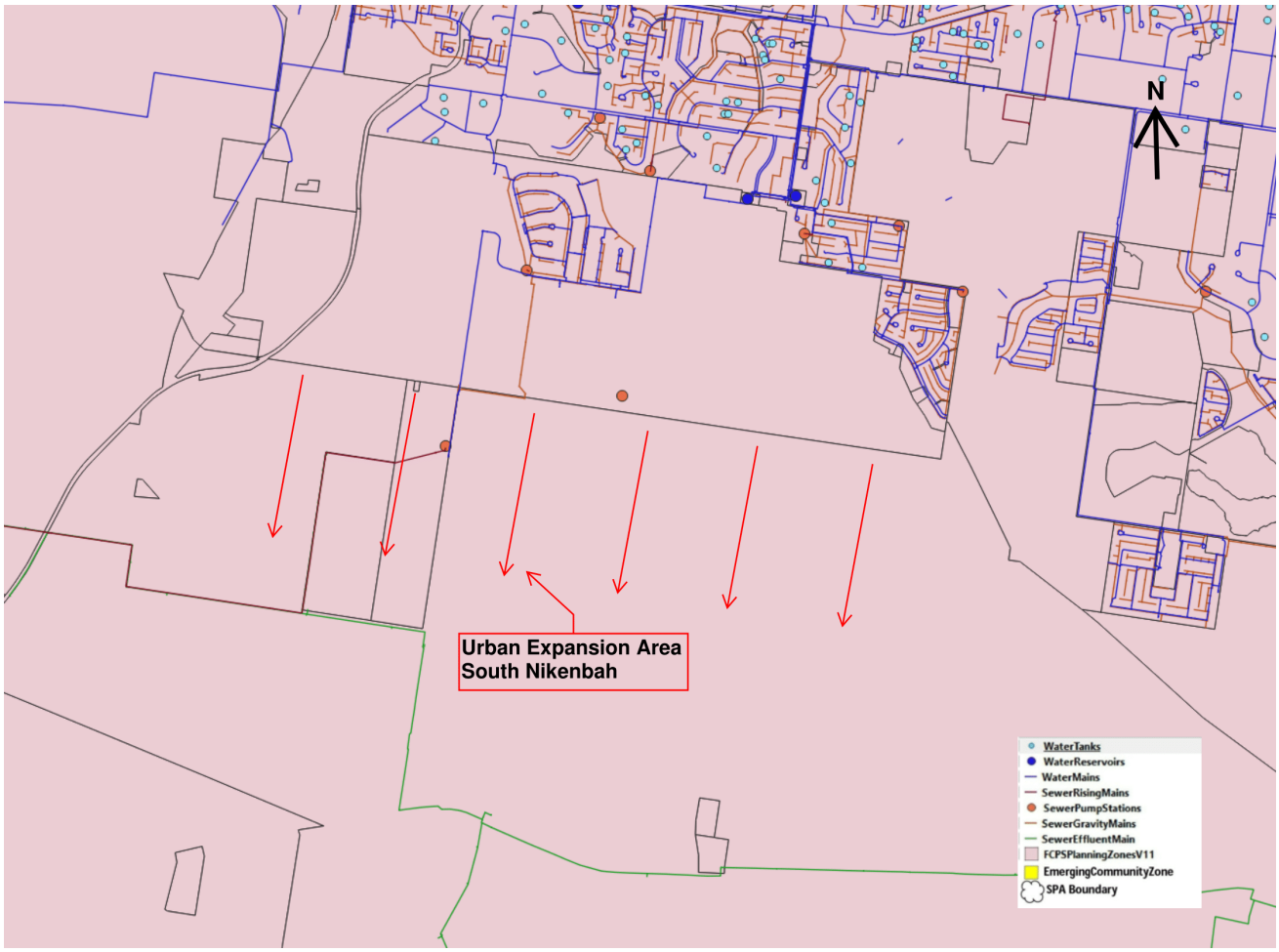


Figure 2: Urban Expansion Area South Nikenbah (Fraser Coast Planning Scheme GIS shapefiles 2022)

As can be seen in Figure 2, there is limited water and wastewater infrastructures within the identified urban expansion area with no existing residential development evident. An existing sewer rising main and pump station, sewer effluent main and DN100 water main are located within the investigation area which are servicing existing and sports precinct.

With the urban expansion area outside of the planned growth area, it is likely that this existing infrastructure would have limited capacity to service development unless there is residual capacity from planned growth within Nikenbah. There is the potential for a residual capacity of 256 ED for sewerage and 396 ED for water when reviewing the estimated yield capacity of 3,604 ED against previous planning assumption of 3,860 ED and 4,000 ED for Nikenbah.

3.2. Craignish – Dundowran Beach

The Craignish – Dundowran Beach SA2 is largely a low-density area. It has an established residential area, which is bordered to the west and south by rural residential, and large areas of emerging communities to the east.

The Dundowran Beach emerging community zone (Eli Waters SPA in Fraser Coast strategy reports) is the primary location for future growth in the Craignish – Dundowran Beach SA2 as illustrated in Figure 3. No existing development is evident in Dundowran Beach, with limited existing water and wastewater infrastructure present within the emerging community zone.

Urbis have estimated a total yield of 4,213 ED for the Craignish – Dundowran Beach sub-region, consist of 1,928 existing dwellings and 2,285 projected additional dwellings. A high growth projection of 1,075 dwellings over the next 20 years was predicted by QGSO for this sub-region. For only Dundowran beach (Eli Waters SPA) the planned servicing potential of 3,980 ED for water, and 4,570 ED for sewer documented in the Fraser Coast Water and Sewer Strategy reports.

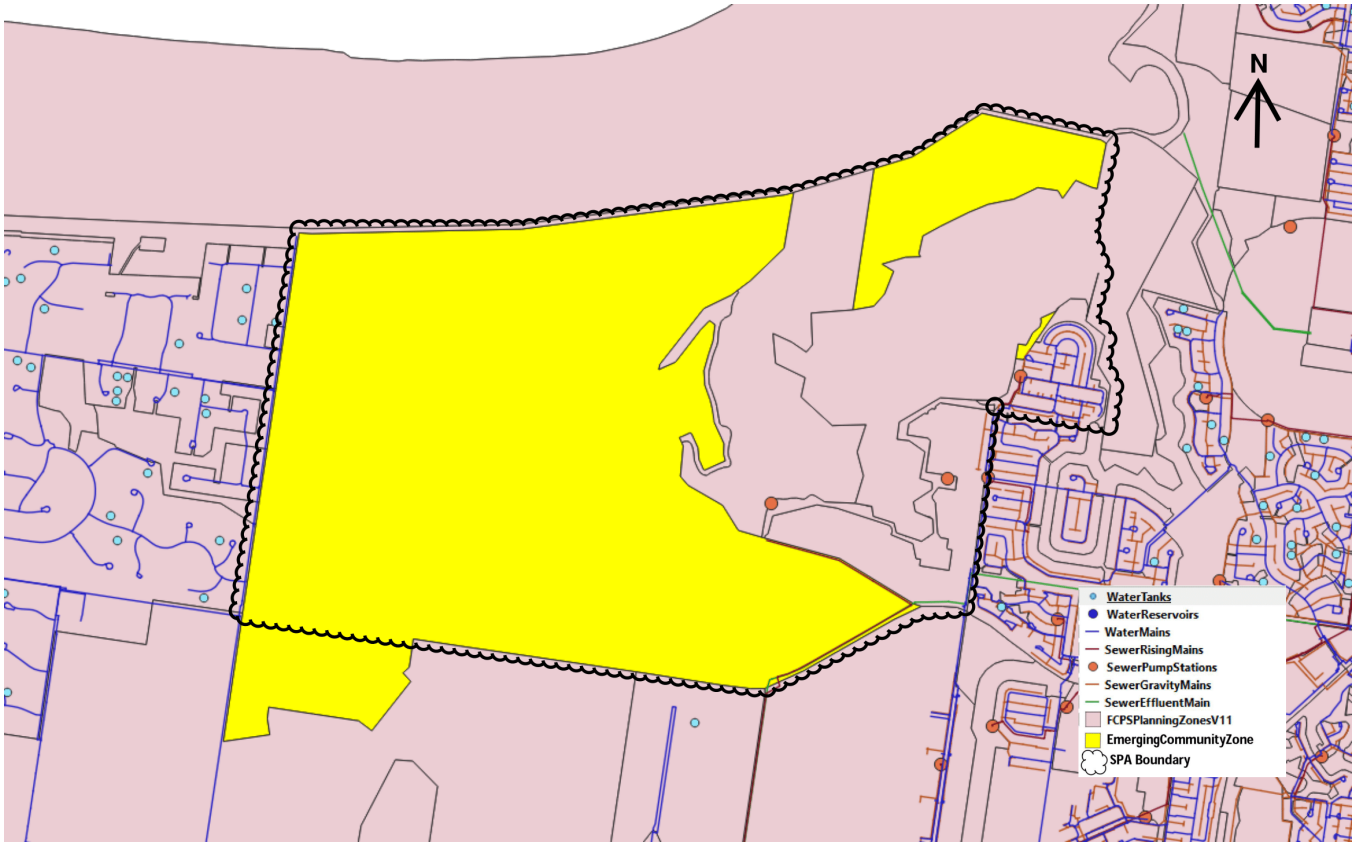


Figure 3: Eli Waters Trunk Infrastructure (Fraser Coast Planning Scheme GIS shapefiles 2022)

Council mapping shows an existing sewer rising main and pump station within the southeast of the emerging community zone. The area is surrounded by existing development in the east, south and west with water reticulation networks servicing these existing customers.

