

APPENDIX A - PROJECT PROCESS

Inception meeting

The project commenced in July 2019 with an inception meeting between the Council and the consultant team. During this meeting the following items were confirmed:

- The project structure, lines of communication, responsibilities, deliverables, timeframes, and project contract;
- Available background information, studies, reports, data etc;
- Identification of outstanding information;
- Base map requirements;
- Consultation approach;
- Actions related to consultation, including identification of groups to consult, and communications and invitations; and
- Approach to Mana Whenua consultation, as advised by the Council's iwi liaison officer.

Analysis of base information

During this stage relevant information was gathered and analysed, including, but not limited to, the following:

- Hazards;
- Other constraints;
- Infrastructure capacity;
- Economic data;
- Demographic data;
- Community facility needs;
- Public open space needs (both passive and active recreation); and
- Movement issues.

A gap analysis was undertaken and the team

identified required information not available.

KDC staff scoping session

A session was held with relevant KDC staff to identify the scope of the spatial planning exercise. First ideas for directions and potential outcomes were identified.

Constraints and opportunities mapping

The consultant team translated technical background information into a spatial context for Mangawhai. These constraints and opportunities maps will be used for the next stage (consultation) and formed the basis for the ultimate deliverables.

Consultation sessions

The Spatial Plan was informed by views on issues, opportunities and priorities for Mangawhai as expressed in the following consultation sessions:

- A consultation session with Te Uri O Hau.
- A consultation session with stakeholders with specialist knowledge of key sectors.
- Two public consultation sessions, one held during the evening and one held on a Saturday morning.

The ideas that were identified during the above sessions were documented and fed into the technical workshop.

Inquiry-by-Design Workshop

In October 2019 a two-day workshop was held with KDC staff. This workshop determined the core spatial planning directions for the Mangawhai area.

The workshop comprised a two-day intensive, inter-

disciplinary workshop during which KDC staff and the consultant team worked together and each contributed their planning and design expertise and knowledge.

The workshop process consisted of the following steps:

Day 1

- Short technical briefings were given by relevant Council officers and other specialists representing them. Presenters described the current situation, trends and offered provisional strategy suggestions for their discipline area. Briefings were provided from the discipline leads responsible for infrastructure, traffic, planning, economic development, parks and recreation, and community development.
- Small teams associated with the above topic areas produced their disciplines' 'ideal strategies' for the area. This was purposely single-discipline, in order to achieve depth in understanding, as early integration can be shallow.
- The topic groups reported their outcomes to the whole workshop.
- A group discussion then explored the inter-relationships, synergies and tensions. Together a number of strategy options were formulated. These ranged from business-as-usual through to highly aspirational and sustainable.

Day 2

- Option groups were formed with cross-discipline representation to develop the respective strategy options.
- The options were reported back into the wider group. The group discussed their merits and evaluated them by discipline.

- A preferred Spatial Plan option was selected. This comprised of a hybrid between previous options.
- The preferred option was developed, described and quantified.
- The key actions were prioritised with consideration of how transformative and deliverable these are.
- The technical discipline groups documented the actions and policy implications for their respective topics.
- The workshop concluded with a summary presentation of the key workshop outcomes.

Presentations

After the inquiry-by-design workshop, the outputs were developed with supporting maps, diagrams, photos and artist impressions.

In November and December 2019 the outcomes, consisting of options and preferences, were presented to the following groups:

- Presentation 1: Council staff;
- Presentation 2: Councillors; and
- Presentation 3: Public and stakeholders.

The presentation was posted on the Council's website and public feedback was invited. This consultation feedback further informed the development of this Mangawhai Spatial Plan 2020.

APPENDIX B - GROWTH PROJECTION ASSUMPTIONS

Population Projection

Population projections in the Mangawhai Spatial Plan is based on calculation in *Workings behind significant assumptions in the Kaipara District 2018-28 LTP* prepared by Rob Bates. The population data is derived from the Census 2018. These projections were cross-checked against the Council's ratings and building consent data to provide a more accurate estimate of the population from 2018 to 2043.

The population projections for the LTP provides a straight-line/ high growth scenario of growth continuing at the same rate to a total population of 14,466 in year 2043. The mid-range projection takes into account that growth will not continue at the same rate, dropping off over time due to changes in economic and social conditions.

The variation in the projected population figure arises from a number of assumptions that are subject to change:

- The high growth rate experienced between 2013 and 2018 may or may not continue.
- The cyclic nature of the economy means that over time growth will moderate back to the lower levels previously predicted by Statistics New Zealand.
- The prevalence of holiday homes in Mangawhai:
 - The percentage of unoccupied (holiday) homes is high at 42%.
 - There is a trend down towards less unoccupied homes at 1.4% per annum (from 49% at Census 2013).

