Raglan Housing Study

Prepared for

WHAINGAROA-RAGLAN HOUSING AFFORDABILITY PROJECT

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STRATEG.EASE
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Kelvin Norgrove
Strateg.Ease Ltd

Level 6 AIG Building
41 Shortland St.
Auckland Central 1010

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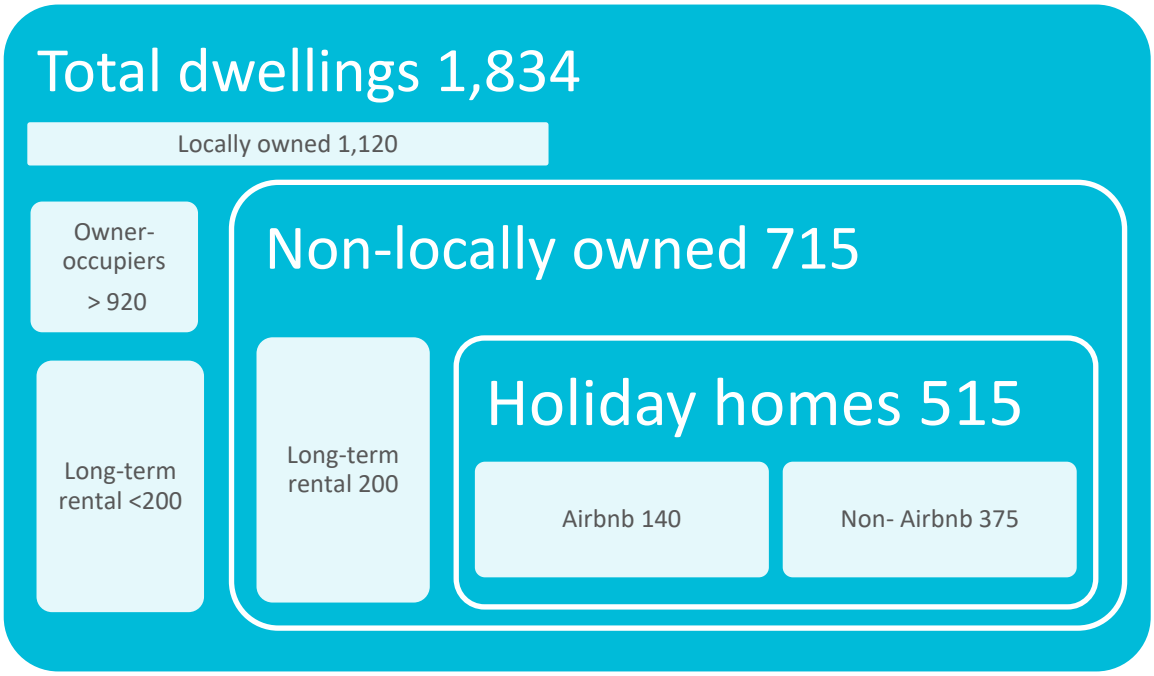
Executive summary

This **Raglan Housing Study** has been commissioned by the Whaingaroa-Raglan Housing Affordability Project (WRAP) and Waikato District Council, to provide analysis of housing cost pressures in Raglan. The report is intended to complement a householder survey being conducted by Waikato University for WRAP in September 2018, which will provide additional insights on current housing pressures.

Raglan's resident population is estimated to have increased by 21% over the past decade (2007-17) from 2,670 to 3,240. Corelogic 2018 data for the Raglan study area defined for this report shows there are 1,834 'residential properties with dwellings' and 201 'vacant residential properties' in 2018.

Much of the population growth over the past five years has been accommodated without a corresponding increase in the supply of dwellings. The number of houses increased by 5% while households increased by more than twice as much (12.6%). The nature of occupancy of houses in Raglan is estimated to comprise 28% holiday homes (of which more than a quarter are listed on Airbnb), up to 22% long-term rentals, and at least 50% 'owner-occupied' dwellings (refer Figure 1).

Figure 1: Estimates of Raglan dwellings 2018



Source: Strateg.Ease

House and section capital values (CVs) and sales prices in Raglan have reached record high levels over the past three years such that the lower value/entry price stock of houses for first home buyers is now around $470,000-$500,000 and vacant sections start at $250,000. The 2018 median house value is now $580,000 and the median section value is $355,000.

The number of rental properties listed on TradeMe has declined markedly in recent years and the median rent has risen by 30% (from $340 to $440 per week) since 2016, exceeding the average rent for the Waikato District as a whole ($354 per week). The median rent in Raglan is estimated to be around 40% of the median household income ($55,600[1]).

Over the medium term (2026) Raglan is projected to face demand for 419 new dwellings, a growth rate of 21%. To meet this demand the annual average volume of 22 new dwellings built in Raglan during 2007-18 would need to at least double over the next eight years. Over the longer term (2046) demand is projected for an additional 1,284 dwellings, a 63% increase from 2017.

The projected supply of new dwellings able to be built in Raglan over the next 8 years will likely fall short by over 300 dwellings, as a maximum of only 107 additional dwellings are estimated as feasible to develop over the period to 2026, from a combination of subdivision, infill and greenfields development. The supply deficit is due to much of the 'plan-enabled' zoned land in greenfield areas not having infrastructure 'in place' and also to commercial feasibility constraints reducing the ability to provide dwellings at prices that demand can afford. Most greenfields capacity is expected to become available after 2026 and even then will only meet half of the long-term demand for 1,284 dwellings.

Future Proof projections suggest that the majority of demand from population growth will be for dwellings that are priced below $440,000, and certainly below $580,000. Assuming a basic house cost of around $300,000, to buy a new 'house and site' at around $500,000 would rely on sections being no more than $200,000 in at least some parts of the greenfield areas at Rangitahi, Greenslade Rd., Hills Rd. and Te Hutewai Rd. In 2018 the lowest sales price of sites within these areas was $205,000 in Greenslade Rd. while sites at Rangitahi are reported to start at $275,000.

Even at $500,000 households would need to have an income of at least $80,500 to afford them (assuming a 20% deposit of $100,000), which is a lot higher than the estimated median household income in Raglan. If a

[1] Based on adjusting the 2013 Census median household income in Raglan of $47,500, by the average growth rate in household incomes in NZ as a whole over 2013-17.

significant number of new sections cannot be created and sold at prices around $200,000 then a large share of projected medium term demand cannot be met from supply in Raglan's greenfield areas.

At the heart of the issue for the town is that without adequate new supply, the anticipated strong demand for lower priced dwellings will be directed to existing stock in the lower quartile and median price bands, and exert upward pressure on those prices which will effectively thwart demand. The feedback effects on the Raglan community will include increased demand for rental dwellings, higher rental prices and inability to accommodate low-income workers and residents within close proximity to the town. In turn, the local economy would be expected to face labour shortages, particularly in retail and service activities (e.g. shops, restaurants, accommodation, schools). It will also add pressure to 'open up' more rural land for residential development as a solution to the affordability dilemma.

In the current situation with high house prices and the likelihood of houses in greenfields developments being priced well above $500,000, the best hope for lower-income groups appears to be if new 'higher end' dwellings were purchased by existing or new residents who can use existing equity to upgrade to a new house. That at least could free up some relatively more affordable existing stock (at prices less than $470-500,000) for first home buyers or renters (assuming those prices do not continue to also rise as they have been in recent years).

Even then, it is unlikely that many houses would become available at the low end of the price range, and nor would market rents for those houses likely be within the affordability threshold of 25-30% of household income.

The WRAP has highlighted the need for the Raglan community to generate and explore all possible options to provide affordable houses (based on the Future Proof projections 69% of demand will be for houses in a range below $300,000 and up to $440,000), and to provide accommodation for those who cannot afford to buy a stand-alone house. This report is part of the mix and suggests consideration be given to the following actions:

1. Investigating the commercial potential for alternative forms of housing that depart from the traditional single site/detached dwelling (e.g. multi-units/townhouses which achieve a higher density of dwellings per site)
2. Seeking ways for construction delivery to occur at a faster pace and lower cost (e.g. use of pre-fabricated structures)

3. Engaging with Waikato District Council to encourage the Proposed Waikato District Plan to provide additional capacity for houses in the existing urban area or in greenfields locations beyond that identified in the Future Proof 2018 report (which is based on the Operative District Plan)
4. Promoting awareness of the expected growth in housing demand to landowners and encouraging them to provide low cost forms of residential accommodation on 'spare land'(e.g. through infill or subdivision) and on existing vacant sites
5. Advocacy to the council and large landowners in the greenfields locations to accelerate land development and infrastructure provision (which will likely require landowners to enter into development agreements with the council on the funding and timing of infrastructure provision).

1.0 Introduction

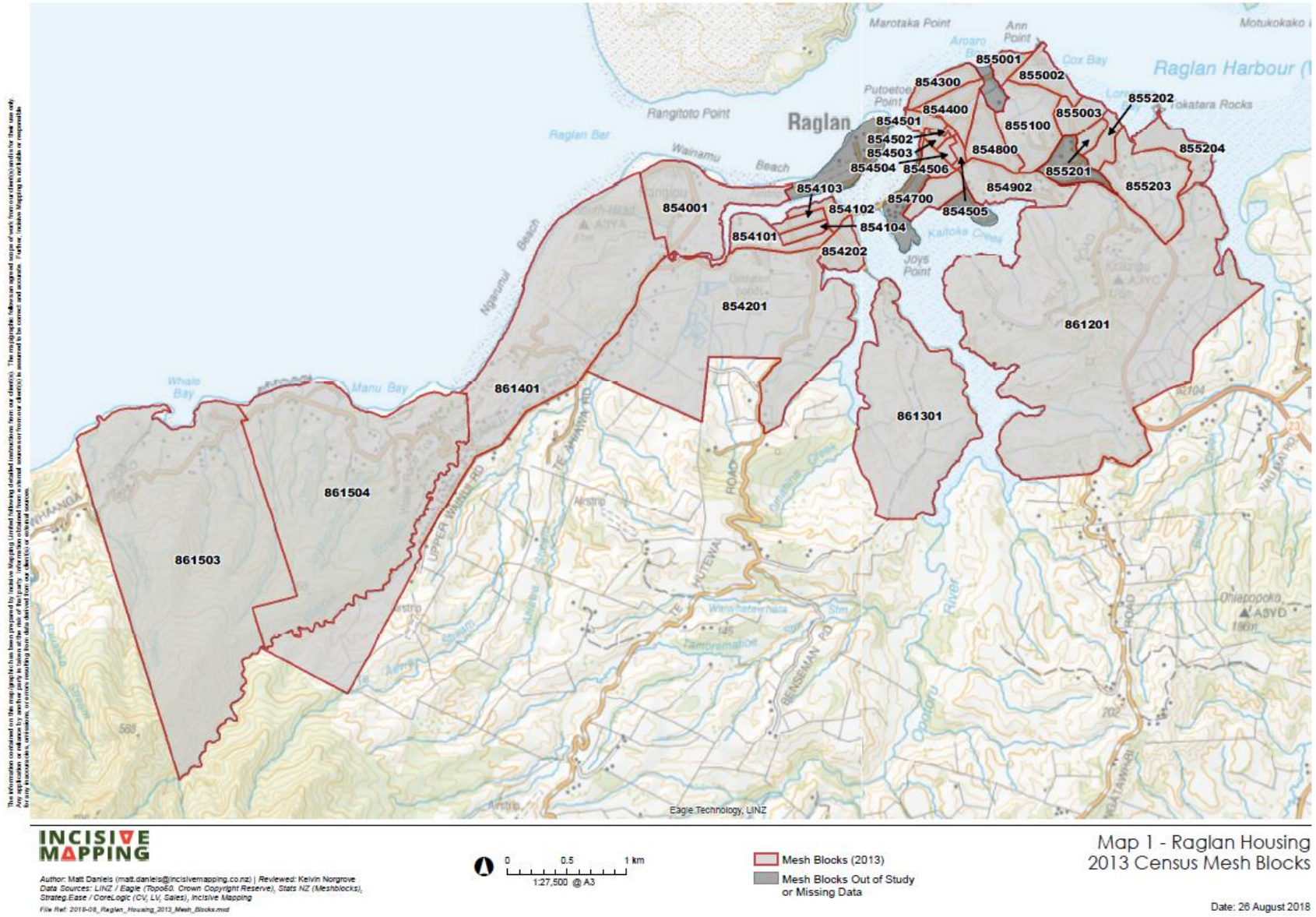
1.1 Purpose

This **Raglan Housing Study** has been commissioned by the Whaingaroa-Raglan Housing Affordability Project (WRAP) and Waikato District Council, to provide information and insights on the extent of housing related pressures in Raglan. The report is intended to complement a householder survey being conducted by Waikato University for WRAP in September 2018, which will provide additional insights on residents housing situation and concerns.

For the purposes of this report a Raglan study area is defined as shown in Map 1. The study area comprises Stetsons 2013 Census mesh blocks as referenced on the map[2].

[2] Note the map refers to a small number of meshblocks being "out of study/missing data" (this is for various reasons e.g. due to the absence or small numbers of houses or sections in some areas) but the summary tables and figures elsewhere in this report include all dwellings and sections in the study area.