Future growth within the emerging community zone will likely be serviced through existing network infrastructure to the west and southeast. It is anticipated that the development within the region would provide better connectivity between the existing developments immediately east and west, providing better security of supply for the region. Looking at potential 4,570 ED in Fraser Coast sewerage report, It is anticipated that planned sewerage augmentations will remain suitable for servicing the yield capacity of 4,213 ED identified by Urbis, although planned 3,980 ED for water services in Fraser coast water strategy report being slightly lower than total yields, minor augmentations to water networks is required to achieve predicted growth.

3.2.1 Urban Expansion Investigation Area:

As part of the Urbis Study, an area was identified as potential urban expansion should demand exceed the projected capacity within the Dundowran Beach growth area. As illustrated in Figure 4, the identified area is immediately south of the Dundowran Beach emerging community zone.

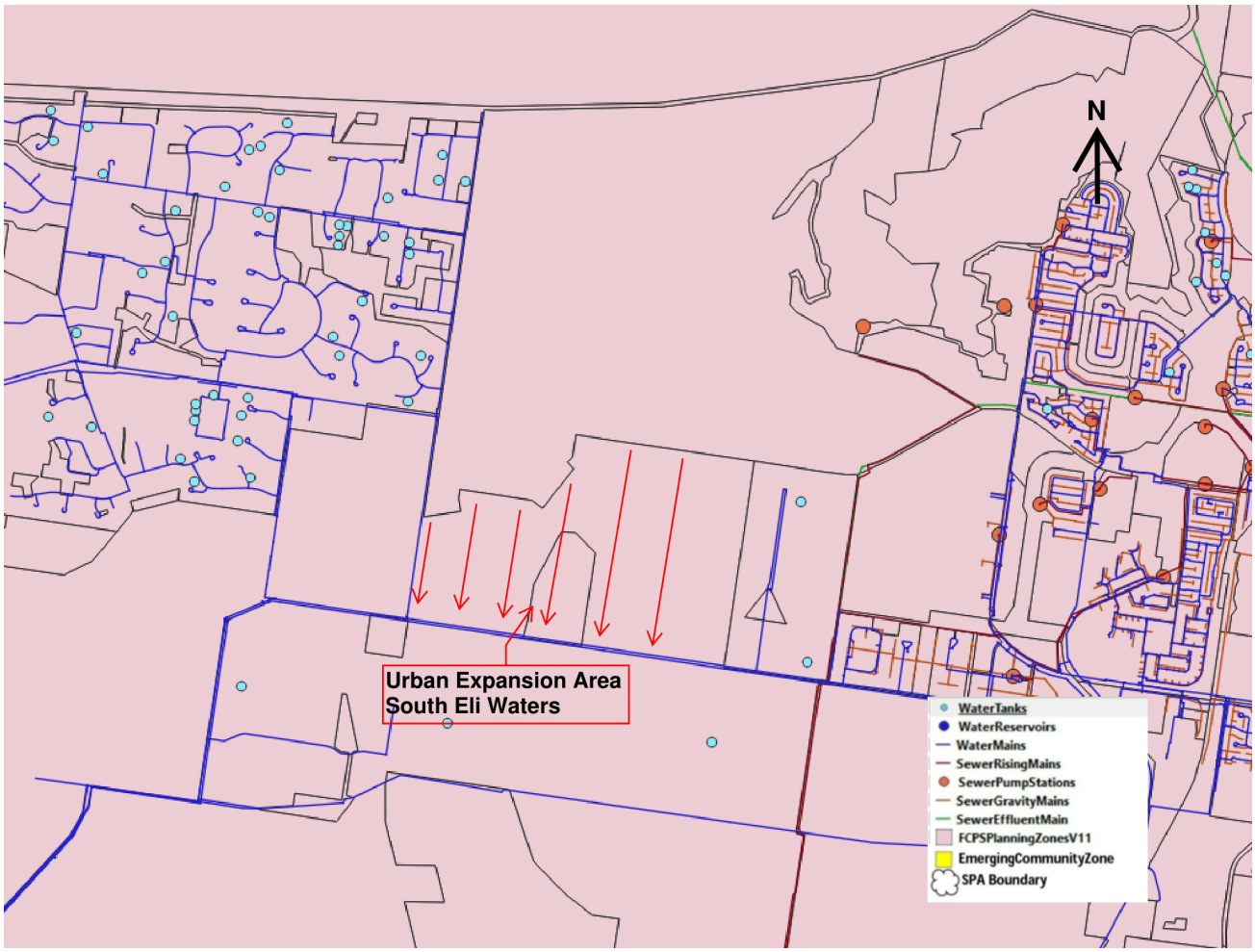


Figure 4: Urban Expansion Area South Eli Waters (Fraser Coast Planning Scheme GIS shapefiles 2022)

As shown in Figure 4, there is no existing water and wastewater infrastructure within the urban expansion investigation area. However, similar to the Dundowran Beach emerging community zone, the expansion area is surrounded by existing water infrastructure to the east, south and west. However no sewer infrastructure is identified within this expansion area and Dundowran Beach Emerging Community zone development will need to be planed for augmentation as to bring in sewer infrastructure for the investigation area.

With the urban expansion area outside of the planned growth area, it is likely that this existing infrastructure would have limited capacity to service development unless there is residual capacity from planned growth within Eli Waters. There is very limited residual capacity of 357 ED when reviewing the estimated yield capacity of 4,213 ED against previous planning assumption of 4,570 ED for sewerage servicing reported in Fraser Coast Sewerage Strategy, and it even falls behind of planned 3,980 ED for water servicing reported in Council's Strategy report , which indicates further augmentation to water networks will be needed if the projected growth is to be serviced within expansion area.

3.3. Pialba - Eli Waters

The Pialba SA2 covers a large area within the centre of the Hervey Bay region. Majority of the zonings in this SA2 is the principal centre located to the east, with medium and high density circling that zone.

Previous Fraser Coast servicing studies identified the Pialba Precinct as the primary area of growth within the Pialba – Eli Waters region. Figure 5 illustrates the existing water and wastewater infrastructure within the region which is already heavily developed around the Pialba Precinct. It is anticipated that the majority of growth will occur within and around the Pialba CBD through infill development, utilising existing infrastructure.

Urbis have estimated a total yield capacity of 6,745 ED for the Pialba – Eli Waters sub-region, consisting of existing 5,597 ED and additional projected dwellings of 1,148 ED. The 1,148 additional dwelling capacity is well below the high growth of 2,176 dwellings predicted to occur by QGSO over the next 20 years.
For only Pialba SPA (small section of Pialba SA2), Previous water planning projected a total demand of 4,500 ED, while previous sewerage planning considered additional dwelling yield of 800 ED for this SPA, It indicated that Pialba SPA doesn't have the potential to service total yield capacity and if the high growth population projection eventuate, further augmentations to infrastructures within Pialba SPA or alternatively other potential areas within Pialba – Eli Waters sub-region needs to be considered and investigated.