Total Mangawhai Area Population Projections								
Scenario	2006	2013	2018	2023	2028	2033	2038	2043
Census Data	2,307	3,144	5,031					
LTP 2018-2028								
- Straight Line			5,031	6,918	8,805	10,692	12,579	14,466
- Mid-range			5,031	5,950	7,162	8,373	9,584	10,796

- The rate of change from unoccupied to occupied dwellings will influence or be influenced by the rate of population growth and hence demand.

Additional residential development potential

The additional residential development potential of Mangawhai was calculated, which involved identifying the size of each development area and applying a potential density (minimum lot size) to it.

The potential additional population capacity was calculated assuming an average household size of 2.4 people¹.

All growth options considered (refer to **Appendix E**) are based on the following assumptions:

- The majority of the existing Residential zoned properties will remain unchanged. Infill and further subdivision of existing 1,000m² lots in the Residential zone will be limited due to several factors such as the position of the existing dwelling on the site, the economic ability of owners to subdivide, the lifestyle

¹ Census 2018: Mangawhai wide average household size is 2.4 people. The New Zealand average household size is 2.7 people.

choice of people living in and moving to Mangawhai.

- Minor dwellings will not be a viable option for a number of existing residential zoned sites for similar reasons as infill subdivision.
- Intensification around Wood Street and the Village will be limited due to the compact size of the commercial areas and economic and lifestyle choices of Mangawhai residents.

For all options it is also assumed that the existing percentage of unoccupied (holiday) homes will remain high (currently 42% of total dwellings in the Mangawhai area). It is noted that the percentage of unoccupied homes has been reducing over time, with new permanent residents occupying existing dwellings. Thus, there is capacity to accommodate additional permanent residents in Mangawhai without additional residential development.

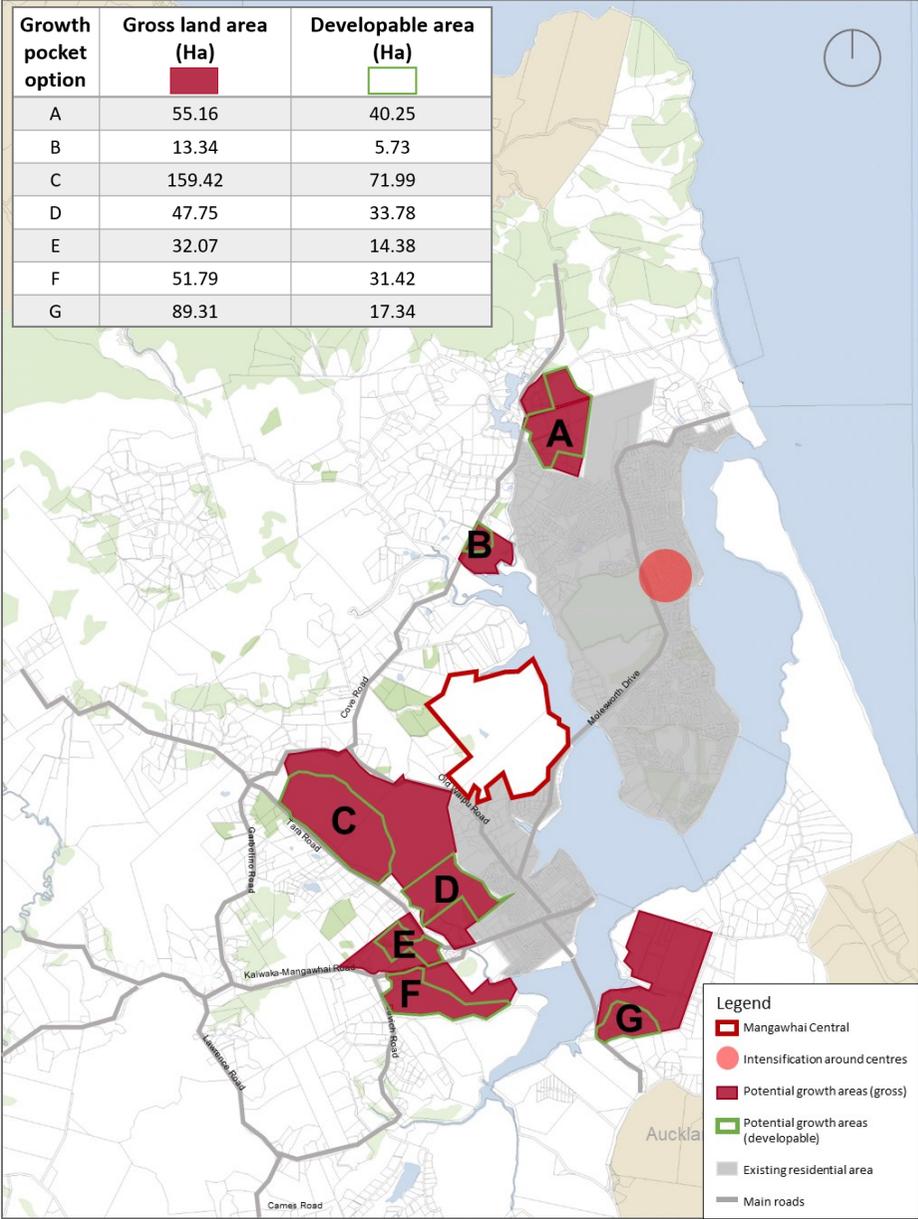
It is however, difficult to predict whether this rate of change will continue into the future and therefore it has not been included in the calculations.