Map 1: Raglan housing 'study area'



1.2 Scope

This report describes Raglan's housing situation based on:

1. Estimates of the number of the supply of residential dwellings and vacant sections, and demand by the resident population (owner-occupiers and renters), and holiday home owners
2. Analysis of trends in house/section capital values and sales prices based on Corelogic data sourced for this report
3. Analysis of rental levels over the past 5-10 years based on TradeMe data sourced for this report
4. Review of other information available from Waikato District Council (rates addresses; Infometrics report on AirBnB)
5. Projections of future demand for houses and the commercially feasible supply based on Future Proof 2018 (Housing Development Capacity Assessment for Waikato District).

As the 2013 Census is now well out of date, this report does not provide a profile of Raglan's population in terms of the current occupancy of housing by family type, income, ethnicity or age groups. The 2018 NZ Census results are not due to be released until after March 2019 and local area data may not be available until September 2019. Whilst the Census results would usually be expected to provide an uptodate official record of demographic and housing changes since 2013, issues with the 2018 Census's response rate add doubt as to how accurate it will be, particularly in relation to small communities[3].

[3] E.g. The 2018 Census had a 90% response rate overall (5% less response rate than in 2013) and has generated concerns about some smaller areas achieving an 80% response rate: http://healthcentral.nz/failed-census-a-preventable-public-health-policy-disaster/

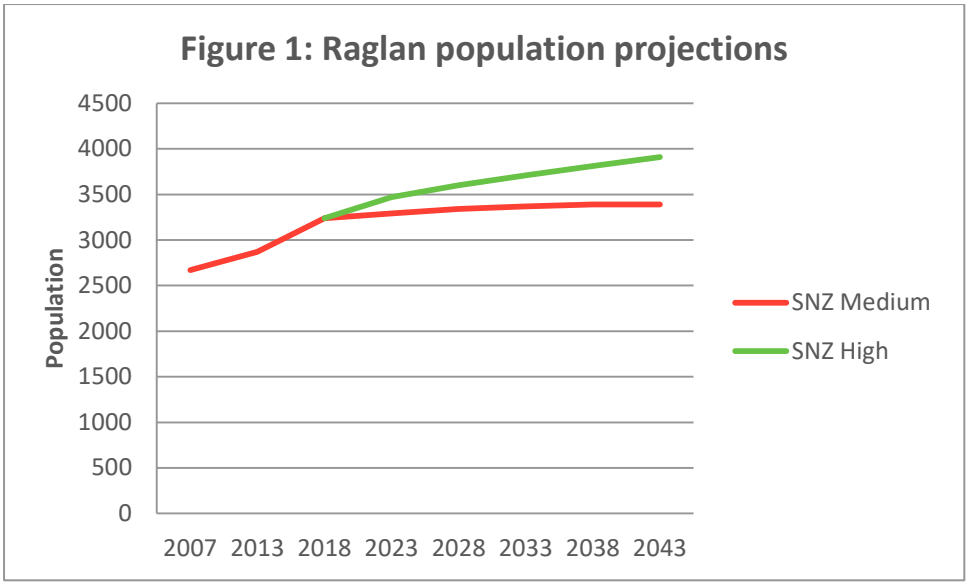
2.0 Raglan's population and housing

2.1 Resident population

The supply of housing in Raglan is subject to competing demand from five different sources or market-types: permanent residents (owner-occupiers), long-term renters, seasonal workers, holiday home visitors and short-stay visitors, as depicted below.

Raglan's resident population is estimated to have increased by 21% over the past decade (2007-17) from 2,670 to 3,240[4]. The population of Waikato District as a whole increased by the same rate, suggesting that Raglan's growth has not been particularly exceptional. However, the 2013 NZ Census recorded a resident population in Raglan of 2,736, indicating that a high rate of increase (18%) in residents has occurred in the past four years (2013-17). Population projections currently available from Stats NZ are likely to underestimate growth as they are based on the 2013 Census, but using the 'high scenario' as a guide, Raglan's population could reach 3,600 by 2028 and close to 4,000 by 2043 (refer Figure 1).

[4] StatsNZ estimate.



Source: Stats NZ estimates (to 2017) and projections to 2043

2.2 Dwellings and sections

The 2013 NZ Census put the number of houses in Raglan as 1,173 'occupied dwellings' and 477 'unoccupied' dwellings (total 1,650). Unoccupied dwellings accounted for close to 30% of total dwellings and provides an indication of the number of baches or holiday homes at that time[5].

Corelogic 2018 data for the Raglan study area defined for this report accounts for 1,834 'residential properties with dwellings' and 201 'vacant residential properties' in 2018 (refer Attachment A for data). The number of properties with dwellings has increased by an average of 22 properties per annum since 2007, resulting in a total 240 additional properties (from 1,594) between 2007 and 2018. Over the past two years, a higher number of additional dwellings has been achieved (26 over 2016-17 and 28 over 2017-18).

The total number of vacant sections has remained between 200-300 each year (going from a total 221 in 2007 to 201 in 2018). Thus, while around a total of up to 240 vacant sections were likely 'lost' to new dwellings being built over the 2007-18 period, a similar number of vacant sections has actually been sustained throughout the period (i.e. new sections have essentially replaced those taken up throughout the eleven year period).

The increase in population over 2013-17 appears to have been accommodated without a corresponding increase in the supply of dwellings. Comparing the Corelogic data on dwellings growth over 2013-2017 with

[5] Refer Stats NZ 2013 Census data: Unoccupied dwellings increased by 20% over 2001-13, compared to 'occupied dwellings' at 8%.

StatsNZ estimate of population growth for the same period suggests that the total number of residential properties with dwellings increased by 87 or 5% while households increased by more than twice as much (216 or 12.6%) over this period[6].

2.3 Holiday homes

Holiday homes are used by domestic and international visitors for overnight stays during the year, with peak occupancy during school and public holiday periods (e.g. Christmas/New Year, Easter, Labour weekend). Non-owners may rent houses or rooms booked through sites such as Airbnb or Bookabach and some will be using houses otherwise occupied by permanent residents who vacate over peak holiday periods.

Information from WDC's database of rateable properties has been accessed for the Raglan Ward as a whole, to estimate the number of holiday homes in 2018. Whilst this data relates to a larger area than the Raglan study area[7], analysis indicates that rates notices for 61% of all residential properties (which will include some vacant sections) are sent to addresses within Raglan Ward, and 39% are sent to other addresses (e.g. in Hamilton, Auckland, Bay of Plenty, South Island and overseas).

Applying this ratio to the Corelogic data for the study area, and just focussing on the dwellings component (i.e. excluding vacant sections) suggests that out of 1,834 houses, around 1,120 would be owned by resident households within the study area, while 715 houses are owned by residents elsewhere. Some of the locally owned houses will be investment properties available for rental whereas the 715 non-locally owned properties will include a mix of holiday homes and investment properties many of which could be available for long-term or short-term rental.

An Infometrics report[8] prepared for the council states that Raglan was the most popular area unit in terms of the number of Airbnb listings and guest nights in the summer of 2017/2018. Raglan and Te Uku have the largest number of Airbnb listings in the Waikato District, accounting for 45% of total listings in February 2018. The number of listings and stay nights also increased markedly between the summer months in 2016/17 and the summer in 2017/19. As at Feb. 2018 Raglan had 186 listings (up from 119 in 2017) and Te

[6] Households estimated by applying the 2013 average household size of 2.33 to the 2017 population estimate.
[7] The Raglan study area defined in this report accounts for the core Raglan settlement within the wider Raglan Ward. Analysis of Council rating base data for the Ward indicates there are 2,522 rated as Residential, of which 2,091 have a 'Raglan' or 'Whale Bay' address. That is close enough to the total 2,035 total residential properties (dwellings and vacant sections) in the Corelogic dataset to suggest the rates address data can be relied on to estimate holiday homes in the study area.
[8] Refer Infometrics 'Measuring the scale and scope of Airbnb in Waikato District' April 2018.

Uku had 108 (up from 79 in 2017)[9]. Summer was clearly busier than winter, with four times as many nights booked in January than in July.

Raglan's spilt between whole houses vs. private rooms (within a house) is higher than for the district as a whole (at 53% and 46% respectively) with 75% whole houses and 25% rooms within a house. That is 140 whole houses (and 46 other 'rooms') were available for Airbnb rental. If it is assumed that the private rooms are mainly in permanent residents houses, the 140 whole houses is equivalent to one-fifth of the 715 houses owned by non-residents (and less than 10% of the total stock of houses in Raglan). That still suggests that the majority of holiday homes are not currently being made available for rent through the summer months (or at least not via Airbnb). Potentially some of these dwellings (the 'family-sized' ones) might otherwise be available for long-term rental, but that would rely on holiday home owners not wanting access themselves outside of the summer period.

The Infometrics report suggests the situation should be monitored to see whether continued growth in Airbnb listings, or a high proportion of whole houses being made available throughout the year, is starting to encroach on the private rental market.

2.4 Rental accommodation

In 2013 there were 411 households in rental tenure according to the NZ Census, which had increased by 20% from 342 in 2006. Based on a total number of occupied dwellings of close to 1,180 in 2013, rental households accounted for over a third of total dwellings.

The total number of rented dwellings in 2018 is difficult to estimate due to the latest Census results not yet being available (and even then the data may not be reliable). Feedback from property management agencies in Raglan suggests around 200 houses are under tenancy management (by agencies in Raglan or Hamilton[10]). Other rental houses will be self-managed by local owners, which could be in the vicinity of 200 houses if the total hasn't changed since the 2013 Census.

[9] Raglan was by far the most popular area unit, with 14,884 stay unit nights in the 12 months to February 2018. Te Uku had 6,955 stay unit nights over the same period.
[10] Based on personal communication with managers at Ray White and LJ Hooker August 10, 2018.

TradeMe data indicates there were 121 listings for rental properties in Raglan in 2013. Whilst annual listings of places for rent will usually be a sub-set of the total pool of rental supply, this suggests listings accounted for equivalent to 30% of total 'renting households' in 2013. Whilst relatively high levels of listings occurred up to 2015, it is apparent that the number of rental properties 'turning over' to be listed on TradeMe has declined to be almost negligible (refer Table 1).

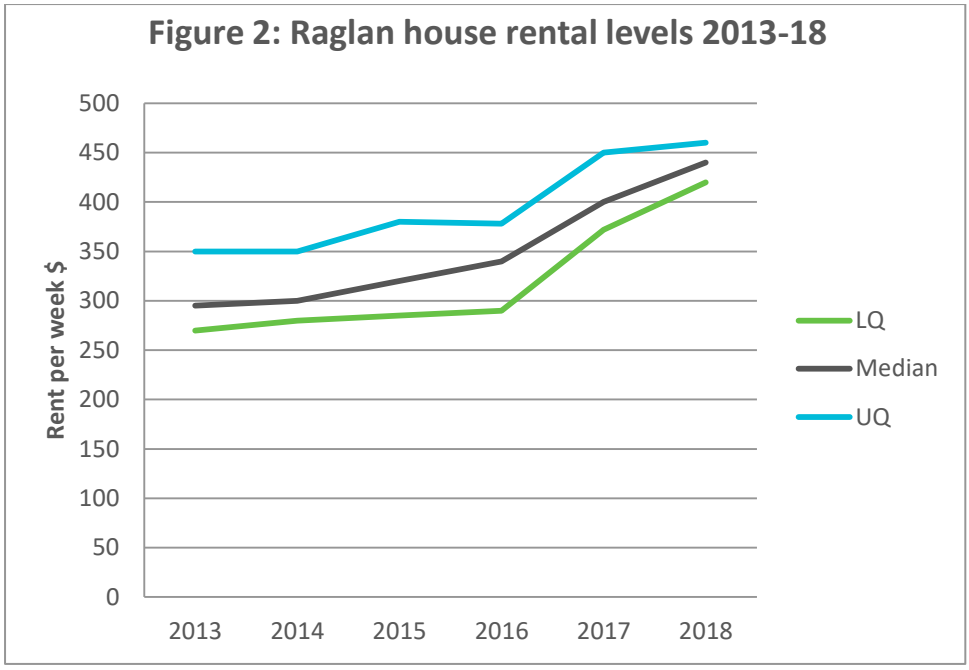
Table 1: Raglan houses for rent and rental levels 2013-18

	No. of listings	LQ	Median	UQ
2013	121	270	295	350
2014	171	280	300	350
2015	144	285	320	380
2016	78	290	340	378
2017	14	372	400	450
2018	6	420	440	460

Source: TradeMe data

The TradeMe data also shows that 95% of rental listings over the period as a whole were for stand-alone houses (rather than units in a block) and of those 80% were for 2-3 bedroom houses, 12% for four or more rooms, and 8% had one bedroom.

Unsurprisingly weekly rent levels being asked for have increased markedly since 2016 when listings started to drop off. The very small number of listings in 2018 means there is negligible difference between the lower and upper quartile rents, but the data suggests that the median rent has risen by 30% (from $340 to $440) in the past two years (refer Figure 2).



Source: TradeMe data

While the asking rents in the table do not provide a guide to the total spread of rents being paid in Raglan, the median listed rent of $400 in 2017 exceeded the average weekly rent reported for Waikato District as a whole ($354) in that year[11].

2.5 Conclusions

Whilst the 2018 Census results (due to be released from March 2019) will provide an official view on housing occupancy and relative changes in population and dwellings growth, the Corelogic data suggests that Raglan has experienced significant demand for housing in the past five years (based on population growth) without a corresponding increase in the total supply of dwellings.