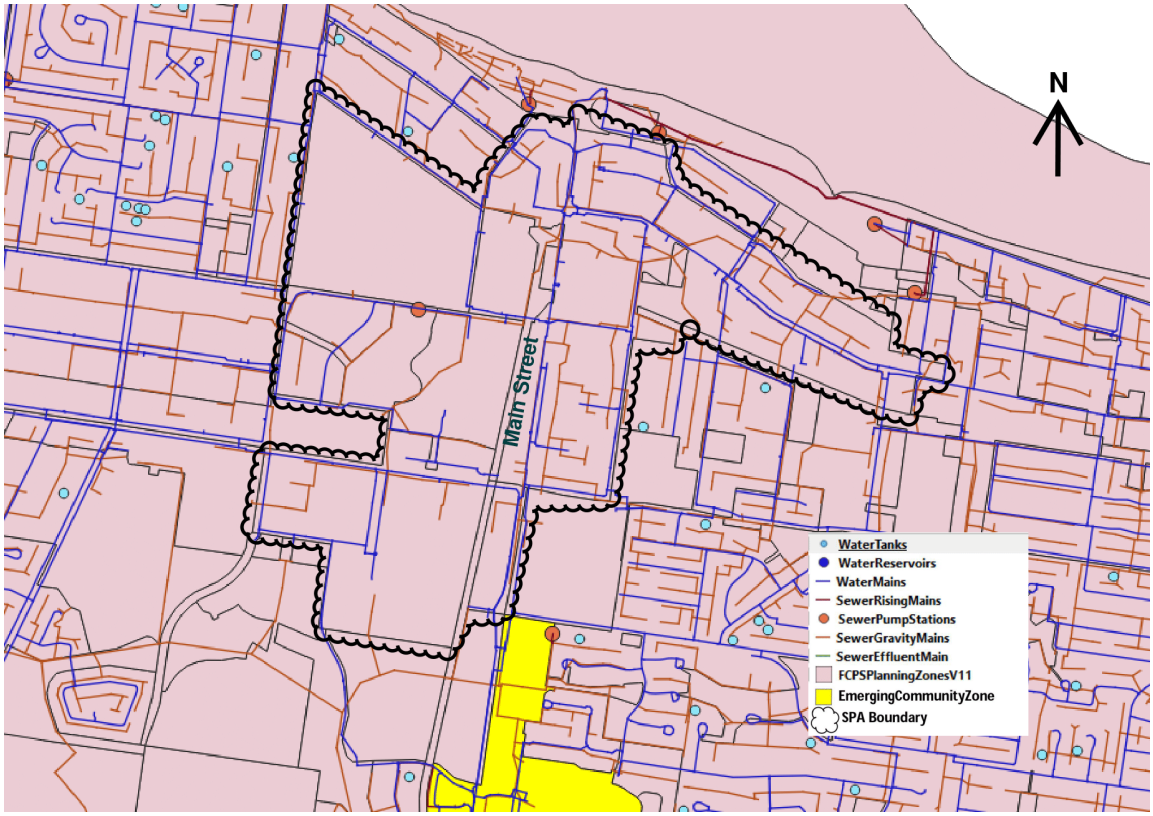


Figure 5: Pialba Trunk Infrastructure (Fraser Coast Planning Scheme GIS shapefiles 2022)

With significant existing development in the region, there is substantial trunk water and wastewater network infrastructure as illustrated in Figure 5. This includes existing DN375 and DN300 watermains along Main Street, as well as a DN450 trunk gravity sewer.

As mentioned, If the high growth population projection (2,176 ED) does eventuate, it is likely that on top of previously planned network augmentations, developments outside Pialba SPA will be required to service demand. Infill development should target locations with available capacity and limit yield to match capacity where possible, rather than augmenting the network to meet isolated servicing needs.

3.4. Urangan – Wondunna

The Urangan – Wondunna SA2 is located in the far north-east corner of the Hervey Bay region, bordered by the ocean on both sides. The area is largely low density residential, with some mixed use zoning along the eastern coastline. There is also a small area of rural residential land adjoining the River Heads area to the south.

Doolong Flats/Ghost Hill is the primary growth area located within the southwest of the Urangan – Wondunna region. Council mapping indicates some existing development within the emerging community zone as illustrated in Figure 6.

Urbis have estimated a total yield capacity of 9,003 ED for the Uranga - Wondunna SA2 consist of existing 6,006 ED and additional capacity of 2,997 ED. The additional capacity of 2,997 ED is below the high growth of 3,221 dwellings QGSO predicted to occur over the next 20 years. Previous water planning projected a demand of 5,130 ED, and previous sewerage planning projected 5,390 ED for the Doolong Flats/Ghost Hill SPA which is a section of Urangan – Wondunna sub-region.

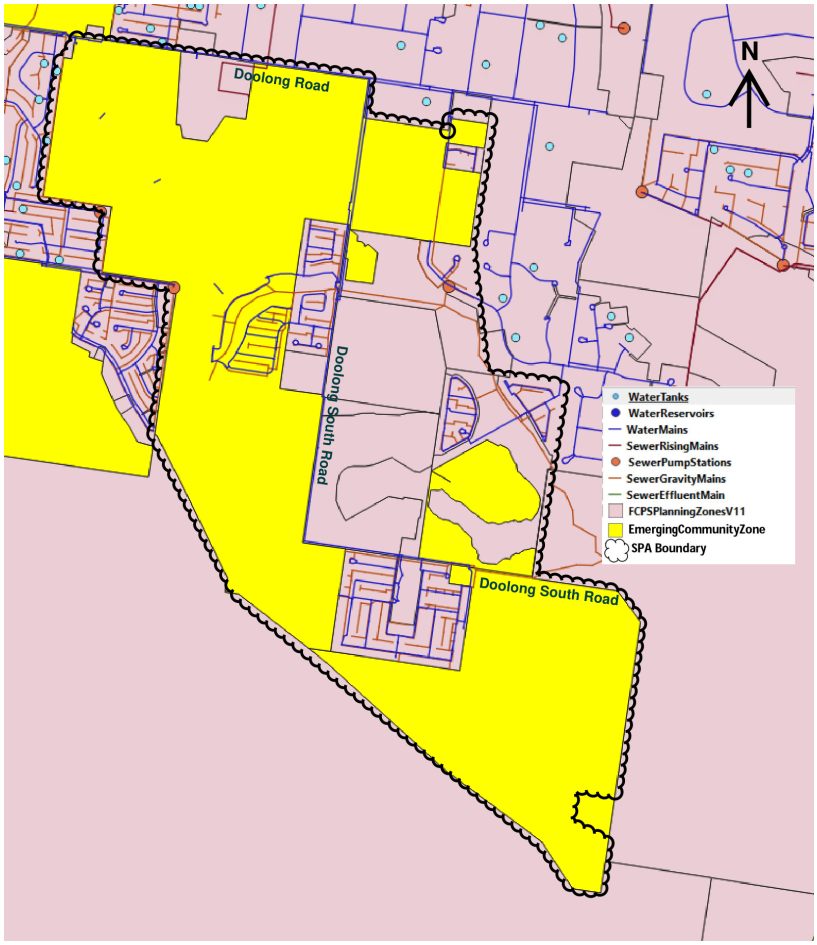


Figure 6: Doolong Flats/Ghost Hill Trunk Infrastructure (Fraser Coast Planning Scheme GIS shapefiles 2022)

Fraser Coast mapping shows DN375 and DN300 water mains along Doolong Road and Doolong South Road connected to the established networks and servicing developed areas. A DN375 gravity sewer main located on the south-east services the existing development to the south, while another DN375 gravity sewer main crossing Doolong South Road services the central existing development.

It is anticipated that future growth will extend from the existing development located in the centre and south of the emerging community zone, utilising the existing trunk infrastructure that appears to be sized to accommodate planned growth.

With the Urbis estimated additional yield capacity of 2,997 ED unable to accommodate the high growth projection of 3,221 ED, and previous water and sewerage plan servicing both standing far below total yield capacity of 9,003 ED, it is anticipated that infill development will be required throughout the wider Urangan – Wondunna region. If these higher demands do eventuate, it is anticipated that wider network augmentations may be required to service infill growth.

3.5. Torquay – Scarness – Kawungan

The Torquay – Scarness - Kawungan SA2 is located on the coastline, with the northern border along the coastline. It holds the greatest supply of high-density zoning located along the coastline. There are also a few blocks of medium density, and some more standard low-density zoning.

The majority of growth within this region is expected to occur within the Kawungan North East emerging community zone. Council mapping indicates substantial development surrounds the growth area illustrated in Figure 7.