APPENDIX C - PROVISIONAL RESIDENTIAL GROWTH AREA ASSESSMENT

The Spatial Plan process identified potential residential growth areas A-G. The practical suitability of these areas for residential development was assessed during the inquiry-by-design workshop against the criteria outlined in the table below.

- Red = Least suitable
- Yellow = Moderate, subject to technical improvement
- Green = Most suitable

Whilst Area A and Area D were identified as preferred growth areas, the findings from this assessment will require further comprehensive and formal studies to provide evidence and support.



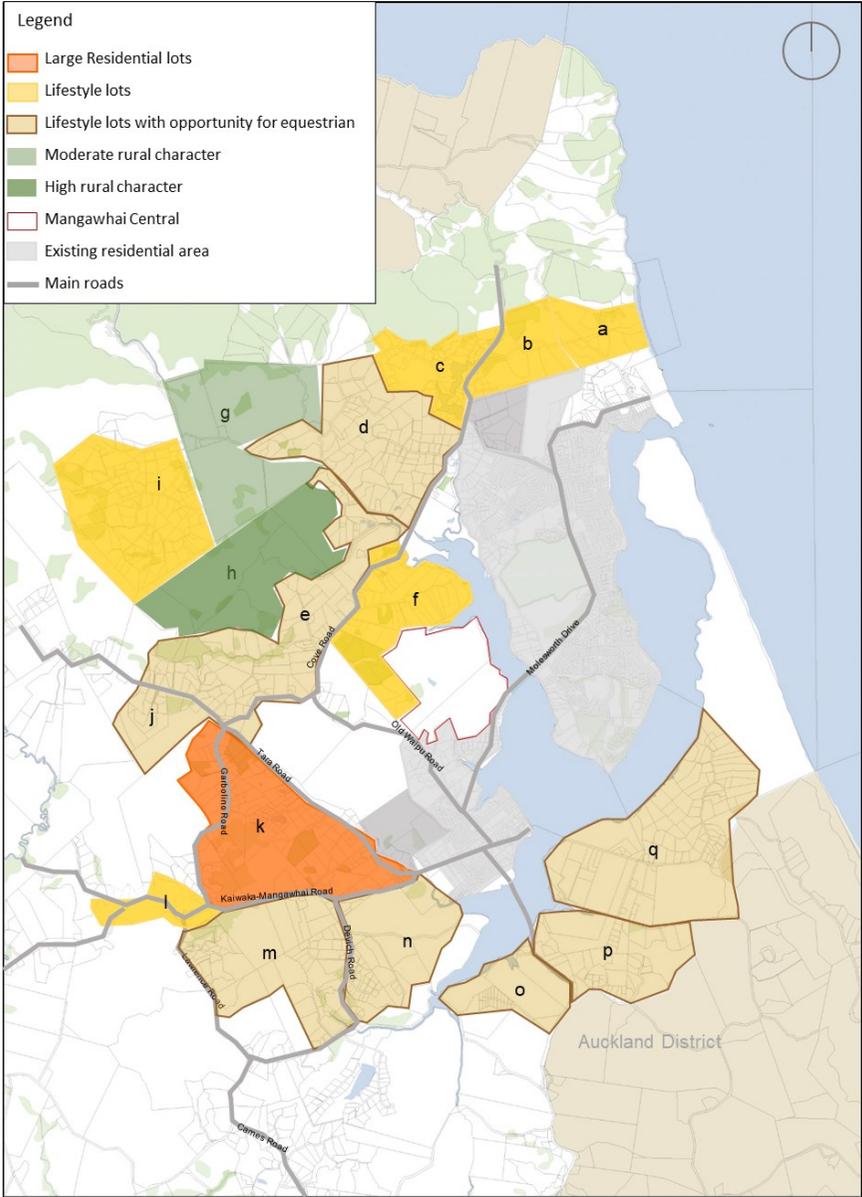
Growth pocket option	planning	landform	fragmentation	tsunami risk	coastal flooding	protected features	wastewater	landscape	geohazards	soils	flooding	transport
A	Green	Yellow	Green	Red	Red	Yellow	Green	Yellow	Yellow	Green	Yellow	Green
B	Yellow	Green	Green	Red	Red	Yellow	Green	Yellow	Yellow	Green	Red	Green
C	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Green	Yellow	Green
D	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Green	Yellow	Green
E	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Green	Yellow	Green
F	Yellow	Green	Green	Yellow	Yellow	Green	Red	Yellow	Yellow	Green	Yellow	Green
G	Yellow	Green	Green	Yellow	Yellow	Green	Green	Yellow	Yellow	Green	Yellow	Green