On the face of it demand for additional dwellings in the high population growth period 2013-17 has exceeded supply of new dwellings by a factor of 2.5 to 1. To cater for the increased demand a significant share of new residents have likely acquired or are renting former holiday homes. If all of the 87 new properties with dwellings recorded over 2013-17 were occupied by residents, it would imply 129 households are occupying former holiday homes (i.e. equivalent to taking out 27% of the 477 unoccupied dwellings that existed in 2013). But the estimated 715 non-locally owned houses in the study area suggests there's still a

[11] Refer Future Proof Housing and Business Market Indicators Quarterly Monitoring Report Q3 Sept. 2017.

lot of holiday homes. Even if all of the 200 rental properties under professional management are attributed to non-local owners, that would still leave 515 holiday homes (of which 140 are listed on Airbnb). Implying the total volume of holiday homes is still close to what it was in 2013.

Alternatively some share of new residents could have extended the size of, or replaced pre-existing dwellings with larger ones, and some of the additional population could also be accounted for by an increase in average household size (e.g. extended family households occupying spare rooms, or the addition of 'informal' accommodation such as cabins or units within existing properties).

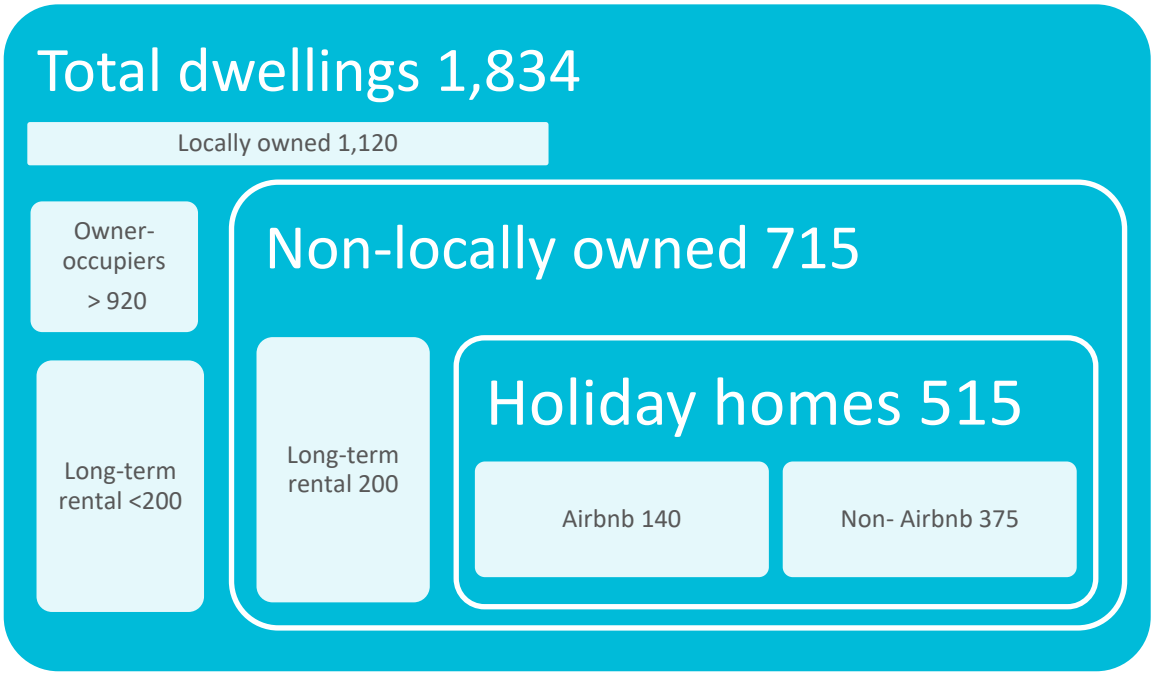
Local real estate agents consulted for this report, have advised that house sales in the past few years have tended to be dominated by owner-occupiers shifting from out of town (around 50% of sales) and from existing places within Raglan (around 35% of sales), implying low levels of sales to investors or holiday home buyers. Furthermore, first-home buyers have not been significant and there is a shortage of houses available for rent.

It is therefore reasonable to expect that the share of permanent homes versus holiday homes will have increased in Raglan compared to five years ago. The number of rental households in the study area may have remained steady at around 400 but has likely decreased as a proportion of resident households. The marked decline in TradeMe listings suggests that rental stock is not turning over much at all[12], or being added to with new listings. Given the lack of supply of long-term rental stock and increases in listed rental levels since 2016, unmet demand for rental housing in Raglan may also be spilling-over into locations outside the study area (e.g. Te Uku, Okete, Whaingaroa, Te Mata or Kawhia). A more accurate estimate of the total number of long-term rental houses may be provided from WRAP's householder survey in September 2018.

The nature of occupancy of dwellings in Raglan based on the above estimates is summarised in Figure 2. Whilst the figures are subject to uncertainty, they indicate a composition of the total 1,834 dwellings including 28% holiday homes, up to 22% long-term rentals, and at least 50% being 'owner-occupied'.

[12] That is, existing tenants appear to be 'holding onto' their houses and not moving out at the same frequency as a few years ago. Alternatively, rental houses may be 'passed on' by word of mouth or through other forms of advertising.

Figure 2: Estimates of Raglan dwellings 2018



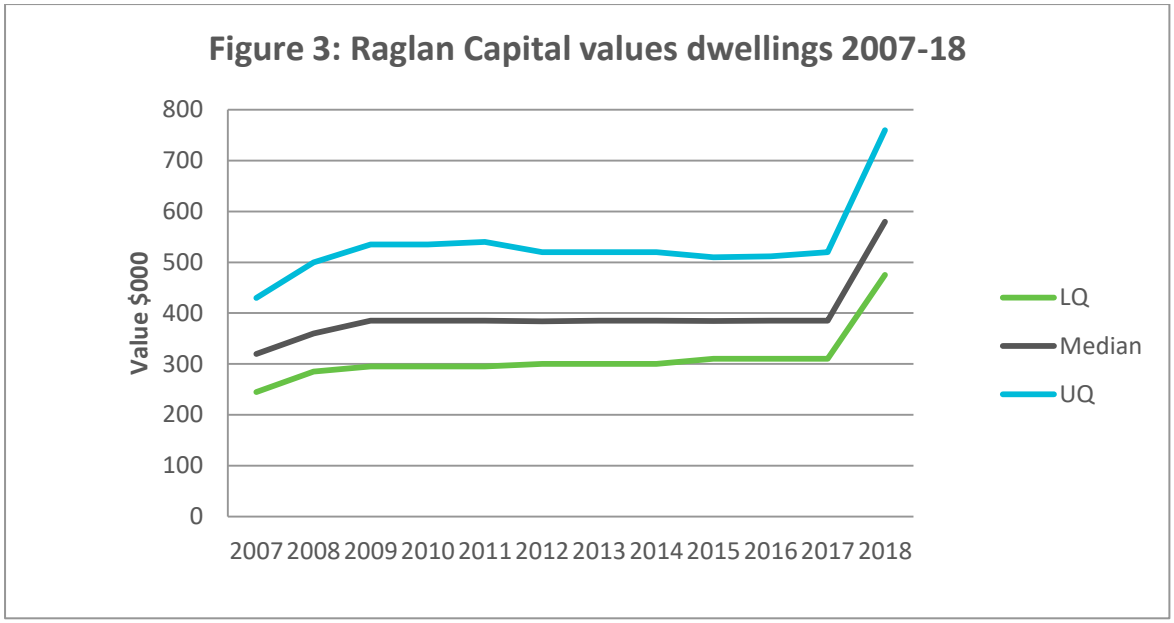
Source: Strateg.Ease

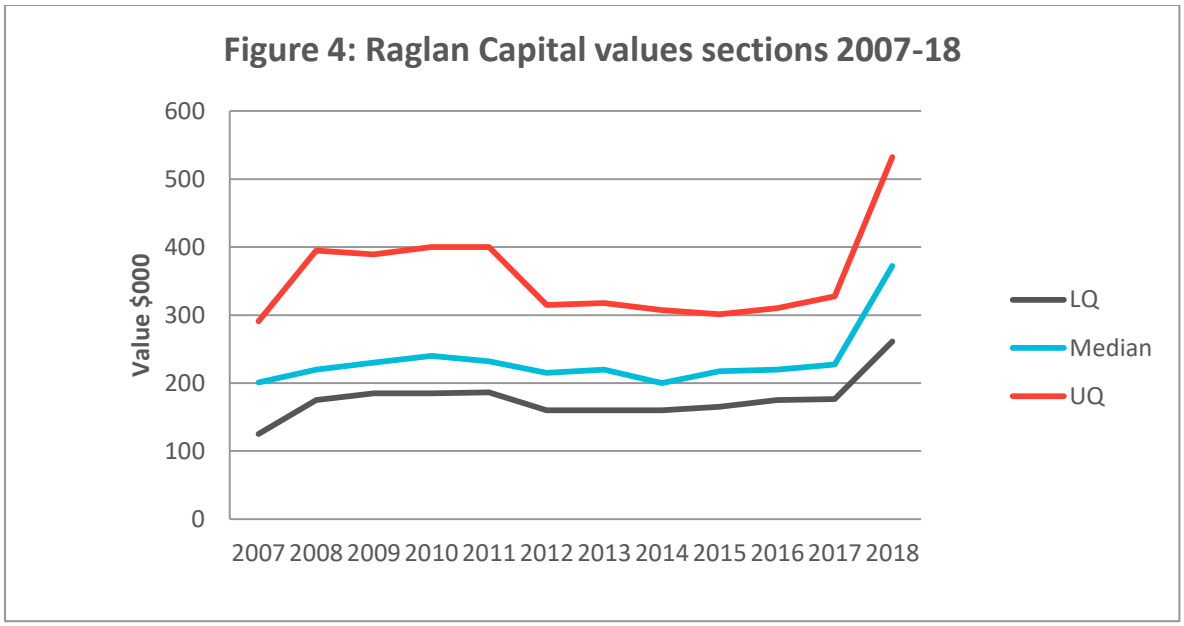
3.0 Values and sales prices of housing and land

3.1 Capital values

Corleogic data on the capital values (CVs) of the total stock of residential dwellings and vacant sections in Raglan shows how values have changed over time (2007-18). Refer Figures 3 and 4 respectively. It is important to note that the values reflect a range of section sizes and housing quality.

The median CV of houses has remained fairly stable and flat at under $385k and median section values at less than $220k, throughout the period until 2017. While adjustments in CVs only occur as part of the council triennial revaluation cycle (and then remain constant for 3 years), the adjustments at each cycle (2009,2012,2015,2018) have been relatively gradual over most of the period, with a jump to higher values now reflected in the 2018 rating year.





Source: Corelogic data

The 2018 median house value is now $580,000 and median section's $355,000 (refer Attachment A for data). The median for the more affordable 'lower quartile' (LQ) houses is now $470,000 and for LQ vacant sections, $250,000.

The spatial pattern of median CVs for houses is shown by meshblock in Attachment C. The maps show how median CVs have changed over the decade 2007-2017 in different locations (refer Maps 2A-2C)[13]. Changes in

[13] Note some meshblocks in each map do not have data for various reasons (e.g. no residential or vacant properties in the area or not available from Corelogic).

an individual meshblock's median CV over time reflects whether land has been improved, subdivided into smaller parcels, or built on etc. The spatial distribution of CVs also provides a guide to which areas are low or high value and therefore relatively more or less affordable.

Key points to note are:

- In 2007, most locations (meshblocks) were in the lower value bands (below $400,000) including a mix of both coastal and inland areas. The main exceptions where values were in the $500,000 - $900,000 range being Whale Bay and Manu Bay
- In 2017 several inland areas remained below $400,000 but several coastal areas went over the $400,000 mark (e.g. Ngarunui Beach; and areas along the coastal Raglan Harbour edge). However in terms of relative rates of increase on the base 2007 median CVs, the lower value areas generally experienced higher rates of increase (in the 20-30% or 30-40% bands) compared to those areas starting from a higher base (probably reflecting in part a greater volume of new house building/improvements in lower value areas compared to others).
- In 2017, inland 'greenfield' areas to the south (e.g. Rangitahi; Hills Rd.) entered the $500,000 - $600,000 median CV range while Whale Bay was in the $700,000 - $800,000 band and Manu Bay in the $900,000-$1m band. Since 2007 the median CV rose by 30-40% in Whale Bay, and 0-10% in Manu Bay.

The spatial pattern of median CVs for vacant sections is also shown by meshblock in Attachment C for 2007 and 2017 (refer Maps 4A and 4B). Key points to note are:

- In 2007, most meshblock areas were in the lower value bands ($100,000 - $300,000) including a mix of both coastal areas and inland areas. The main exceptions where values were in the $300,000 - $650,000 range being Whale Bay and Manu Bay.
- In 2017 several inland and coastal areas remained below $300,000 but the inland 'greenfield' area to the south around Hills Rd. went above $300,000 median CV while Whale Bay and Manu Bay entered the $400,000 -$600,000 range.

3.2 House and section sales prices

The volume of sales of houses or sections in any one year is typically a small percentage of total stock and prices may diverge from the overall pattern of capital values. The Corelogic data on house and section sales

prices shows that higher sales prices in houses and sections have coincided with the high rate of population growth over the past five years. Median dwelling and sections sales prices both increased by 61% over 2013-18, with a lift-off in prices commencing in 2016 (refer Table 2 and Figures 5 and 6, and Attachment B for the annual data).