Urbis have estimated the total yield capacity of 8,319 ED for the Torquay – Scarness – Kawungan sub-region, consisting of 6,827 existing and 1,492 projected dwellings. The additional projected dwellings of 1,492 sits well below the high growth of 3,083 dwellings predicted to occur over the next 20 years by QGSC. Previous water planning projected a demand of 1,830 ED and sewerage planning projected a demand of 1,400 ED for the Kawungan North East region..

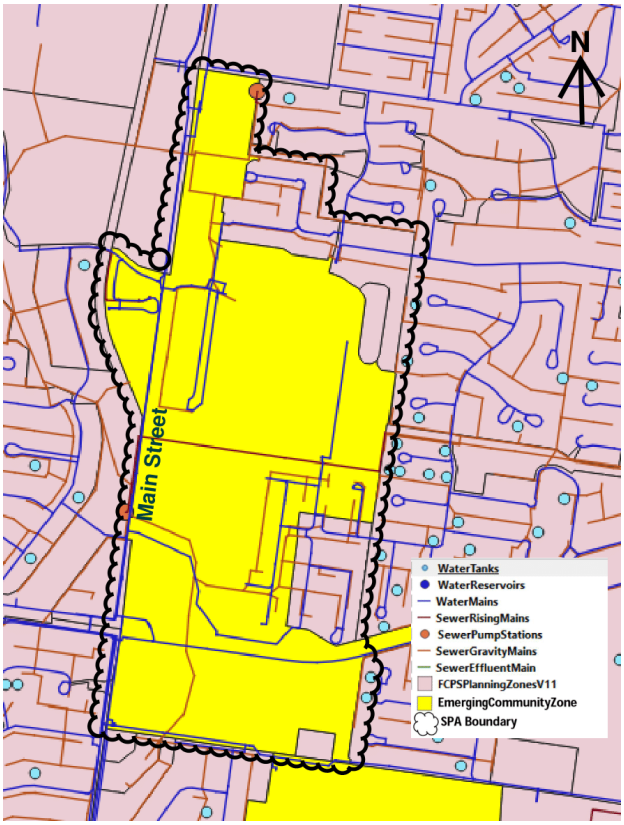


Figure 7: Kawungan North East Trunk Infrastructure (Fraser Coast Planning Scheme GIS shapefiles 2022)

With substantial existing development throughout the area, there are several existing water and wastewater trunk mains within the immediate vicinity. Specifically, council mapping shows a DN375 water main following Main Street along with existing DN150 / DN225 gravity sewers throughout the growth area.

It is anticipated that growth within the emerging community zone will be serviced through connection to the surrounding network infrastructure. Considering significant growth forecast of 3,083 ED for whole Torquay – Scarness – Kawungan sub-region which is much higher than total estimated water and sewer yields reported for Kawungan North East SPA,

only a small percentage of the high growth demand can be accommodated within the emerging coming zone and planned infrastructure.

With the Kawungan North East area unable to accommodate the high growth projection, it is anticipated that further development will be required throughout the wider Torquay – Scarness – Kawungan region. If these higher demands do eventuate, it is anticipated that wider network augmentations would be required to service this growth.

3.6. Burrum – Fraser

Burrum – Fraser SA2 consists of the lands between Hervey Bay and Maryborough and includes Fraser Island. The majority of the land is rural, with some low density and rural residential around existing nodes to the northwest. Fraser Island is predominantly environmental management zone.

Burrum Heads is the primary growth area in this sub-region with three separate emerging community zones shown on council mapping as illustrated in Figure 8. Existing low density residential developments with water and wastewater infrastructures are evident immediately north of each emerging community zones.

Urbis have estimated a total yield capacity of 4,664 ED for the Burrum – Fraser sub-region, consisting of 3,551 existing and 1,113 additional projected dwellings. The predicted additional number of dwellings is below the high growth of 1,803 dwellings QGSO predicted to occur over the next 20 years. Previous water and sewer planning both projected additional 1,520 ED could be developed just in the Burrum Heads SPA which is a very small part of Burrum – Fraser sub-region, It is 283 ED below the Urbis high growth forecast.

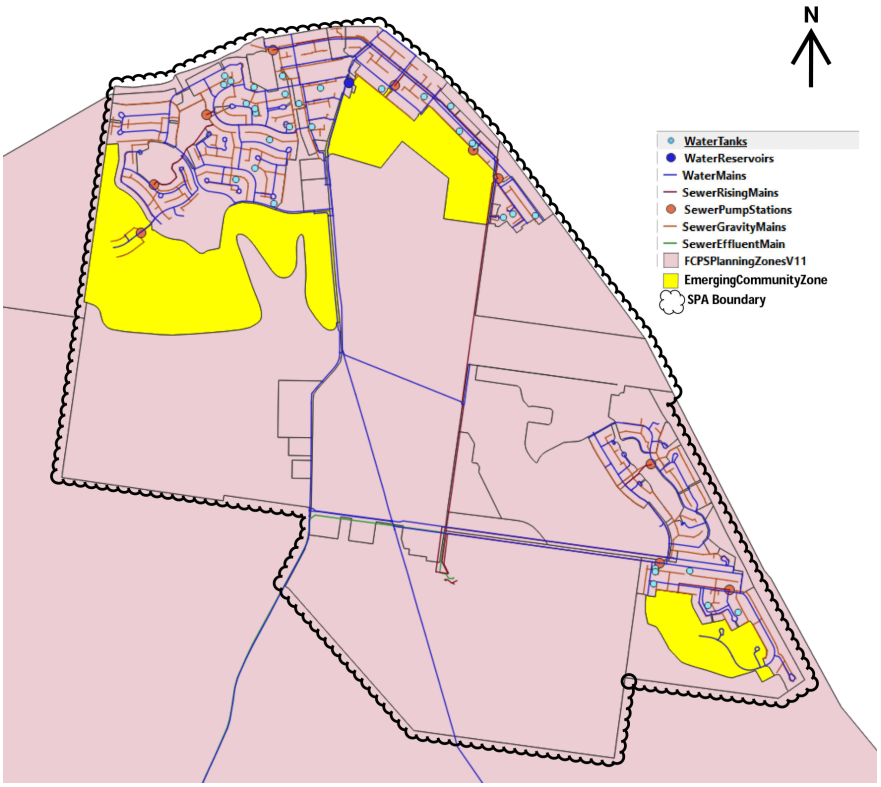


Figure 8: Burrum Heads Trunk Infrastructure (Fraser Coast Planning Scheme GIS shapefiles 2022)

The established development in the east is serviced by two DN150 water mains, while the existing developments in the north are serviced via existing DN250 and DN150 water mains. Both existing development areas are serviced via sewage pumping stations and rising mains which transfer sewage to the existing Burrum Heads WWTP.

It is anticipated that growth within the emerging community zone will be serviced through connection to the adjoining network infrastructure. With previous planning for 1,520 ED, the majority of demand projected over the next 20 years can be accommodated within the emerging community zone and planned infrastructure.

With the Burrum Heads area unable to accommodate the high growth projection of 1,803 ED, it is anticipated that further infrastructures planning will be required throughout the wider Burrum – Fraser region. If these higher demands do eventuate, it is anticipated that wider network augmentations would be required to service this growth.

3.7. Point Vernon

Point Vernon is one of the smaller SA2's and characterised by low density detached dwellings, with several medium density pockets along the southern coastline.

Urbis investigations have indicated minimal potential for growth within the Point Vernon region, with only 72 dwelling capacity available due the fragmentation of developable land. The QGSO 20 year high growth forecast shows an upper demand of 418 dwellings for this region. Council mapping shows no emerging community zone in this region, with established water and sewer network infrastructure evident (refer Figure 9).