APPENDIX D - PROVISIONAL DETAILED ASSESSMENT OF RURAL-RESIDENTIAL AREAS

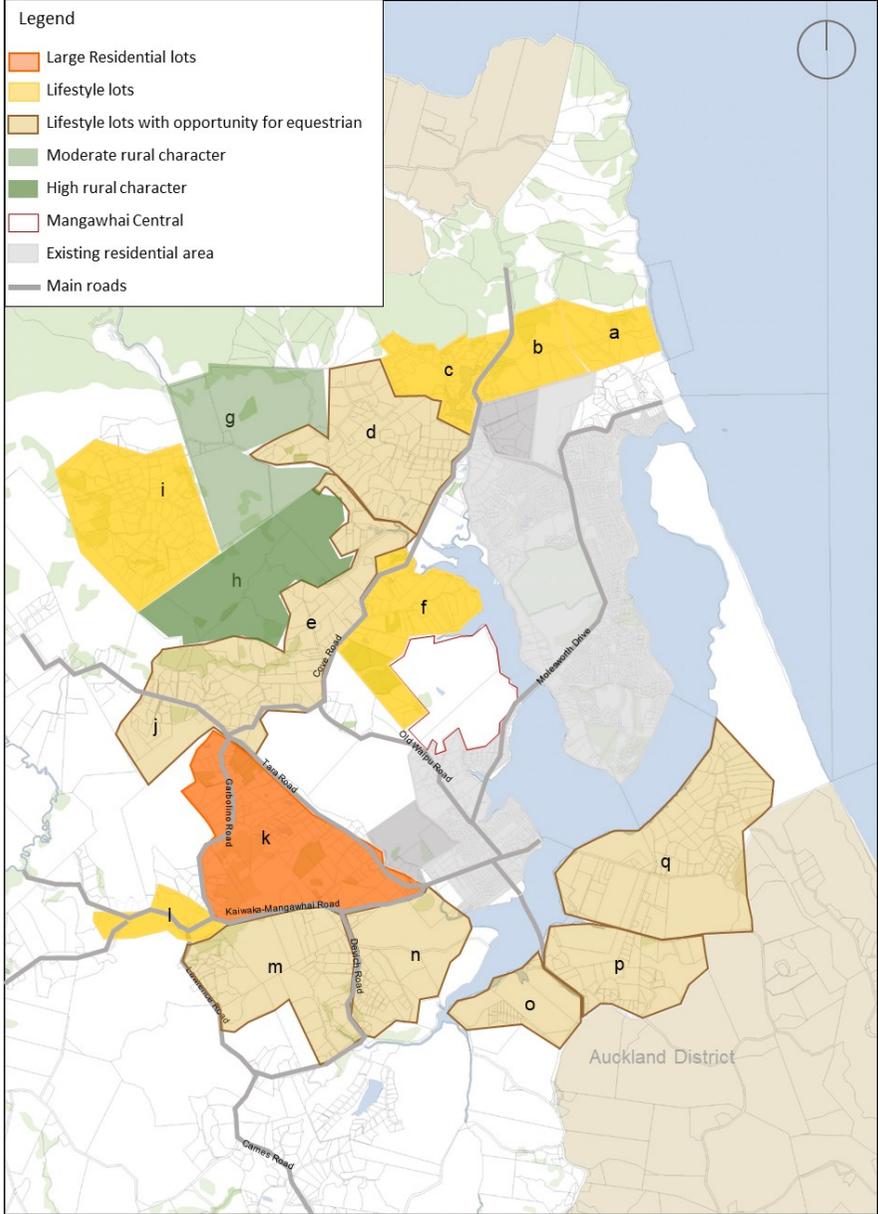
A provisional desktop assessment of the rural residential areas was carried out in the Inquiry-by-Design workshop as part of the Spatial Plan process. Five categories of rural residential areas were identified and a provisional range for the minimum lot size proposed, based on the characteristics of each area. The result is shown on the maps in this appendix, with a rationale for the zone application outlined in the following tables.

Further technical assessments are required to refine and formalise the zone application and determine detailed provisions.