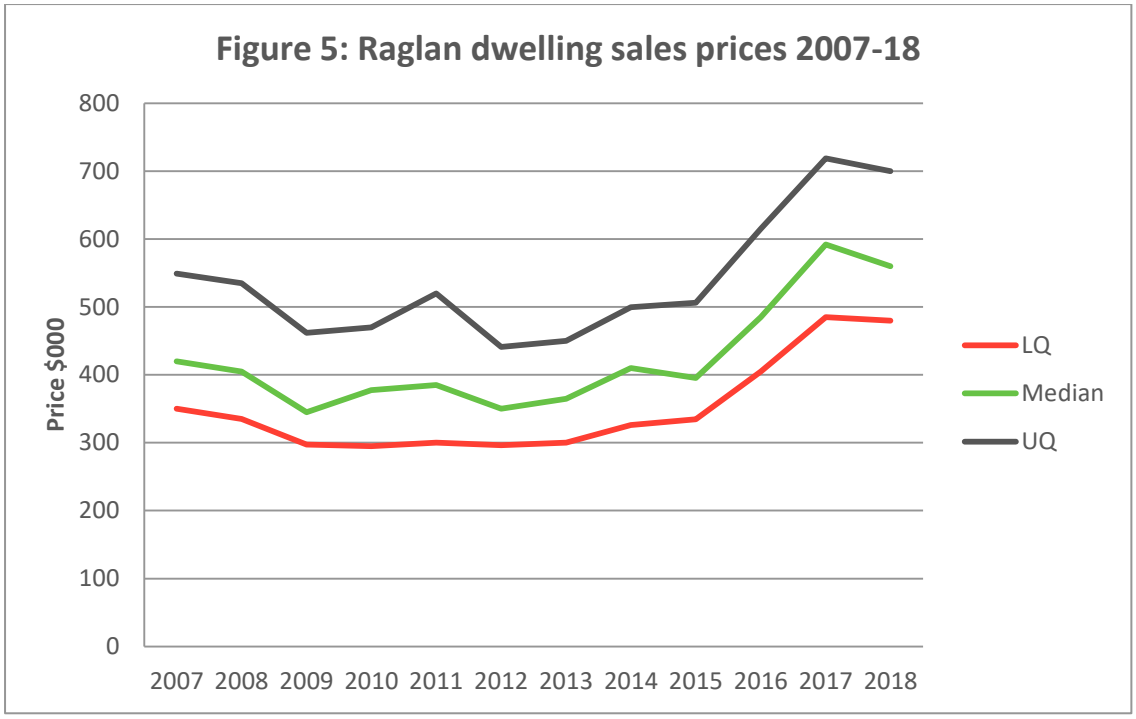
Table 2: Five year changes in Raglan sales prices

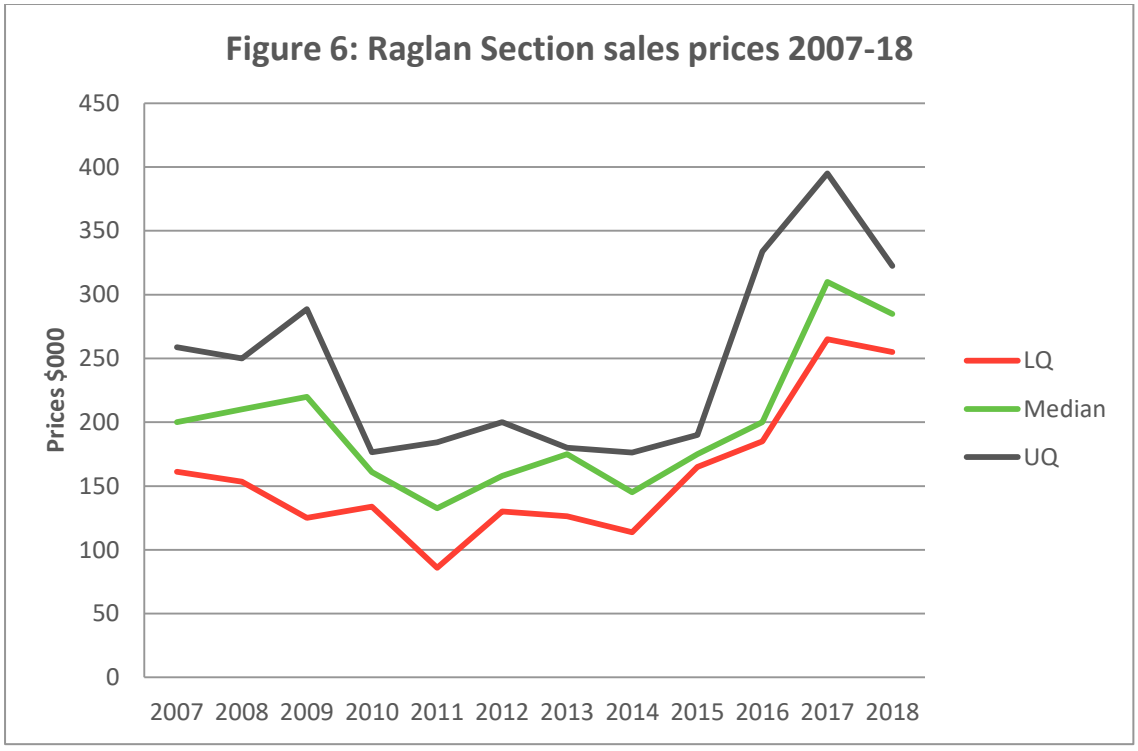
Dwellings	LQ	Median	UQ
2008-13	-10.4%	-9.9%	-15.8%
2013-18	65.5%	61.0%	57.4%

Sections	LQ	Median	UQ
2008-13	-19.7%	-6.1%	-26.5%
2013-18	109.8%	61.3%	78.5%

In contrast, the previous five years (2008-13) showed a decline in sales prices and flattening out following the Global Financial Crisis (when median house prices fell by around 10% and sections prices fell by 6%; refer Table 2). These five year trends in the direction of price changes were common in many other parts of the country.

The upper quartile (UQ) of property sales for both sections and dwellings experienced higher rates of price decrease in the first five-year period and lower rates of uptick in prices in the second period, compared to lower quartile (LQ) properties. This likely reflects the strength of demand for more affordable housing in Raglan compared to that at the higher end.





Source: Corelogic data

Key points to note:

- Over the entire 2007-18 period (with 2007 generally being a peak-price period in New Zealand), Raglan's median house sales prices have increased by 40%, from $420,000 to $588,000, and median

vacant section prices increased by 41% from $187,500 to $265,000 (refer Figures 3 and 4 and Attachment B).

- The median sale price of dwellings remained in a fairly tight range of $350-410k, and vacant sections in a range of $120-175k throughout most of the period (i.e. 2008-15).
- The median house sale price in Raglan in July 2018 ($588,000) has fallen compared to 2017 but is above the medians for Waikato District ($540,000) and Hamilton City ($525,000)[14].
- The cheapest houses (LQ) being sold recently (in 2017 and 2018) went for not much under $500k ($486,000).
- The median vacant section sales price in July 2018 shows prices have fallen compared to 2017 but the cheapest sections (LQ) are still around $250k.
- The significant movement in LQ prices over 2013-18 (65% for dwellings and 110% for sections) indicates that pressure on the affordability of lower-cost houses and sections has intensified in the past few years.

The spatial pattern of median sales prices for houses is shown by meshblock in Attachment D for 2007 and 2017 (refer Maps 3A-3C). Key points to note are:

- In 2007, most meshblock areas had a sale(s) in the lower to middle median price bands (below $500,000), whether they were coastal or inland areas. The main exceptions where prices were higher were in the coastal area of Greenslade Rd. and around Hills Rd. ($500,000 - $600,000) and Manu Bay (over $1.1m).
- In 2017 very few areas had a median sales price below $500,000 and several coastal areas had sales in the $600,000 - $800,000 price bands (e.g. Ngarunui Beach; and areas along the coastal Raglan Harbour edge)
- In 2017, the inland 'greenfield' area to the south at Hills Rd. houses also sold above $700,000 while the coastal areas of Greenslade Rd., Marine Parade and Whale Bay had sales prices over $1m (NB. there were no sales in Manu Bay that year).

NB. The spatial pattern of median sales prices for vacant sections is not shown by meshblock in the attached maps due to several areas having no sales of sections in 2007 or 2017.

[14] Refer REINZ August 2018 https://www.reinz.co.nz/Media/Default/Statistic%20Documents/2018/Residential/July/REINZ%20Monthly%20Property%20Report%20-%20July%202018.pdf

3.3 Sales as a share of total stock

Over 2007-18 yearly house/section sales volumes across Raglan have generally been within a range of 5-8% of total stock, which is within the normal range for other places in New Zealand. The only exceptions to this pattern are:

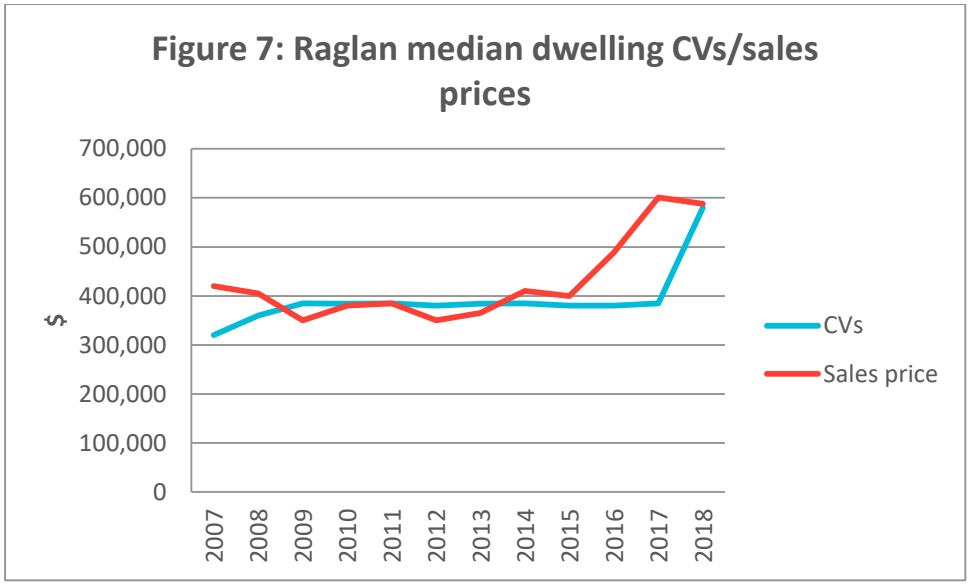
1. In 2015, dwellings sales were 11.3% of total stock (199 sales out of a stock of 1,766 dwellings)
2. Higher rates of sections sales have been occurring over the past three years (2015-18) with rates of 10-14% of total stock (equating to an average 29 sections sold per annum). If demand continues at similar rates the current stock of 201 vacant sections would be exhausted in seven years (by 2025).

It is important to note that the house sales volumes in each meshblock area tend to be very low in any given year (e.g. 1-4, and some do not have a sale at all), so the maps in Attachment D should be used as indicative of the spread or variation in price bands between locations rather than an accurate guide to the sales price of a 'typical' house in each location[15].

In order to consider the affordability of housing in Raglan it is appropriate to check whether there is any significant divergence between capital values (CVs) for the stock of housing as a whole and sales prices for the relatively much smaller number of properties sold in the same year – as a major difference between CVs and sales prices may reflect (besides whether the market is taking off or softening) that the properties being sold are not representative of the range of stock potentially available to future purchasers. For example, if sales prices in the low quartile are well above the low quartile capital values, it may not necessarily imply that first home buyers cannot afford entry level housing if such houses were to enter the market).

In fact the data shows that apart from 2007 and in the two years 2015-17, there has not been a major divergence between the median CV and median sales prices overall (refer Figure 7). During 2008-15 sales prices were close to CVs, but in the peak years of 2007 and more recently (2016-17), prices have raced ahead of CVs. In 2017 the gap between the median sales price and CV was more than $200,000 above CV (56%), but the increase in CVs for 2018 has now brought the median CV across all dwellings in line with the median sale price in 2017.

[15] Whereas the previous section on capital values reflects the relative median values of all of the existing stock of houses and vacant sections in each year.



Source: Corelogic data

The equivalent data for the LQ and UQ bands is not shown in Figure 5 but they follow a similar pattern with the their sales prices tracking close to CVs over 2008-15, but for both quartiles in 2016 and 2017 sales prices raced ahead of CVs. Now the 2018 LQ houses CV of $470,000 is close to the LQ houses sales price of $496,400 and the UQ CV of $750,000 is close to the UQ sales price of $709,000.

3.4 Conclusions

The lack of significant divergence between CVs and sale prices over most of the 2007-18 period suggests that properties being sold are representative of the range of values of the total housing stock in Raglan. A large gap opened between CVs and sales prices over 2016-17 but CVs have now been adjusted upwards across the total stock of houses.

House and section values and prices in Raglan have reached record high levels over the past three years such that the lower value/price entry stock of houses for first home buyers is now around $470,000. It cannot be said that there is a latent supply of lower value houses which could potentially become available at lower sales prices than the properties being sold in recent years.

While it remains to be seen whether house prices might continue to adjust downwards over the rest of 2018 or over the next couple of years (compared to 2017), that is likely to depend on the strength of demand and the adequacy of supply to meet demand in the short to medium term. These factors are assessed in the next section.