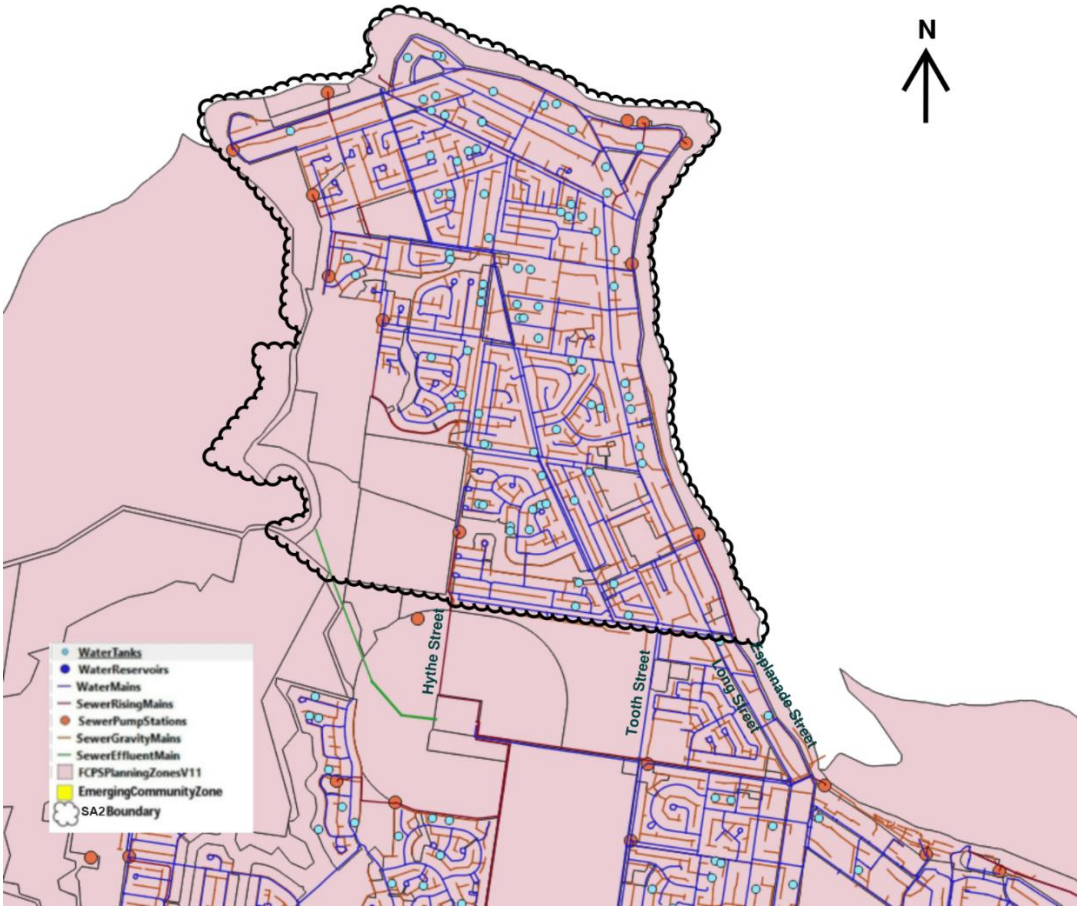


Figure 9: Point Vernon Trunk Infrastructure (Fraser Coast Planning Scheme GIS shapefiles 2022)

Council mapping shows several trunk water mains including a DN375 and DN200 along Tooth Street and Long Street respectively. An existing DN375 gravity sewer trunk along Esplanade Street and sewer rising main along Hythe Street direct wastewater flows to the south.

With no emerging community zones, growth will predominantly occur through pockets of infill development. These pockets of development should target areas where trunk infrastructure is in close proximity or network capacity is available.

3.8. Tinana

The Tinana SA2 is located south of Maryborough with the area characterised predominantly by rural residential lands and some low-density development. There is no emerging community zone mapped for this region as illustrated in Figure 10.

Urbis have estimated total yield capacity of 1,849 ED for the Tinana SA2, consisting of 1,207 existing and 642 additional projected dwellings. The number of additional projected dwelling is slightly below the high growth of 654 dwellings QGSO predicted to occur over the next 20 years. Previous network planning for both water and sewerage servicing indicated a total potential yield of 5,310 ED for the SPA.

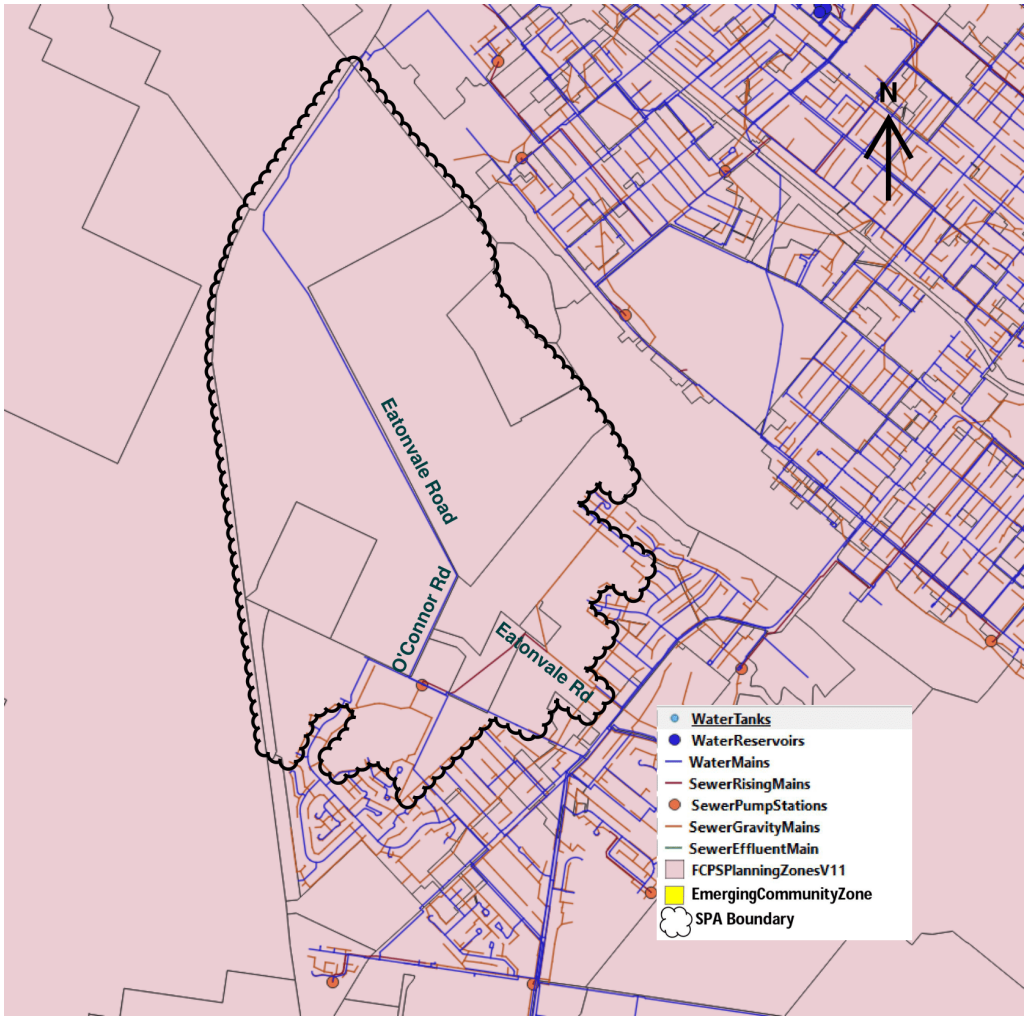


Figure 10: Tinana trunk infrastructure (Fraser Coast Planning Scheme GIS shapefiles 2022)

Council mapping shows an existing DN600 watermain along Eatonvale Road and O'Connor Road. An existing DN225 gravity sewer main along Eatonvale Road and a pump station service the area.

Future growth within Tinana will likely be serviced through existing network infrastructure to the southeast. With previous planning considering an ultimate yield of 5,310 ED for the SPA, It can likely accommodate the high growth projection of 654 ED through existing infrastructure and appropriate network augmentations.

3.9. Granville

Granville is an SA2 located to the east of Maryborough, stretching approximately 14km south. The majority of developable land sits adjacent to the township, with mostly low-density land and some pockets of medium density available. An emerging community zone is located to the north of Granville as illustrated in Figure 11, however Fraser Coast Council has requested that this area is excluded from the land supply study as this zoning is no longer valid.