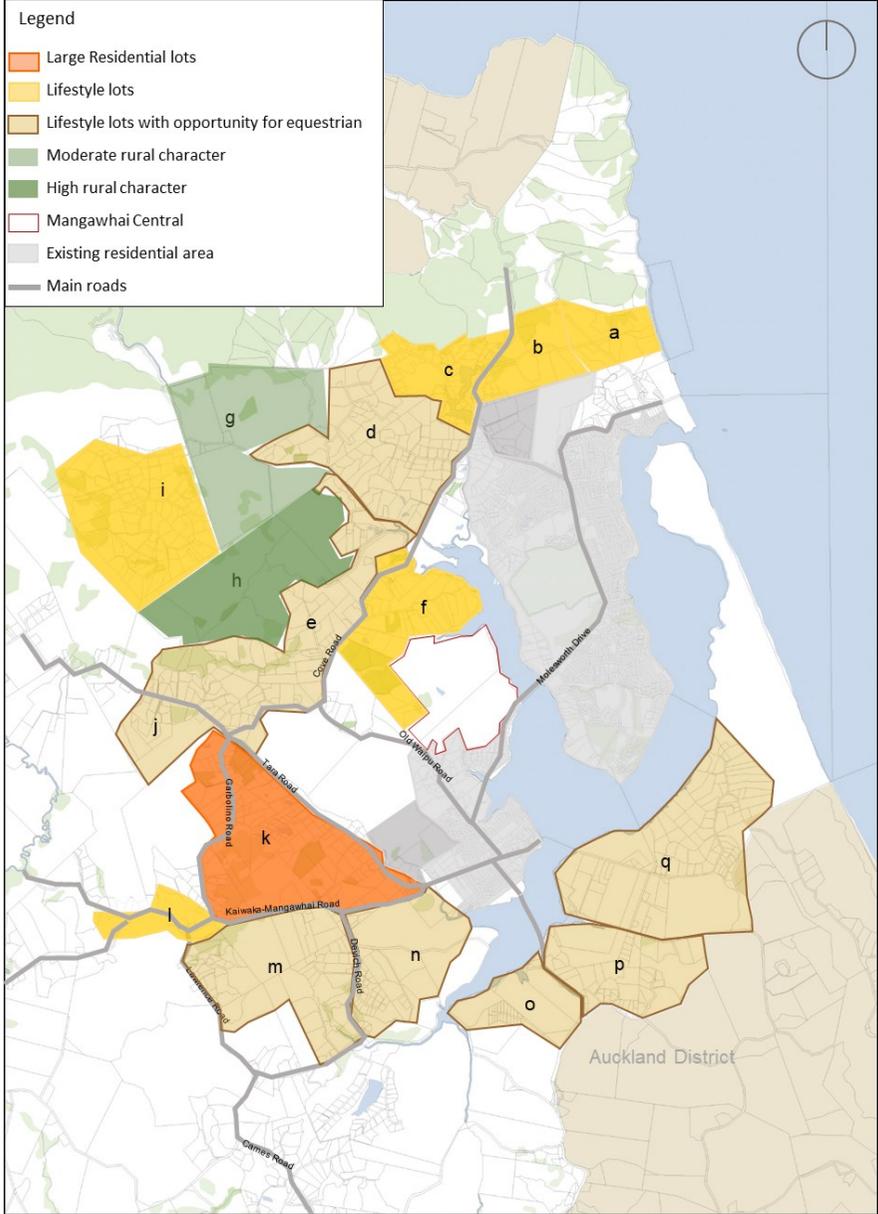
Zone reference	Min lot size (ha)
Large residential lots	0.4 - 0.8
Lifestyle lot	0.8 - 2.0
Lifestyle lot with opportunity for equestrian activity	2.0 - 4.0
Moderate rural character	Avoid
High rural character	Avoid