4.0 Future demand and supply

4.1 Demand

Projections of future demand for dwellings in the wider Future Proof sub-region have been relied on here for assessing future demand and supply of dwellings in Raglan[16]. The geographic areas defined for the projections apply to main settlement areas and in Raglan's case include the Raglan study area in this report, but also include additional land outside of the area in the Country Living Zone (which consists of properties with larger sections around the edges of the main urban settlements)[17]. As the projections cover a larger area than the study area they allow consideration of the extent to which future demand for dwellings might be catered for by supply from land on the fringe of the study area.

The Future Proof report suggests the town will face moderate growth in population and dwelling demand over the next 25+ years, with an estimated demand for a total 2,034 dwellings in 2017 rising to 3,318 dwellings in 2046 (refer Table 3).

Table 3: Projected demand for dwellings in Raglan

Demand	2017	2021	2026	2046	2017-26 additional dwellings
Raglan	1,316	1,423	1,553	1,971	237
Ngarunui Beach	718	788	900	1,347	182
Total	2,034	2,211	2,453	3,318	419

Source: Future Proof July 2018.

Over the medium term (2026) this translates to an extra demand for 419 dwellings, a growth rate of 21%. Over the longer term (2046) demand is projected for an additional 1,284 dwellings, a 63% increase from 2017.

[16] Refer Market Economics17 July 2018 Housing Development Capacity Assessment 2017 Future Proof Area –Waikato District, Hamilton City and Waipa District. http://www.futureproof.org.nz/file/market-economics-housing-development-capacity-assessment-2017_17-july-2018-final.pdf

[17] Note the total demand of 2,034 dwellings in Table 3 is close to the council's rating base total of 2,091 residential properties in the wider Raglan area, but greater than the Corelogic 1,834 'properties with dwellings' in the study area in 2018.

4.2 Supply

The Future Proof Assessment identifies plan enabled capacity[18] for a total of 754 further dwellings in the two defined areas in Raglan, from a combination of subdivision (of existing large sites), infill (using existing vacant sites), redevelopment (increasing the density of existing sites) and greenfields development (of large blocks currently zoned for housing). The majority source lies in the greenfields areas, and assumes there are no infrastructure servicing constraints (refer Table 4). Although the report does not provide details on the location of greenfield areas, it is presumed to account for capacity at Rangitahi Peninsula and 'New Residential Living' zoned land at Greenslade Rd., Hills Rd. and Te Hutewai Rd., which are also within the Raglan study area defined for this report.

Table 4: Raglan 'Plan enabled' capacity for additional dwellings

	Subdivision	Infill/Redevelopment	Greenfields#		Total*
Raglan	97	105	488	497	694.5
Ngarunui Beach	20	21	14	24	60
Total	117	126	502	521	754.5

The low and high range for Greenfields capacity reflects alternative scenarios of average lot sizes

* The total applies a mid-point to the estimates of Greenfields capacity

Source: Future Proof 2018

In simple volumetric terms the potential supply would be more than enough to cater for projected demand to 2026, but not in the long-term 2046. However, the report adds that if allowance is made for the availability of infrastructure (given current planned timing of water/wastewater provision), only a maximum of 84 additional dwellings could be achieved in the greenfield areas within the next ten years, implying the combination of subdivision, redevelopment and constrained greenfields capacity is a maximum of 331 by 2026, which is 27% less than the projected demand for 419 additional dwellings. Most greenfields capacity is available in the outer years 2027-46.

The report further estimates the commercially feasible supply (taking account of land prices, capital values of existing dwellings and construction costs and sales prices) and concludes a maximum of only 107 additional dwellings would likely be able to be developed by 2026 through a combination of subdivision, infill and greenfields development (refer Table 5).

[18] Plan enabled capacity within Waikato District is based on the Operative District Plan. It does not include allowance for any increase in capacity which may be enabled under the Proposed District Plan. In any case it is understood that the Proposed Plan does not include any additional 'live' zoned greenfields land in Raglan.

Table 5 : Commercially feasible dwellings (given infrastructure constraints) - maximum scenario

	2017	2021	2026	2046
Raglan	20	67	69	574
Ngarunui Beach	13	29	38	44
Total	33	96	107	618

Source: Future Proof 2018

The implication is that the commercially achievable supply of dwellings is likely to only meet around a quarter of demand in Raglan in the next eight years, resulting in a deficit of over 300 dwellings. Additional supply is dependent on greenfields development and while there is commercially feasible capacity to meet some future demand most of that capacity is currently constrained by the lack of infrastructure, being timed to occur after 2026. The long-term commercially feasible 618 dwellings would also only satisfy half of the projected long-term demand for 1,284 dwellings.

4.3 Sufficiency of supply and demand

The Future Proof report also considers demand for dwellings in different value bands in the district as a whole, and identifies the shortfall/surplus in each property value band, since that is the soundest indicator of potential supply shortfall relative to the purchasing power of the community.

Throughout the 2017-46 planning period, demand growth in the district is projected to most heavily occur in the lower and lower-middle positions in the housing market, with 31% in the lowest band (under $300,000), and some 38% in the lower middle value band ($300,000 to $440,000). Overall, over four-fifths of the net increase would be for dwellings in the bands below $580,000. For the district as a whole net sufficiency of supply (based on yield from different scenarios of commercial feasibility), within these price brackets is projected to be between 75 per cent to 90 per cent in the medium-term (2026) while there would be a surplus of properties in the higher value band (above $580,000). The net deficits are largest within the lower price brackets. The report notes that “it is unlikely that surpluses within the higher price bracket will be able to play any significant role in meeting demand elsewhere in the price spectrum” (p110).

Applying the Future Proof projections of demand by price band for the district as a whole to Raglan’s demand for 419 extra dwellings by 2026, implies a need for 69% (290 dwellings) to be priced below $440,000 or a total 335 to be below $580,000.

The Corelogic data on recent section values and sales prices in the meshblocks which include several of the greenfield areas shows few sales of sections have taken place in recent years, so the sales prices may not be a reliable guide to what additional sections would cost. Using the existing land values as an alternative, the median land value (LV) for vacant sites in 2017 ranged from $180,000 – $360,000 (refer Table 6).

Table 6: Vacant section land values and sales prices 2017 in Raglan 'Greenfield' areas

		Median	
Greenfield location	**Relevant Meshblock No.**	**Vacant sites Land Value ($)**	**Sales price ($)**
Rangitahi*	861301	na	na
Greenslade Rd. (3 sales)	855203	180,000	205,000
Hills Rd.(2 sales)	861201	360,000	617,500
Te Hutewai Rd.(no sales)	854201	279,500	na

Source: Corelogic data

*Corelogic data does not capture sites under development at Rangitahi but recent information suggests sales prices start at $275,000 and average $350,000[19].

While the higher median values in Hills Rd. and Te Hutewai Rd. might reflect existing section sizes are relatively large, the lower end of the range ($180,000) at Greenslade Rd. suggests there are sites there below the 2017 median vacant section value for all meshblocks in Raglan of $220,000.

If new sections could be created and sold at prices of $200,000 in some parts of the greenfield areas, and allowing say $300,000 for a basic house to be built[20], it would imply final house prices of around $500,000, which is essentially the same as the current 2018 LQ house sales price ($496,400). That would still require buyers in Raglan to be willing and able to pay higher prices than the projected demand for290 dwellings to be priced below $440,000.

Based on estimates from Auckland Council[21] and assuming a deposit of 20% and no significant changes in current interest rates, for a household to afford a $500,000 house they would need to have an income of at

[19] https://idealog.co.nz/urban/2018/07/how-rangitahi-planting-new-seed-urban-development-raglan

[20] QV Costbuilder indicates that in June 2018 the cost for a standard 150m², three or four bed, one or two bath home, in the Waikato region is $289,690.

[21] Refer Auckland Council 2018 https://www.aucklandcouncil.govt.nz/about-auckland-council/business-in-auckland/docsoccasionalpapers/who-can-buy-Aucklands-houses-june-2018.pdf . Note the household income and house price percentiles in Table 6 are Auckland specific and do not apply to Raglan.

least $80,500 (refer Table 6). To afford a house at the 2018 median sales price in Raglan of $588,000 they would need an income of close to $97,000.

Table 7: Indicative household income required to afford to buy a house

Household income		Affordable house		Corresponding house percentile	
Percentile	Income	10% desposit	20% deposit	10% desposit	20% deposit
5	$17,300	$95,000	$107,000		
10	$26,000	$143,000	$161,000		
15	$35,400	$195,000	$220,000		
20	$44,000	$243,000	$273,000		
25	$52,000	$287,000	$323,000	1%	1%
30	$62,300	$344,000	$387,000	1%	2%
35	$70,700	$390,000	$439,000	3%	4%
40	$80,300	$443,000	$499,000	5%	8%
45	$90,500	$499,000	$562,000	8%	13%
50	$97,300	$537,000	$604,000	11%	18%
55	$106,800	$589,000	$663,000	16%	25%
60	$119,500	$659,000	$742,000	25%	36%
65	$127,300	$703,000	$790,000	30%	43%
70	$135,700	$749,000	$842,000	37%	49%
75	$150,000	$828,000	$931,000	47%	58%
80	$170,000	$938,000	$1,055,000	59%	67%
85	$192,300	$1,061,000	$1,194,000	68%	75%
90	$224,500	$1,239,000	$1,394,000	78%	84%
95	$285,700	$1,577,000	$1,774,000	88%	91%

Source: Chief Economist unit, Auckland Council; Statistics New Zealand

Whilst uptodate data on household incomes is not available, the median household income in Raglan in the NZ Census 2013 was reported as $47,500. If that has increased at the same rate as the median income for New Zealand as a whole over 2013-17 (i.e. 17%) it would now be $55,600. That would imply that the median household in Raglan could afford houses in the range of $323,000 -$387,000 assuming a 20% deposit. Given current prices, that also implies that the median household cannot afford a median priced house or even a lower quartile priced house in Raglan[22].

Of course, if a significant number of new sections cannot be created and sold at prices around $500,000 (and assuming infrastructure provision could be accelerated to allow the land to be developed) then a large share of medium term demand cannot be met from supply in the greenfield areas.

[22] Given that new owner-occupier residents appear to have moved into Raglan and managed to buy houses over $500,000 in recent years, the median income in Raglan has likely increased to over $55,600. The 2018 Census will provide more uptodate information on the range of household incomes (e.g. by quartiles), which can be used as a basis for analysing housing affordability constraints in 2019.

4.4 Conclusions

Based on a direct comparison of projected demand and potential supply, there will be a significant level of excess demand in Raglan for the foreseeable future. The Future Proof report suggests there would be a deficit of 312 dwellings in the combined Raglan and Ngarunui Beach areas by 2026 due to commercial feasibility and infrastructure constraints.

Even if the capacity of land development and construction suppliers in Raglan could generate 419 dwellings over the next eight years, the projections of feasible supply indicate two other major issues:

1. Lack of infrastructure availability to allow major areas of greenfield land (where most currently plan enabled capacity lies) to be developed until after 2026
2. Deficits in the commercially feasible supply of dwellings at prices which the majority of demand is likely to be for (i.e. below $440,000 in 2017 prices).

The Future Proof analysis implies that even if the first point could be resolved, for example by accelerating development of land already zoned in greenfield areas at Rangitahi, Greenslade Rd., Hills Rd. and Te Hutewai Rd., the commercially feasible dwellings will tend to be at prices above what most households can afford.

There is also a practical question as to the capability of land development and construction suppliers to achieve the required volume of sections and houses in short time. The estimate of medium-term demand for 419 extra dwellings by 2026 equates to an average of 52 dwellings per annum. The long-term projected demand for 1,284 extra dwellings by 2046 implies an average of 44 dwellings per annum. Although the Future Proof demand projections relate to a larger area than the core Raglan study area they are equivalent to 2-2.5 times the annual average volume of 22 new dwellings that has been achieved in Raglan during 2007-18. In other words, the rate of house building in Raglan would need to at least double over the next 8 years to substantially meet projected demand.

5.0 Overall conclusions and recommendations

An affordability challenge for first home buyers and lower income households has arisen in Raglan, particularly since 2016, and is likely to get worse on the back of expected growth in demand for at least the next eight years. At the heart of the issue for the town is that without adequate new supply, the anticipated strong demand for lower priced dwellings will be directed to existing stock in the lower quartile and median price bands, and those prices will tend to rise and effectively thwart demand.

The feedback effects on the Raglan community will include increased demand for rental dwellings, higher rental prices and inability to accommodate low-income workers and residents within close proximity to the town. It will also add pressure to 'open up' more rural land for residential development as a solution to the affordability dilemma. While some future demand for houses could spillover to existing nearby settlements (e.g. Te Uku, Te Mata) this could not be significant without increasing the zoned and serviced land supply in those areas. Without such additional supply, spillover demand will simply shift upward pressure on prices into those areas.

In the current situation with high house prices and the likelihood of houses in greenfields areas being priced well above $500,000, the best hope for lower-income groups would be if new 'higher end' dwellings were purchased by existing or new residents who can use their equity to upgrade to a new house. At least if the zoned greenfields supply in Raglan is able to be developed sooner rather than later, some demand for lower priced dwellings may be met from existing residents vacating existing stock in those price bands. That could also help to provide stock for long-term rental, whereas a situation of constrained supply of lower priced dwellings will restrict the anticipated demand for both owner-occupier housing and rental accommodation.