Urbis have estimated a total yield capacity of 1,103 ED for the Granville SA2, consisting of 1,032 existing and 71 additional projected dwellings. The additional number of dwellings stands below the high growth forecast of 263 dwellings predicted to occur over the next 20 years by QGSO. Previous water and sewer planning projected a demand of 2,600 ED, and 2,650 ED for the Granville region, considering existing dwellings of 1,032 plus high growth of 263 ED in Urbis report being less than projected plan servicing demands for both water and sewer in Granville emerging community zone, it appears this area is able to accommodate the future growth. However, as mentioned most of this yield was associated with the proposed Granville Harbour development located within the emerging community zone which is excluded from the land supply study as this zoning is no longer valid

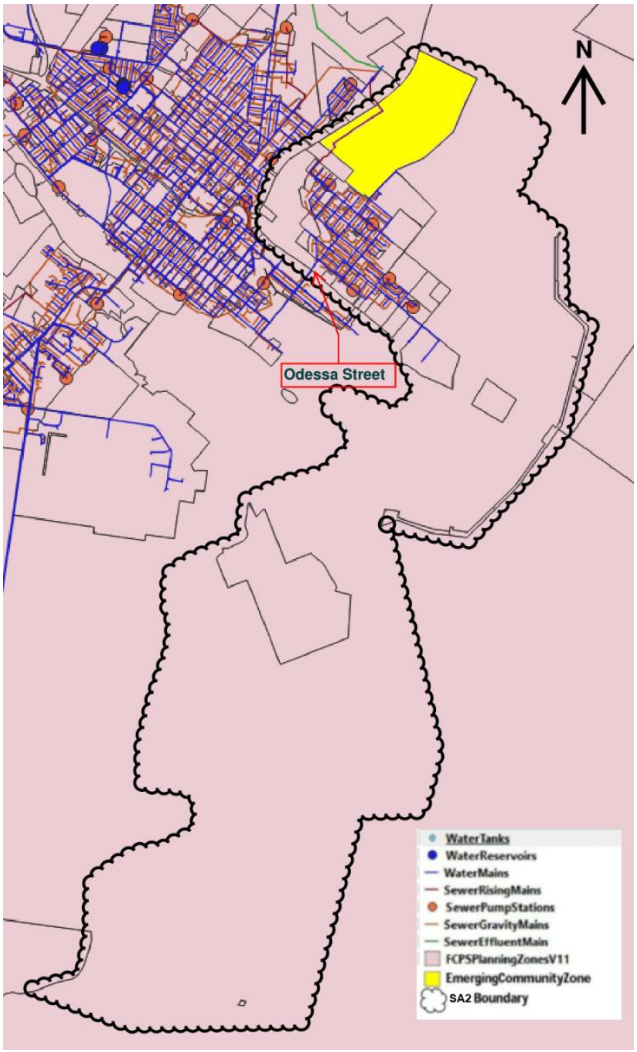


Figure 11: Granville Trunk Infrastructure (Fraser Coast Planning Scheme GIS shapefiles 2022)

With Granville being located on the fringe of Maryborough, there is well established infrastructure servicing the region. Council mapping shows an existing DN450 water main crossing Mary River and servicing existing development along Odessa Street. Several sewage pumping stations and rising mains service existing development footprint.

It is anticipated that future development within the Granville region will extend southeast from the existing network or occur as infill development within the northern region. With a high growth forecast of 263 ED, it is likely that the established network can accommodate this growth as infill or fringe development.

3.10. Maryborough

Maryborough is one of the main townships within the region and therefore the SA2 has a high diversity of zoning. The principal centre is located to the east and rural residential lands to the west. Within the Maryborough SA2, the St Helens emerging community zone (refer Figure 12) is identified as the primary growth area.

Urbis have estimated a total capacity of 10,665 ED for the Maryborough sub-region, consisting of 7,011 existing and 3,654 projected dwellings. A high growth of projected 1,433 dwellings was predicted by QGSO to occur over the next 20 years. Previous water and sewerage planning projected a respectively potential of 3,320 ED's, and 2,890 ED's to be developed for the smaller St Helens SPA within Maryborough SA2.

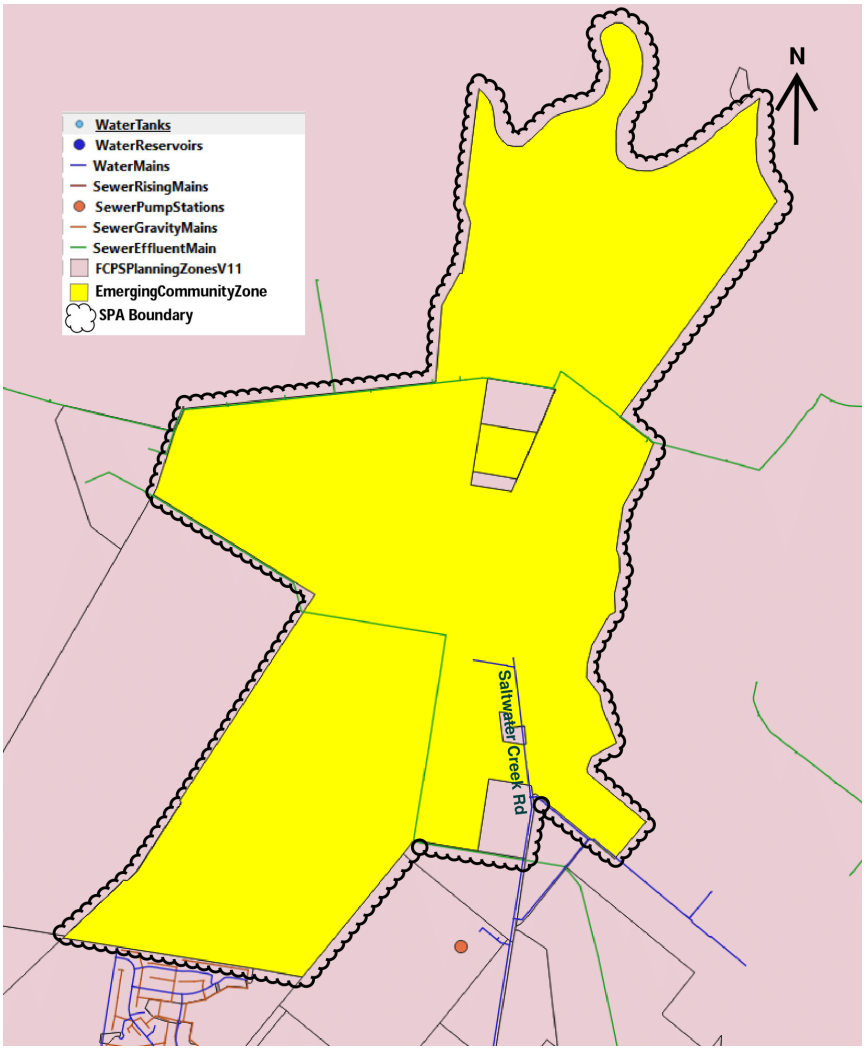


Figure 12: St Helens Trunk Infrastructure (Fraser Coast Planning Scheme GIS shapefiles 2022)

Council mapping shows almost no development or well established network infrastructure within the St Helens emerging community zone. A small pocket of development exists to the south of St Helens along Saltwater Creek Road.

An existing DN250 water main along Saltwater Creek is the only trunk infrastructure servicing the region. Existing sewer effluent mains pass through the site; however there is no existing wastewater infrastructure within the emerging community zone, with only a small gravity network servicing existing development immediately south.

To meet the projected growth and yield capacity, significant investment in new trunk infrastructure would likely be required within St Helens as well as external to the emerging community zone. The previous planning and servicing strategy should be capable of servicing the high growth projection of 1,433 ED.

In addition to the St Helens emerging community zone, previous network planning investigated the development potential of the Maryborough Principal Activity Centre. This area is predominantly the Maryborough CBD and includes a well-established water and sewer network covering the whole district as illustrated in Figure 13.