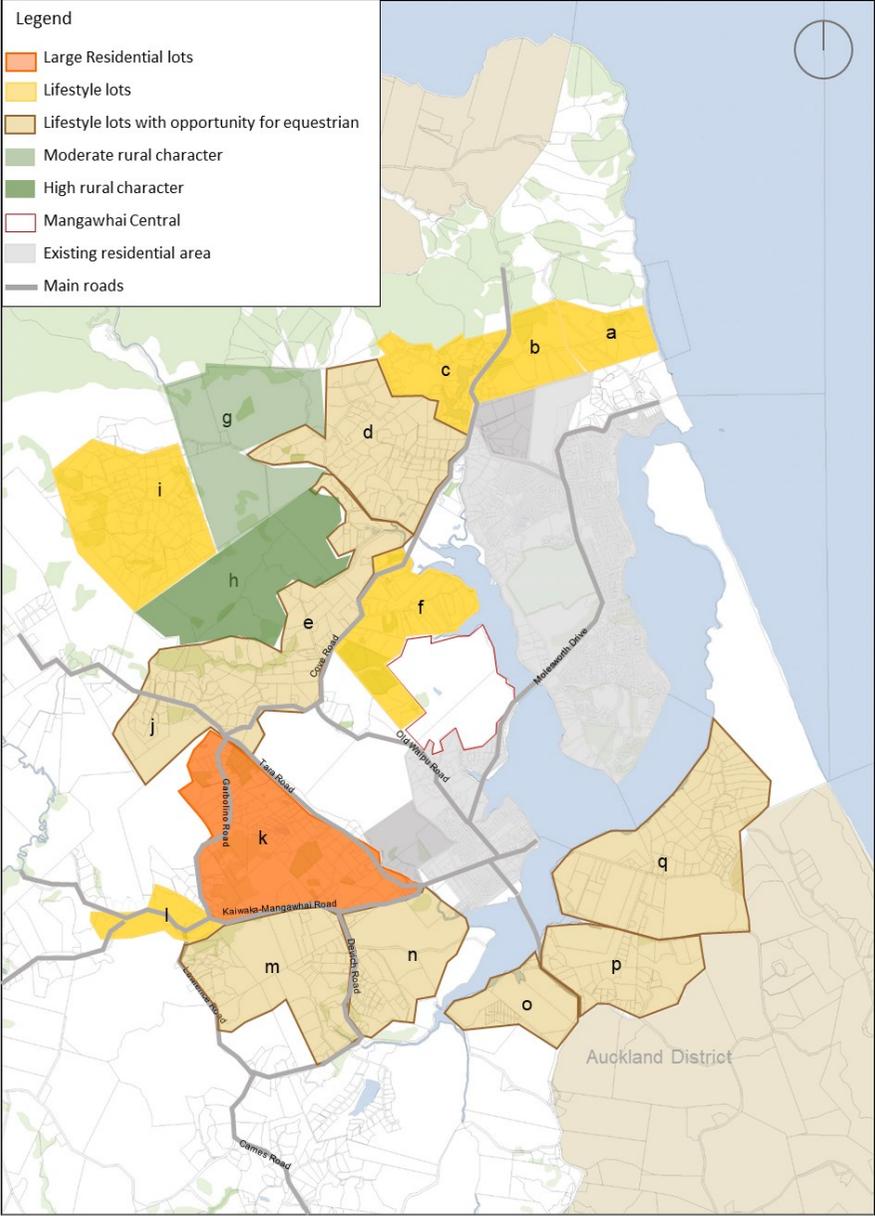
Area	Land area (ha)	Zone reference	Minimum lot size	Rationale
a	68			Discounted
b	60	Lifestyle lot	0.4 - 0.8ha	
c	86	Lifestyle lot	0.8 - 2ha	This area of land is described as 'the Sanctuary' and has already been developed at rural lifestyle density which maintains its high ecological values, ie. waterways. It is close to the Brynderwyn Hills and maintains a buffer of low density land use and bush areas to facilitate the migration of fauna into Mangawhai and other areas, it is the gateway to Mangawhai from the north and its aesthetic value should be protected. Therefore the rural lifestyle density should be reinforced.
d	240	Lifestyle lot with opportunity for equestrian activity	2 - 4ha	Area d and e are already subject to intensification to a density of 3ha-4ha per lot. Given its proximity to town the area has attracted commercial, light industrial and service industries. These sites are attractive as they offer views back to the Brynderwyn Hills over an expansive rural landscape. The continued use of this area for lifestyle development is considered logical given the existing extent of fragmentation. Given the likely pressures on this area for intensification it is recommended that land use is controlled via activity based zoning. Sites located along King Road are likely to have high waterway and ecological values due to its interaction with the estuarine environment.
e	321	Lifestyle lot with opportunity for equestrian activity	2 - 4ha	
f	136.5	Lifestyle lot	0.8 - 2ha	This area has topographical challenges and issues with overland flow. It can be difficult to develop to a significant density (ie. lots <400sq.m) due to geological constraints around design. Current subdivision pattern is extremely fragmented which means that co-ordinated development would be difficult to achieve. To avoid adhoc intensification it is recommended that a structure plan and design guidelines are pursued current to re-zoning to co-ordinate land assembly and infrastructure investment, ie. roads, waste water, pedestrian connectivity with the rest of Mangawhai.