Growth in Raglan's visitor population on the back of growth in main metropolitan centres of Auckland and Hamilton and international visitors will also increase demand for visitor accommodation (both commercial accommodation and use of 'holiday homes') and while there are around 375 holiday homes not currently on Airbnb, increased demand for short-stay accommodation will also reduce the potential for such houses to be used for long-term rental.

The WRAP has highlighted the need for the Raglan community to generate and explore all possible options to provide affordable houses (based on the Future Proof projections they would need to be below $300,000 and up to a maximum of $440,000), and to provide accommodation for those who cannot afford to buy a

stand-alone house. This report is part of the mix and suggests consideration be given to the following actions:

1. Investigating the commercial potential for alternative forms of housing that depart from the traditional single site/detached dwelling (e.g. multi-units/townhouses which achieve a higher density of dwellings per site)
2. Seeking ways for construction delivery to occur at a faster pace and lower cost (e.g. use of pre-fabricated structures)
3. Engaging with Waikato District Council to encourage the Proposed Waikato District Plan to provide additional capacity for houses in the existing urban area or in greenfields locations beyond that identified in the Future Proof 2018 report (which is based on the Operative District Plan)
4. Promoting awareness of the expected growth in housing demand to landowners and encouraging them to provide low cost forms of residential accommodation on 'spare land'(e.g. through infill or subdivision) and on existing vacant sites
5. Advocacy to the council and large landowners in the greenfields locations to accelerate land development and infrastructure provision (which will likely require landowners to enter into development agreements with the council on the funding and timing of infrastructure provision).

ATTACHMENTS

Attachment A: House and section capital values 2007-18

Table 1: Raglan Dwellings capital values 2007-18 ($)

Dwellings	LQ	Median	UQ
2007	245,000	320,000	430,000
2008	285,000	360,000	500,000
2009	294,000	385,000	535,000
2010	295,000	384,000	535,000
2011	295,000	385,000	540,000
2012	300,000	380,000	520,000
2013	300,000	384,000	520,000
2014	300,000	385,000	520,000
2015	310,000	380,000	510,000
2016	310,000	380,000	510,000
2017	310,000	385,000	510,000
2018	470,000	580,000	750,000

Table 2: Raglan Vacant section capital values 2007-18 ($)

Sections	LQ	Median	UQ
2007	128,000	201,000	296,000
2008	170,000	220,000	380,000
2009	155,000	205,000	350,000
2010	160,000	211,500	361,250
2011	163,750	215,000	355,000
2012	140,000	185,000	288,750
2013	145,000	191,500	297,000
2014	155,000	190,000	295,250
2015	160,000	200,000	292,500
2016	165,000	215,000	303,750
2017	165,000	220,000	316,250
2018	250,000	355,000	500,000

Table 3: Number of properties 2007-18

	Number of Dwellings	Number of Sections
2007	1594	221
2008	1611	246
2009	1629	317
2010	1648	304
2011	1668	280
2012	1682	290
2013	1719	260
2014	1747	260
2015	1766	239
2016	1780	234
2017	1806	220
2018	1834	201

Attachment B: House and section sales prices 2007-18

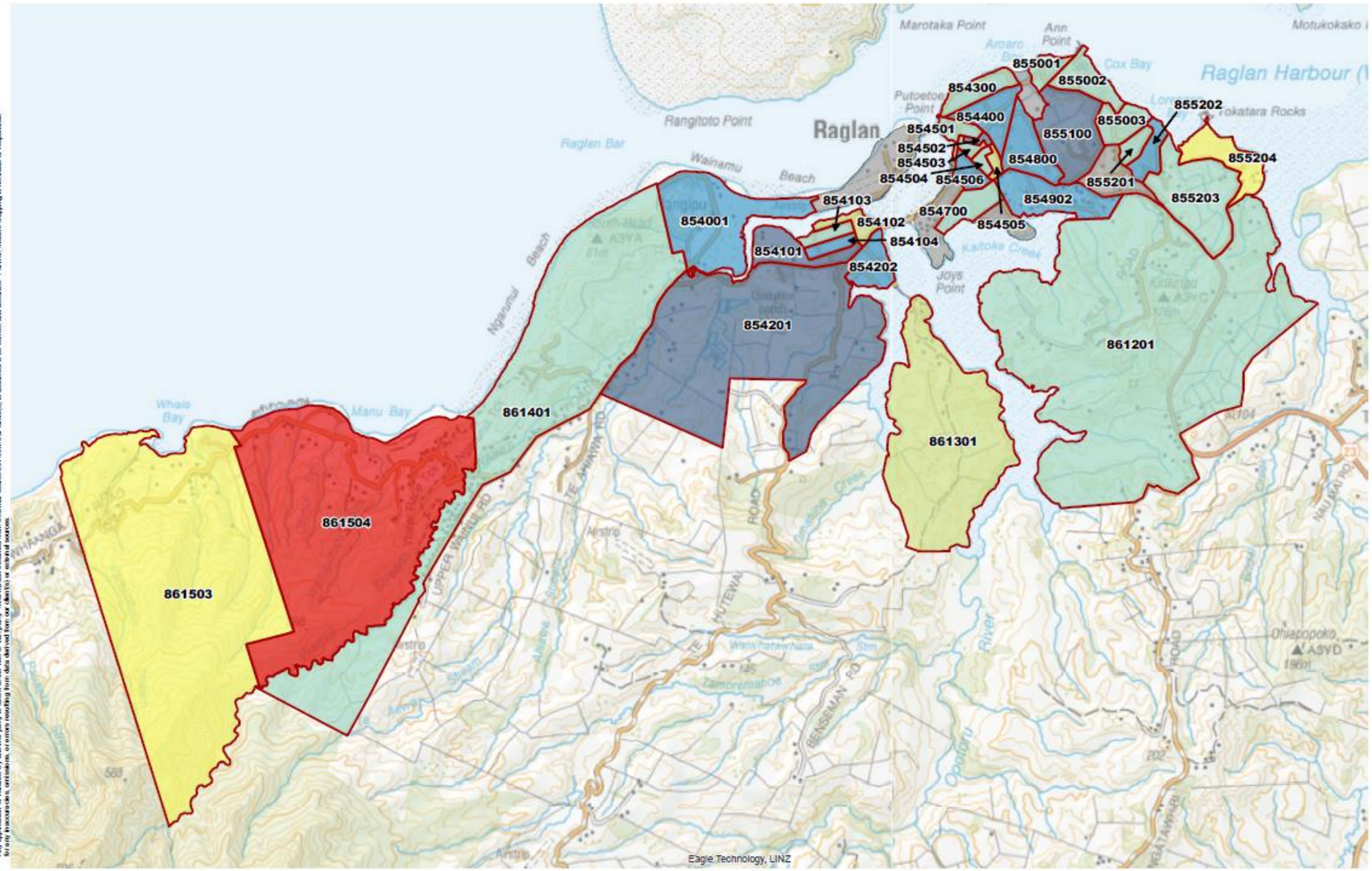
Table 1: Raglan House sales prices 2007-18 ($)

Dwellings	LQ	Median	UQ
2007	352,500	420,000	548,000
2008	335,000	405,000	535,000
2009	299,375	350,000	465,250
2010	296,250	380,000	448,750
2011	315,250	385,000	518,750
2012	299,499	350,000	441,250
2013	300,000	365,000	450,500
2014	330,000	410,000	499,000
2015	343,500	400,000	507,500
2016	410,000	488,750	615,000
2017	486,000	601,000	716,000
2018	496,400	587,777	709,000

Table 2: Raglan Section sales prices 2007-18 ($)

Sections	LQ	Median	UQ
2007	157,500	187,500	252,500
2008	146,250	175,000	245,000
2009	99,500	120,000	220,000
2010	111,250	150,000	161,500
2011	82,075	117,250	142,500
2012	100,000	130,000	180,000
2013	117,500	164,250	180,000
2014	115,000	137,000	165,000
2015	151,500	175,000	198,750
2016	185,000	195,000	296,125
2017	253,750	305,000	384,750
2018	246,500	265,000	321,250

Attachment C: Spatial distribution of Raglan Residential Capital Values



INCISIVE MAPPING

Author: Matt Daniels (matt.daniels@incisivemapping.co.nz) | Reviewed: Kelvin Norgrove

Data Sources: LINZ / Eagle (Topo50, Crown Copyright Reserve), Stats NZ (Meshblocks), Strateg.Ease / CoreLogic (CV, LV, Sales), Incisive Mapping

File Ref: 2018-08_Raglan_Housing_2007_CV_Median.mxd

0 0.5 1 km

1:27,500 @ A3

2007 Median Capital Value

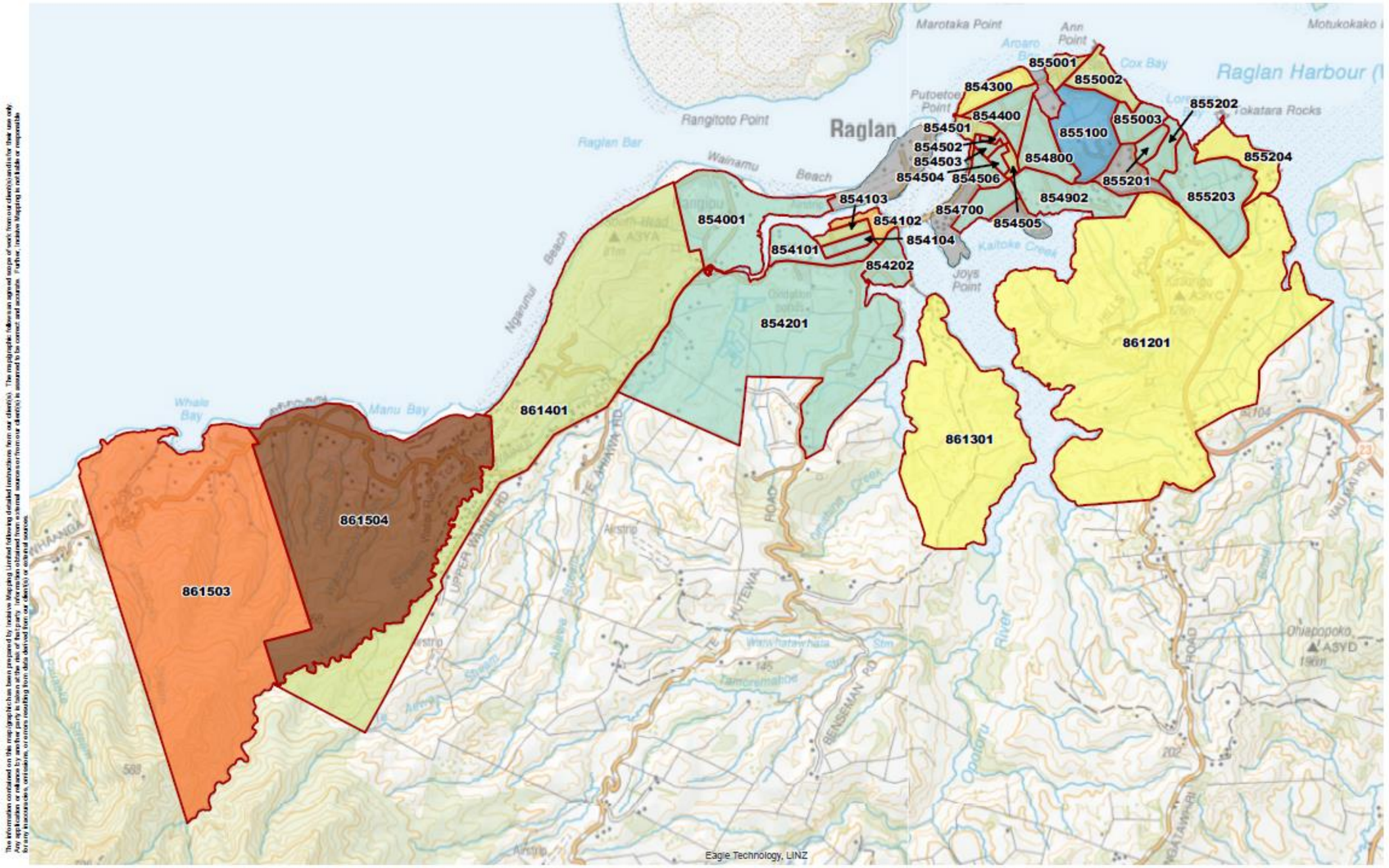
- $200,000 - $250,000
- $250,001 - $300,000
- $300,001 - $400,000
- $400,001 - $500,000
- $500,001 - $600,000
- $800,001 - $900,000

Mesh Blocks (2013)