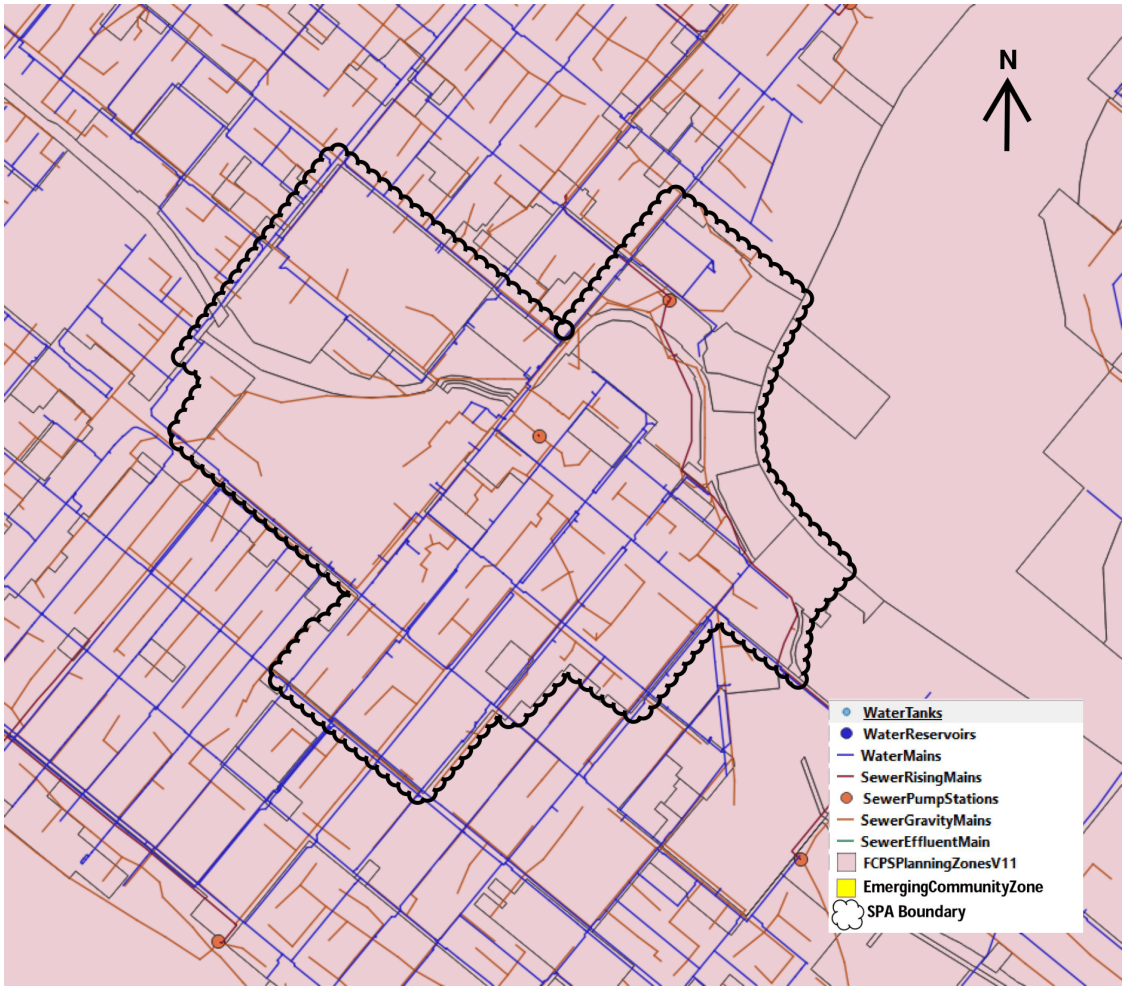


Figure 13: Maryborough Principal Activity Centre trunk infrastructure (Fraser Coast Planning Scheme GIS shapefiles 2022)

Significant trunk infrastructure exists within the Maryborough CBD and is assumed to have some residual capacity. Infill development should target locations with available capacity and limit yield to match available capacity where possible, rather than augmenting the network to meet isolated servicing needs.

3.11. Maryborough Region – South

Maryborough Region – South is the largest sub-region considered in Urbis study. No primary growth area or emerging community zones are evident in this region as illustrated in Figure 14. Tiaro is a small pocket of development where existing residential and commercial demands are serviced by existing network infrastructure.

Urbis have estimated a total yield capacity of 1,428 ED for Maryborough Region – South consisting of 1,137 existing and 291 additional projected dwellings. A high growth forecast of 855 dwellings was predicted by QGSO to occur over the next 20 years. A shortfall of developable land is predicted based on the high growth forecast and will likely need to be accounted for through infill development and densification around the existing townships like Tiaro.

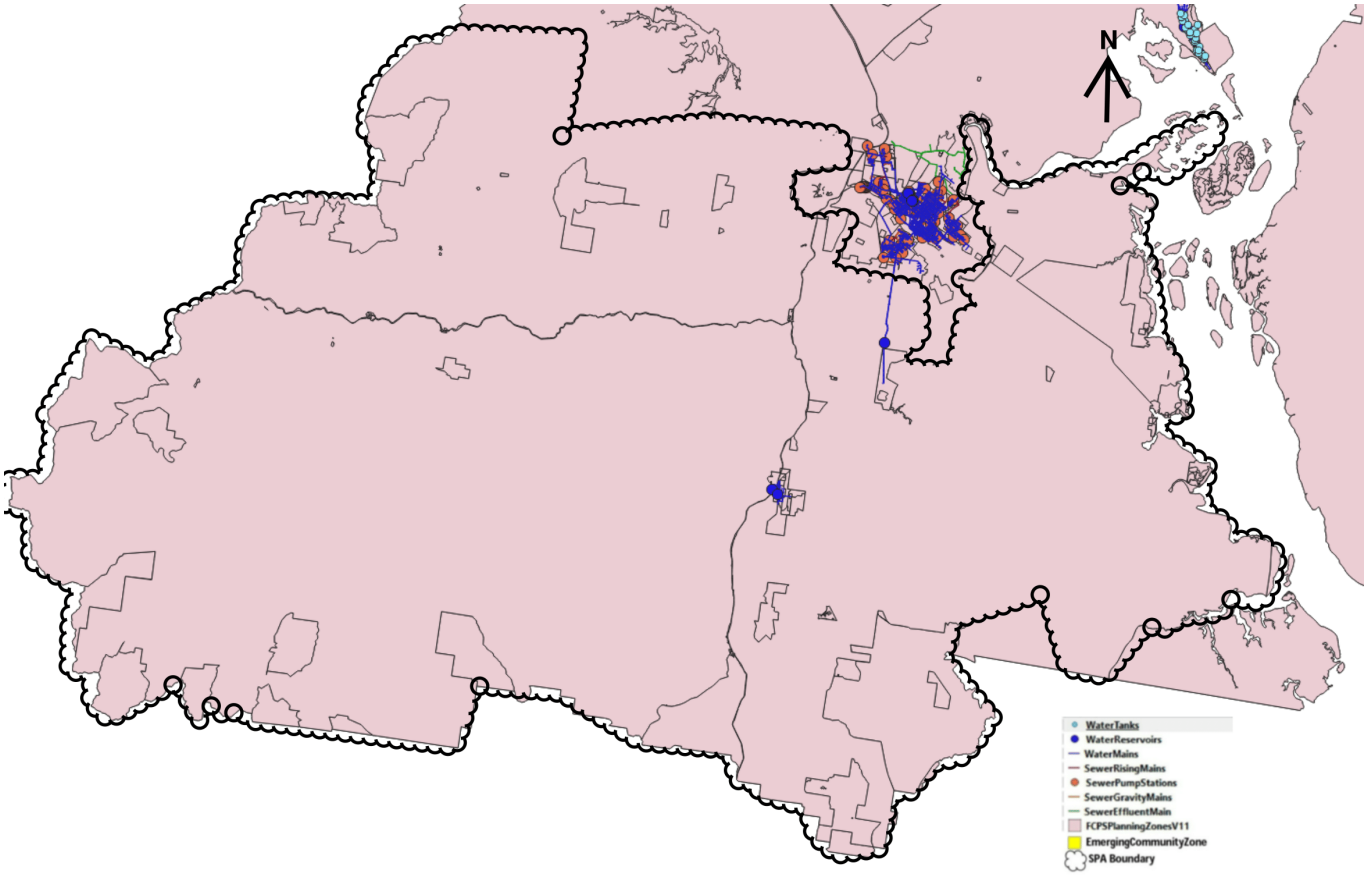


Figure 14: Maryborough Region - South Trunk Infrastructure (Fraser Coast Planning Scheme GIS shapefiles 2022)

Considering the extents of the Maryborough Region – South SA2 and limited existing infrastructure, it is anticipated that any future growth within this region will fringe on existing townships end utilising existing infrastructure. It is also highly likely that some development within the region may not be connected to council infrastructure and be serviced through self-contained infrastructure (i.e. rainwater / septic tanks).

3.12 Infill Development Opportunity

As discussed in the sections above, there is potential for infill development in several of the SA2 growth areas. Where there is an opportunity for infill development, these areas should be investigated as a priority due to the following benefits associate within infill development:

- Opportunity to exploit available network capacity within underutilised infrastructure.
- Reduced capital expenditure on new infrastructure and better return on previous infrastructure investment.
- Decreased operational and maintenance costs associated with new infrastructure.

While infill development typically results in lower upfront and ongoing infrastructure cost, it is contingent on available network capacity to service growth. Where infill development is planned with limited available network capacity, there is the risk that the potential savings are lost to network augmentations, especially when upgrades to treatment capacity is required. This challenge is not unique to infill development and remains a similar risk for greenfield development when growth areas leverage off existing infrastructure that wasn't planned to cater for future growth.