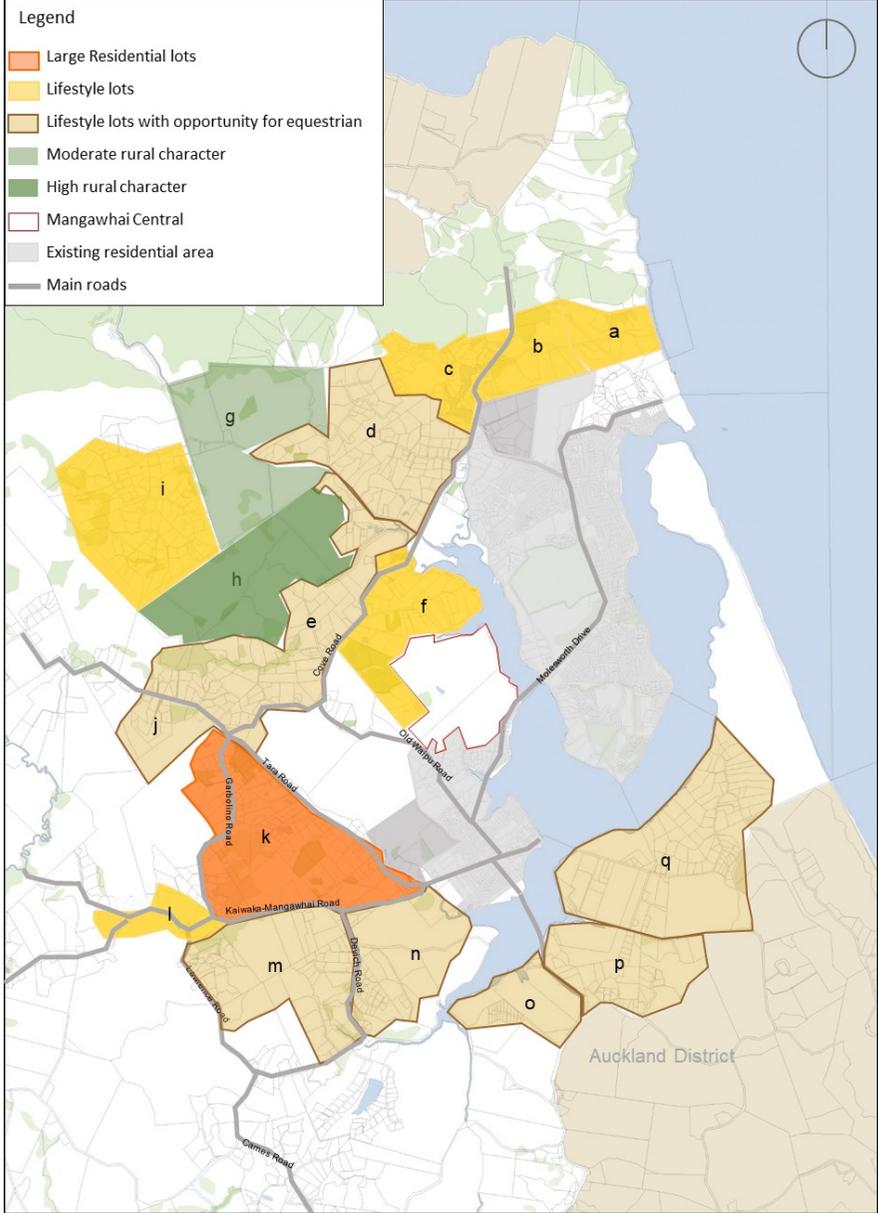
Area	Land area (ha)	Zone reference	Minimum lot size	Rationale
g	313.2	Avoid		These areas contain high value soils for rural production, horticultural and agricultural land use as well as significant ecological and amenity values that offers unbroken rural views through to the Brynderwyn ranges, maintaining the rural character and landscape. As viewed from Cove Road and Mangawhai-Kaiwaka Road drivers experience rural vistas through to the ranges which is viewed as a culturally significant and defining feature of the Mangawhai Spiritual personality and has high impact on incoming tourists. Note: Council reinforce the establishment of an urban growth boundary which clearly defines the extent of lifestyle and urban spaces, whilst maintaining the countryside aesthetic.
h	231	Avoid		
i	198.5	Lifestyle lot	0.8 - 2ha	This area of subdivision is a historic anomaly. The initial subdivision create modest size lots 2-4 ha. The site is bounded by large productive farms. This is a very pretty part of the district and have interconnecting waterways rolling landscape, productive soil and a beautiful backdrop of the Brynderwyns. The attractive nature of this area and the ecological values mean that landowners have sought to use 'environmental benefit rules' with the DP to enable subdivision. The roading network is a series of cul-de-sacs with a combination of private roads, JOALs and ROW easements to access individual lots. The roading is very disjointed and therefore unable to be upgraded for further subdivision. This is a high density kiwi site and intensification is compromising this species due to predators, cats and dogs. A pathway forward would be to restrict further intensification to protect what is left and recognise the area as an anomaly. the same principle should apply to Spioenkop / Peeblebrooke Road, and another small cluster on Tara Road.



Area	Land area (ha)	Zone reference	Minimum lot size	Rationale
j	47.9	Lifestyle lot with opportunity for equestrian activity	0.4 - 0.8ha	Development in this area is somewhat constrained by topography (steep) and natural features (gullies and links to waterways). There is a high value wetland to the rear of this area which should not be developed. The area sits up on a ridge so existing developments are exposed and intensification has the potential to cumulatively erode the landscape values of this area including views of the Brynderwyns. The lot size is already small and development capacity has likely been fully absorbed. As such it is recommended that further intensification should not be sought.
k	250.1	Large residential lots	0.4 - 0.8ha	This area provides the opportunity for clear 'boundaries' to the more intensified large lot zone I. This area is somewhat constrained by topography and ecological values (Garbolino bush). This bush is very high quality and needs protection and buffering. A majority of this area is already intensified and mostly residential. The lot sizes are already small but the development capacity has not been fully absorbed. Therefore large lot/lifestyle intensification should be considered. The lots on Tara Road borrow the landscape value of Frecklington Farm and so this should be a consideration when determining the design of Frecklington farm and its intensity. Note: Council has recently upgraded both Tara Road and Cove road including a 50km zone so it signals that this area is higher density.
l	29.5	Lifestyle lot	0.8 - 2ha	This area has some undesirable intensification patterns that have been historically allowed. The area has views across the rural landscape in the mid-ground with the Brynderwyn ranges in the background. As this area is close to town, it is targeted for intensification, but the development of poor quality housing is cumulatively eroding the landscape values of this area. This should be acknowledge but not replicated. The development capacity has been full absorbed in the area and not further intensification should be considered. Note: Council is concerned about the cumulative adverse effects of residential intensification on both sides of Kaiwaka Mangawhai Road, due to visual impacts.