Mesh Blocks Out of Study or Missing Data

Map 2A - Raglan Housing 2007 Median Captial Value

Date: 26 August 2018



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Author: Matt Daniels (matt.daniels@incisivemapping.co.nz) | Reviewed: Kelvin Norgrove
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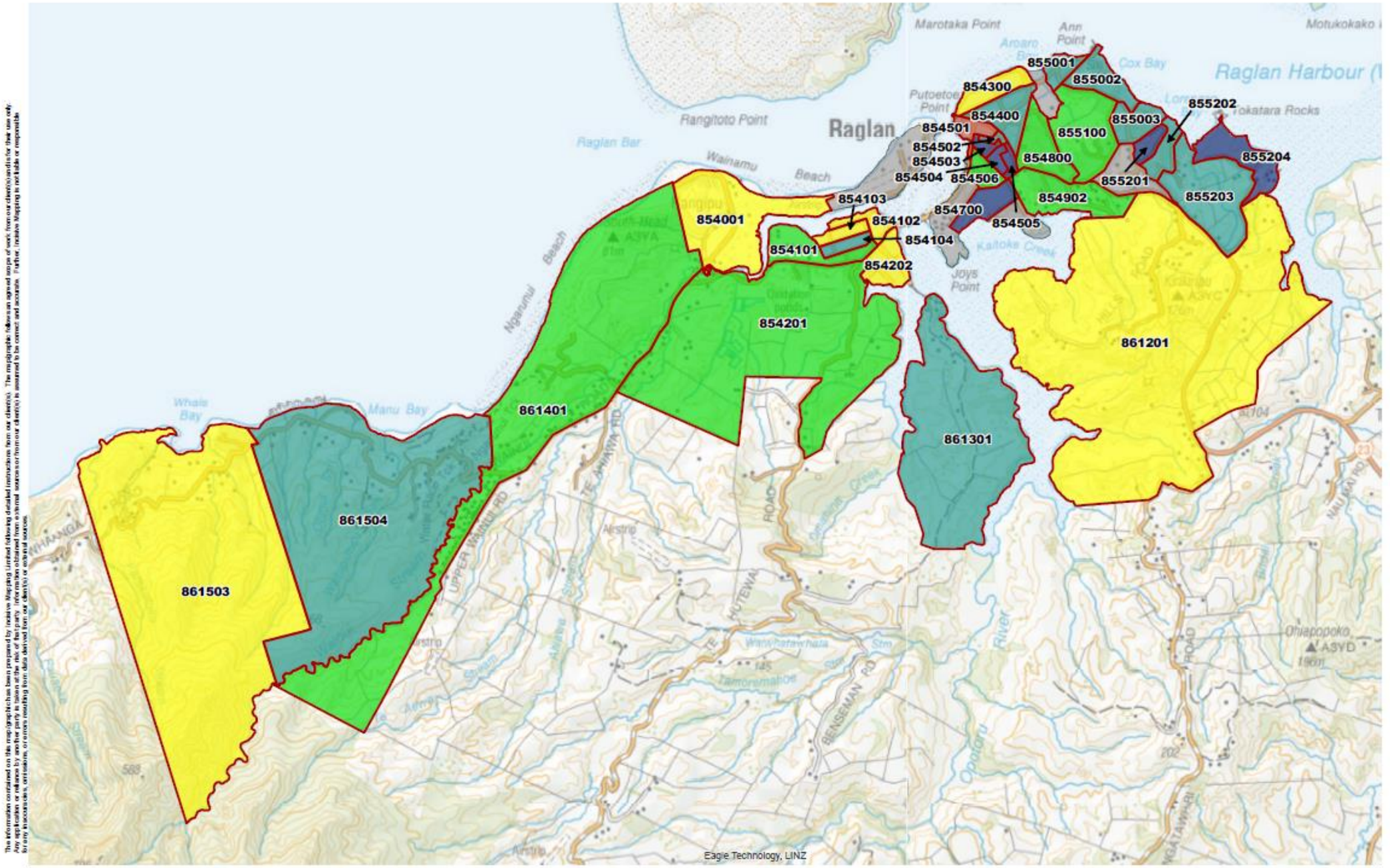
File Ref: 2018-08_Raglan_Housing_2017_CV_Median.mxd

0 0.5 1 km
1:27,500 @ A3

2017 Median Capital Value
$250,001 - $300,000
$300,001 - $400,000
$400,001 - $500,000
$500,001 - $600,000
$600,001 - $700,000
$700,001 - $800,000
$900,001 - $1,000,000
Mesh Blocks (2013)
Mesh Blocks Out of Study or Missing Data

Map 2B- Raglan Housing 2017 Median Captial Value

Date: 26 August 2018



INCISIVE MAPPING

Author: Matt Daniels (matt.daniels@incisivemapping.co.nz) | Reviewed: Kelvin Norgrove

Data Sources: LINZ / Eagle (Topo50, Crown Copyright Reserve), Stats NZ (Meshblocks), Strateg.Ease / CoreLogic (CV, LV, Sales), Incisive Mapping

File Ref: 2018-08_Raglan_Housing_CV_Change.mxd

0 0.5 1 km

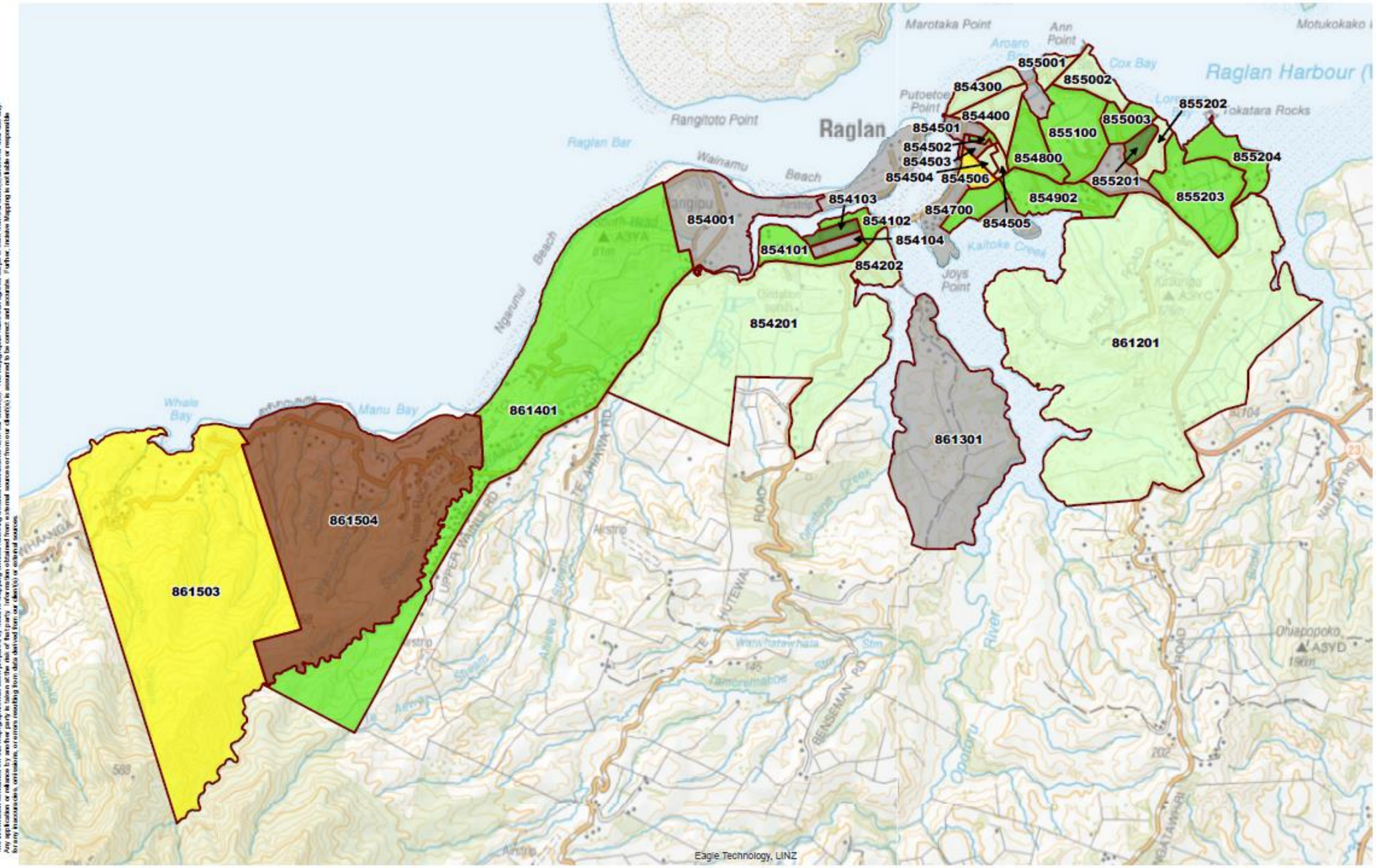
1:27,500 @ A3

CV Change 2007-2017

- 0-10%
- 10-20%
- 20-30%
- 30-40%
- 50-61%
- Mesh Blocks (2013)
- Mesh Blocks Out of Study or Missing Data

Map 2C - Raglan Housing Median Captial Value Percent Change 2007-2017

Date: 26 August 2018



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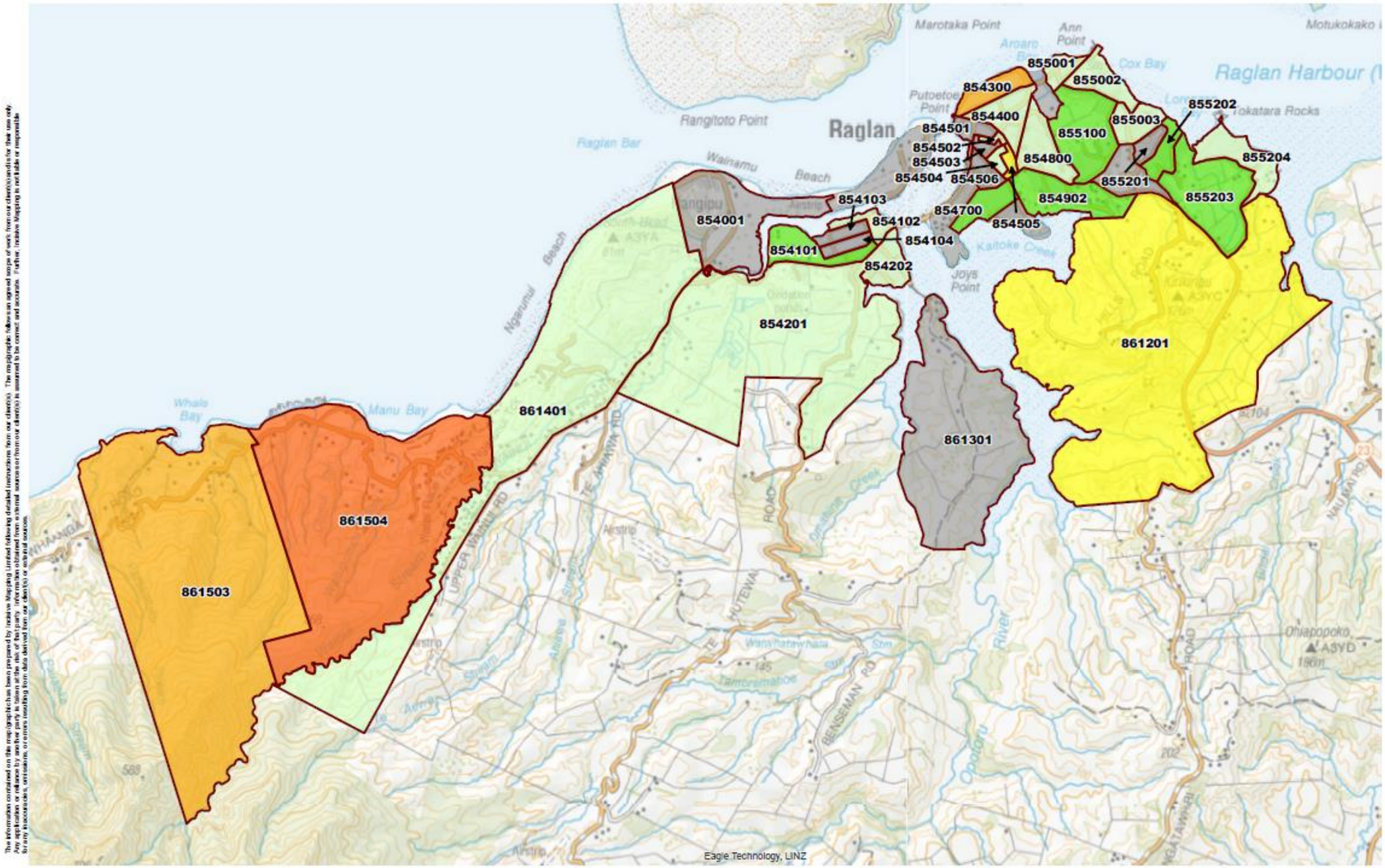
Data Sources: LINZ / Eagle (Topo50, Crown Copyright Reserve), Stats NZ (Meshblocks), Strateg.Ease / CoreLogic (CV, LV, Sales), Incisive Mapping
File Ref: 2018-08_Raglan_Housing_2007_Vacant_LV_Median.mxd

0 0.5 1 km
1:27,500 @ A3

2007 Median Vacant Land Value
- $19,000 - $100,000
- $100,001 - $200,000
- $200,001 - $300,000
- $300,001 - $400,000
- $600,001 - $650,000
- Mesh Blocks (2013)
- Mesh Blocks Out of Study or Missing Data

Map 4A - Raglan Housing 2007 Median Land Value Vacant Lots

Date: 26 August 2018



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File Ref: 2018-08_Raglan_Housing_2017_Vacant_LV_Median.mxd