A hypothetical example with two scenarios of greenfield and infill developments for 20 new dwellings, with regards to the construction and maintenance cost of water and wastewater infrastructures is demonstrated below, it is assumed that no regional network capacity limitations exist with these scenarios.

Scenario 1: Greenfield Development
As can be seen in figure 15 below; if it is considered that the 20 new dwellings are serviced within greenfield development, with 10 dwellings on each side of a new constructed road. Considering the width of each parcel of land is 20 meters, the length of the road required for this development is 200 meters. Consequently 200 meters of new water and sewer mains to service this area is required which involves the construction and maintenance costs of these 200 meters water and sewer trunk mains.

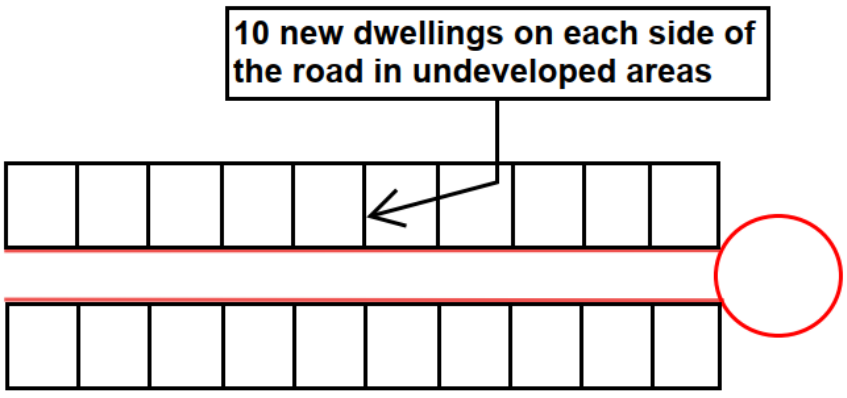


Figure 15: Scenario 1, Greenfield development for 20 dwellings

Scenario 2: Infill Development
In this scenario infill development of 20 dwellings within an established urban area is reviewed. As can be seen in Figure 16, development of 20 new dwellings is within an existing and established parcel of land, as the water and sewerage services are available within the urban area, only a short length of new road and water and sewer mains is required. For this scenario about 20 meters of road and as a result 20 meters of new water and sewer mains are needed. Comparing the two scenarios it is given that the construction and maintenance cost of the infill development to greenfield development is 1 to 10, which is a considerable difference for these two scenarios.

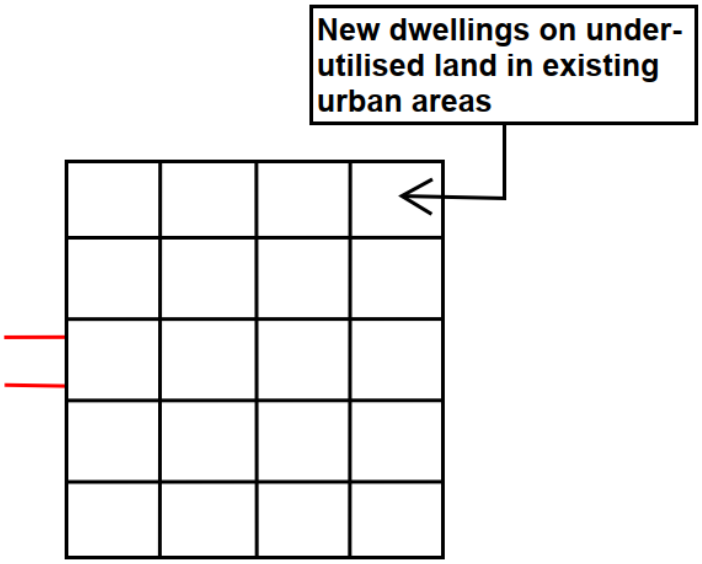


Figure 16: Scenario 2, Infill development for 20 dwellings

So as demonstrated above, generally the construction and maintenance cost of water and sewer infrastructures for infill developments are less than greenfield developments.

4. Conclusions & Recommendations

Through the high-level water and wastewater network investigation, the following conclusions can be made:

- Growth within each of the SA2's will predominantly occur within the emerging community zone where present or alternatively occur as infill development through establish networks.
- Potential infill development due to existing water and sewer networks within Pialba, Kawungan North East, Point Vernon, and Maryborough Principal Activity Centre is recognised.

- The water and sewer plan servicing for Nikenbah, Tinana, Granville, and ST Helens SPAs are adequate to service Urbis's projected growth for their correlated SA2s. For the rest of Statistical areas either further augmentations within SPAs or considering areas out of the nominated SPA and within the SA2 is required.
- For Urban expansion area 1 very narrow residual capacity for sewerage, and no residual capacity for water servicing after considering the planned growth within Dundowran Beach emerging community zone was recognised. And for the urban expansion area 2 very limited residual capacity of for water and sewer after considering the planned growth within Nikenbah was recognised.
- Areas with potential infill development or established network infrastructure will result in lower infrastructure cost to service the projected growth.
  - Higher densities can also result in lower infrastructure cost per dwelling, subject to available capacity within the surrounding network and augmentations required.

It is recommended that the following be undertaken to verify the high-level assessment and conclusions.

- Complete water and wastewater network modelling to assess Urbis growth projections and ultimate yield capacity for each of the SA2's.
  - Including assessment of water and wastewater infrastructure for the expansion of Nikenbah and Eli Waters areas identified by Urbis.
- Assess existing network infrastructure to identify available network capacity suitable for infill development.
- Prepare updated water and wastewater service strategy reports for the region with a focus on the 11 SA2's and projected growth identified by Urbis.

COVID-19 AND THE POTENTIAL IMPACT ON DATA INFORMATION

The data and information that informs and supports our opinions, estimates, surveys, forecasts, projections, conclusion, judgments, assumptions and recommendations contained in this report (Report Content) are predominantly generated over long periods, and is reflective of the circumstances applying in the past. Significant economic, health and other local and world events can, however, take a period of time for the market to absorb and to be reflected in such data and information. In many instances a change in market thinking and actual market conditions as at the date of this report may not be reflected in the data and information used to support the Report Content.

The recent international outbreak of the Novel Coronavirus (COVID-19), which the World Health Organisation declared a global health emergency in January 2020 and pandemic on 11 March 2020, has and continues to cause considerable business uncertainty which in turn materially impacts market conditions and the Australian and world economies more broadly.

The uncertainty has and is continuing to impact the Australian real estate market and business operations. The full extent of the impact on the real estate market and more broadly on the Australian economy and how long that impact will last is not known and it is not possible to accurately and definitively predict. Some business sectors, such as the retail, hotel and tourism sectors, have reported material impacts on trading performance. For example, Shopping Centre operators are reporting material reductions in foot traffic numbers, particularly in centres that ordinarily experience a high proportion of international visitors.

The data and information that informs and supports the Report Content is current as at the date of this report and (unless otherwise specifically stated in the Report) does not necessarily reflect the full impact of the COVID-19 Outbreak on the Australian economy, the asset(s) and any associated business operations to which the report relates. It is not possible to ascertain with certainty at this time how the market and the Australian economy more broadly will respond to this unprecedented event and the various programs and initiatives governments have adopted in attempting to address its impact. It is possible that the market conditions applying to the asset(s) and any associated business operations to which the report relates and the business sector to which they belong has been, and may be further, materially impacted by the COVID-19 Outbreak within a short space of time and that it will have a longer lasting impact than we have assumed. Clearly, the COVID-19 Outbreak is an important risk factor you must carefully consider when relying on the report and the Report Content.

Where we have sought to address the impact of the COVID-19 Outbreak in the Report, we have had to make estimates, assumptions, conclusions and judgements that (unless otherwise specifically stated in the Report) are not directly supported by available and reliable data and information. Any Report Content addressing the impact of the COVID-19 Outbreak on the asset(s) and any associated business operations to which the report relates or the Australian economy more broadly is (unless otherwise specifically stated in the Report) unsupported by specific and reliable data and information and must not be relied on.

To the maximum extent permitted by law, Urbis (its officers, employees and agents) expressly disclaim all liability and responsibility, whether direct or indirect, to any person (including the Instructing Party) in respect of any loss suffered or incurred as a result of the COVID-19 Outbreak materially impacting the Report Content, but only to the extent that such impact is not reflected in the data and information used to support the Report Content.

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