0 0.5 1 km

1:27,500 @ A3

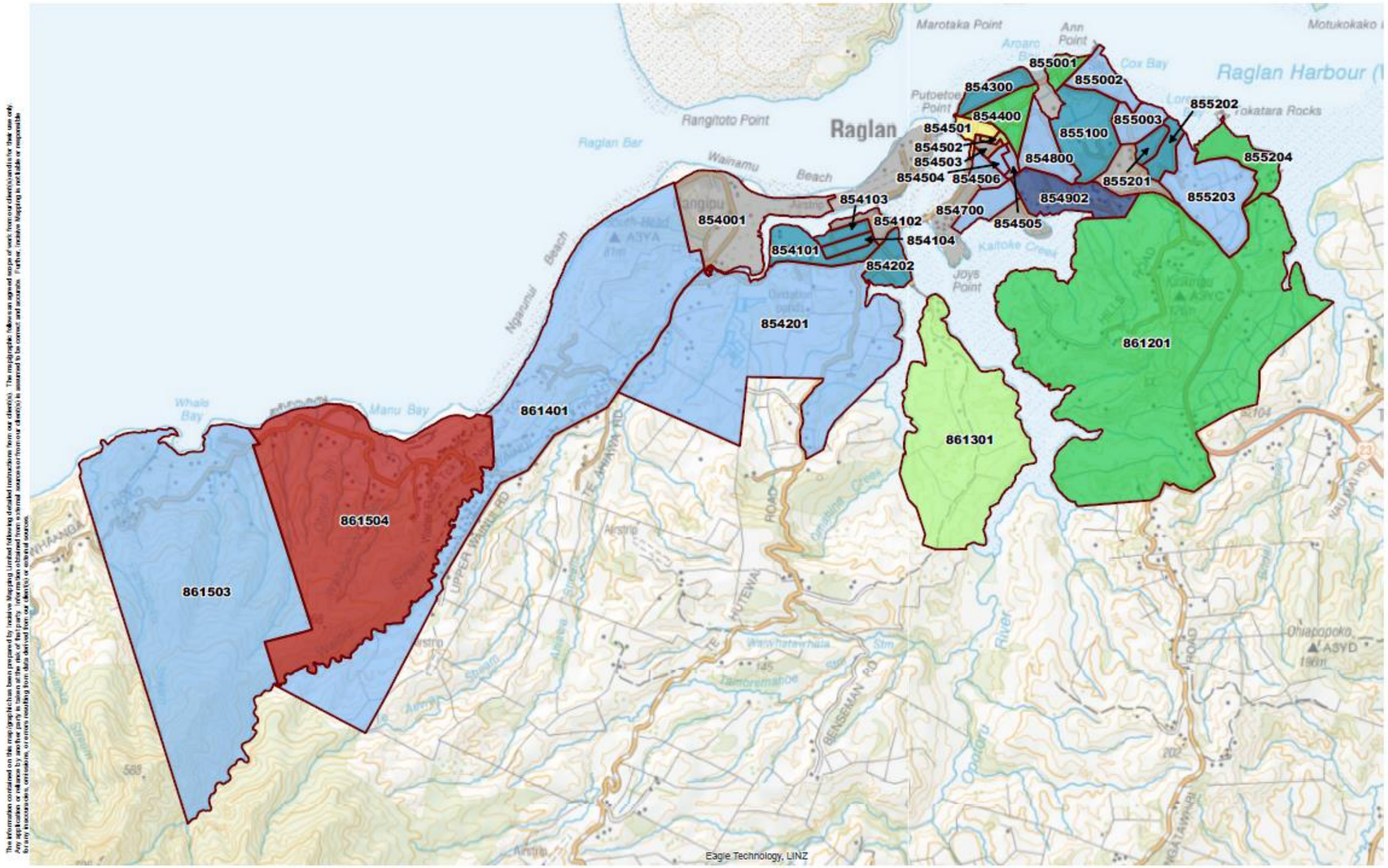
2017 Median Vacant Land Value

- $100,001 - $200,000
- $200,001 - $300,000
- $300,001 - $400,000
- $400,001 - $500,000
- $500,001 - $600,000
- Mesh Blocks (2013)
- Mesh Blocks Out of Study or Missing Data

Map 4B - Raglan Housing 2017 Median Land Value Vacant Lots

Date: 26 August 2018

Attachment D: Spatial distribution of Raglan House and section sales prices



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File Ref: 2018-08_Raglan_Housing_2007_Sales_Median.mxd

0 0.5 1 km

1:27,500 @ A3

2007 Median Sales Price

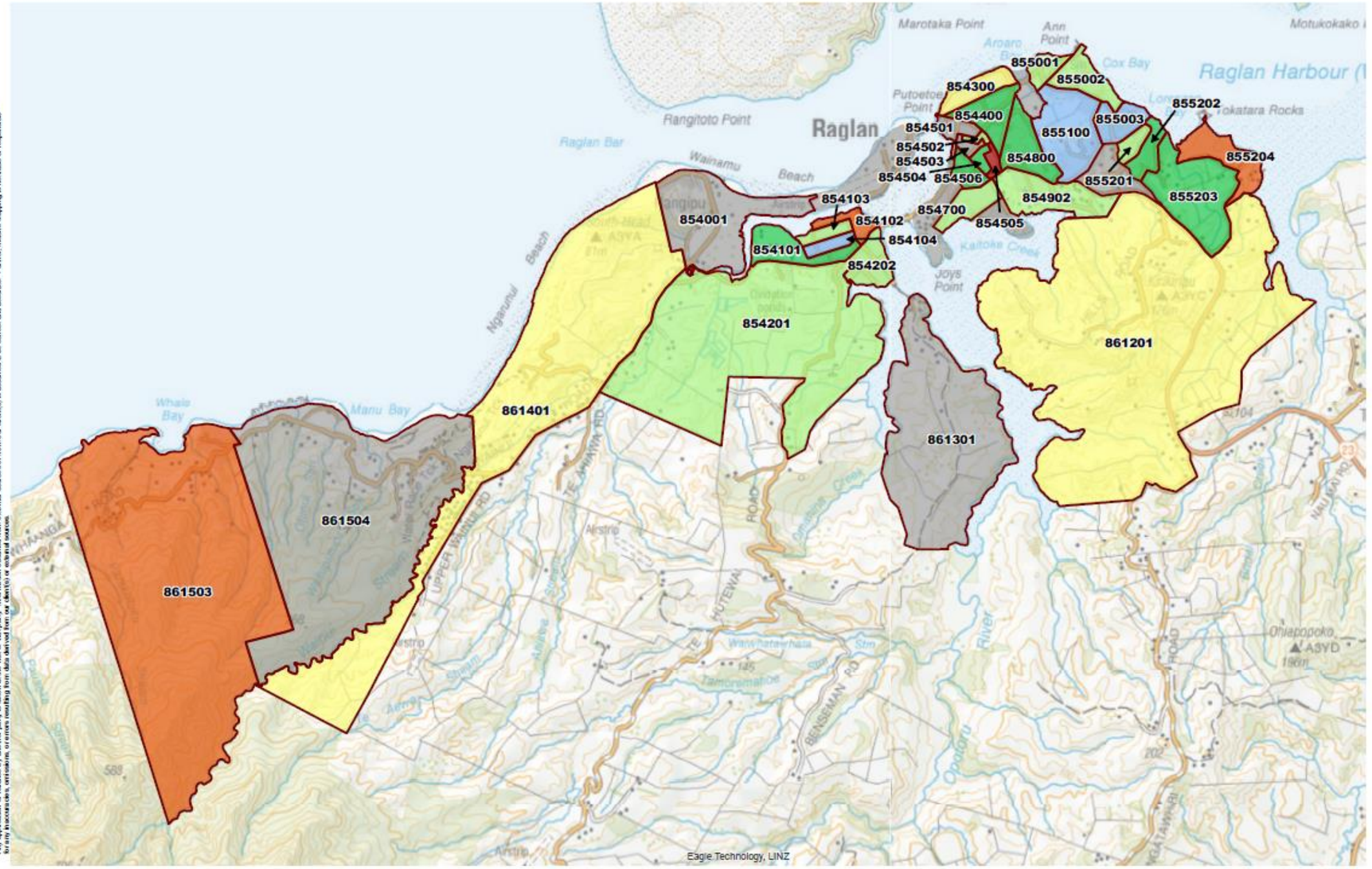
- $250,000 - $300,000
- $300,001 - $400,000
- $400,001 - $500,000
- $500,001 - $600,000
- $600,001 - $700,000
- $700,001 - $800,000
- $1,100,001 - $1,200,000

Mesh Blocks (2013)

Mesh Blocks Out of Study or Missing Data

Map 3A - Raglan Housing 2007 Median Sales Price

Date: 26 August 2018



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File Ref: 2018-08_Raglan_Housing_2017_Sales_Median.mxd

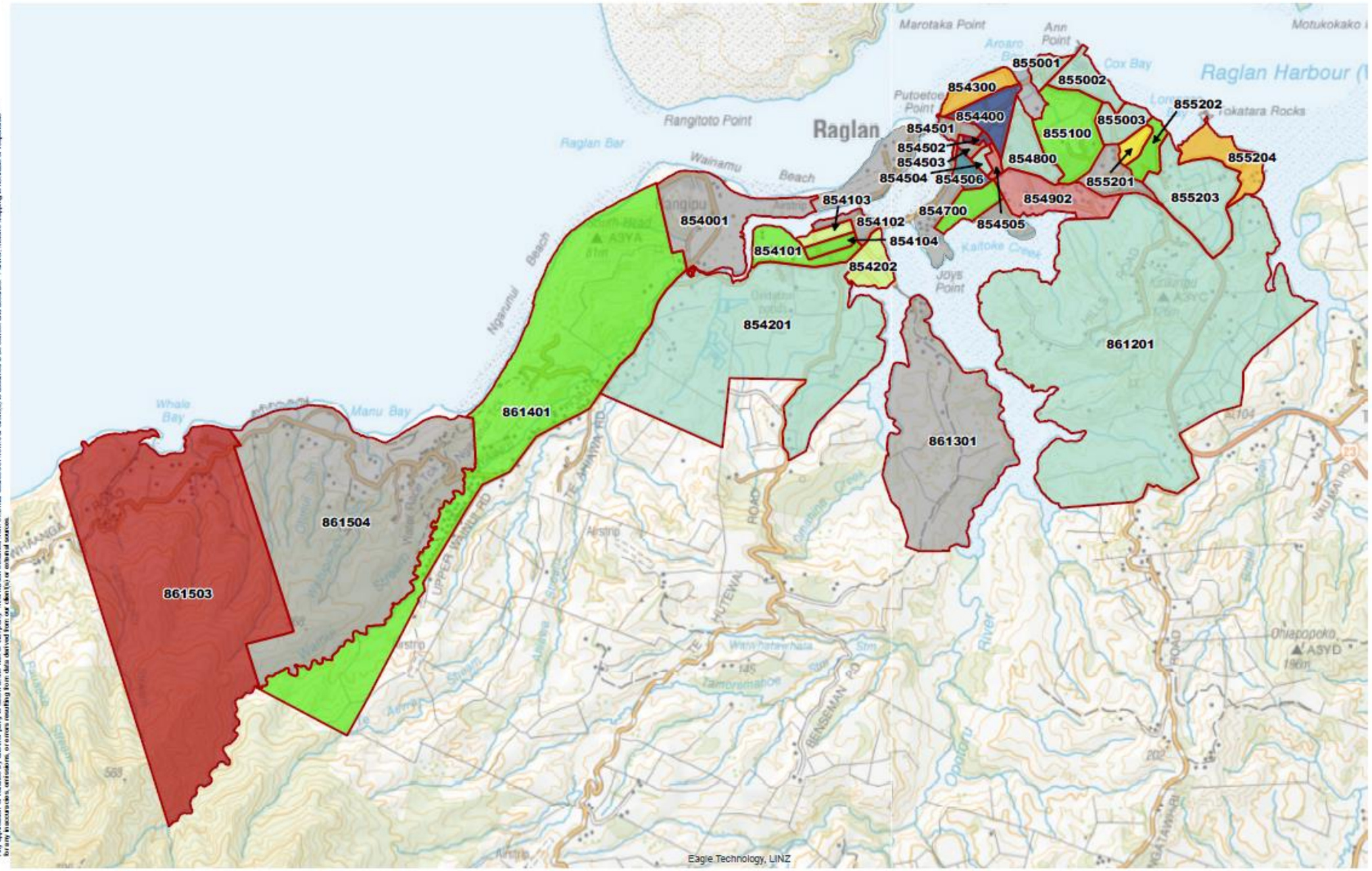
0 0.5 1 km
1:27,500 @ A3

2017 Median Sales Price
- $400,001 - $500,000
- $500,001 - $600,000
- $600,001 - $700,000
- $700,001 - $800,000
- $1,000,001 - $1,100,000
- $1,100,001 - $1,200,000

Mesh Blocks (2013)
Mesh Blocks Out of Study or Missing Data

Map 3B - Raglan Housing 2017 Median Sales Price

Date: 26 August 2018



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File Ref: 2018-08_Raglan_Housing_Sales_Change.mxd

0 0.5 1 km
1:27,500 @ A3

Sales Change 2007-2017
-6-0%
0-20%
20-40%
40-60%
60-80%
80-100%
100-120%
120-140%
140-150%
Mesh Blocks (2013)
Mesh Blocks Out of Study or Missing Data

Map 3C - Raglan Housing Sales Price Percent Change 2007-2017

Date: 26 August 2018