Area	Land area (ha)	Zone reference	Minimum lot size	Rationale
m	209	Lifestyle lot with opportunity for equestrian activity	2 - 4ha	Some existing mixture of lifestyle lots. Area n has the best connection to the estuary through walkways, waterways and high value bush areas. It is recommended that an intensified development pattern is not to be sought as it would set an undesirable precedent to allow further intensification south of the Kaiwaka Mangawhai Road. MK Road is a cultural link and a tourist drive so protection of the landscape values on both sides is important. Given the modest size lots, there is potential for future coordinated development to avoid 'gated' or ad-hoc development. There are some notable gullies, waterways and ecological area (riparian) that should be considered when determining
n	181.7	Lifestyle lot with opportunity for equestrian activity	2 - 4ha	
o	131.7	Lifestyle lot with opportunity for equestrian activity	2 - 4ha	This area has nice views of the harbour and Mangawhai and some ecological features. It is recommended an intensified development pattern is not to be sought. Land is close to the beach, estuary and sand dunes and could play a role in reinforcing connection to protection for flora and fauna, especially at risk birds which nest in the dune systems. Given the modest size lots, there is potential for coordinated development. The area is also directly on the road to Auckland and the gate to Mangawhai Village so development should acknowledge this role as the key entry point and be respectful of the public experience of the area.
p	145.4	Lifestyle lot with opportunity for equestrian activity	2 - 4ha	
q	316.9	Lifestyle lot with opportunity for equestrian activity	2 - 4ha	This area is highly constrained due to risk of sea level rise, coastal hazards and ecological protection. The area is relatively flat and is particularly suitable for hobby farms, horticultural, and commercial/industrial type uses. We recommend not seeking an intensified development pattern. It is preferred to have a gradual change from ecological coastline to horticultural/ agricultural land use close to the sand dunes. Given the modest size lots, there is potential for coordinated development. This area has the best connection to the coast and the only southern accessible beach to Mangawhai.

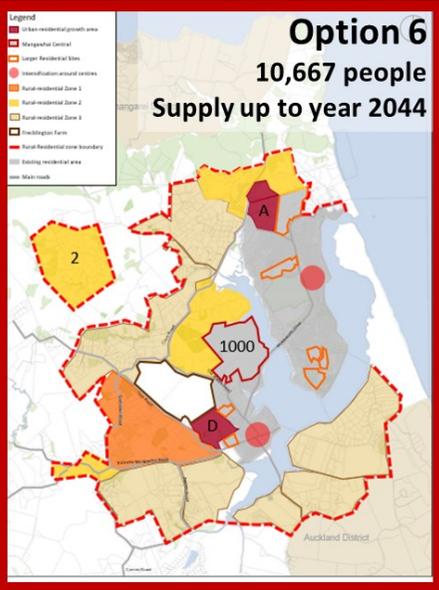
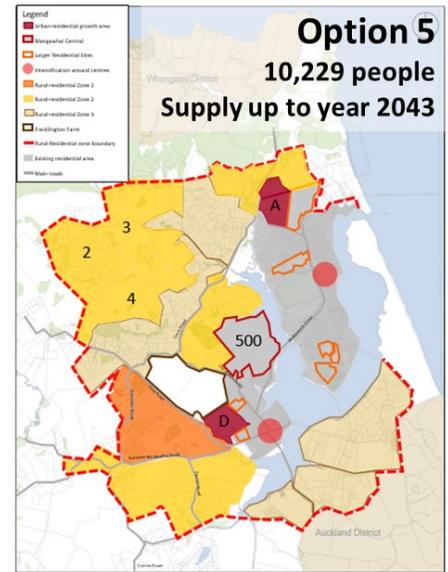
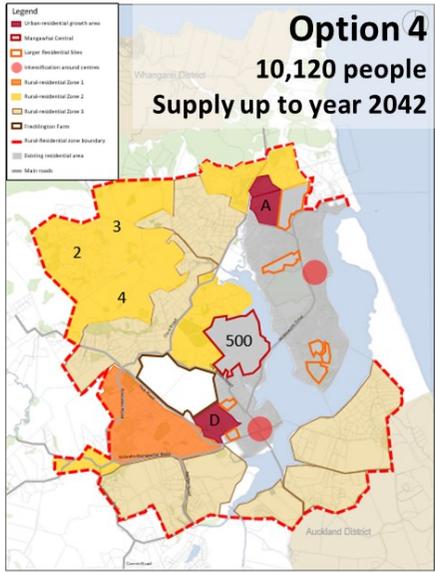
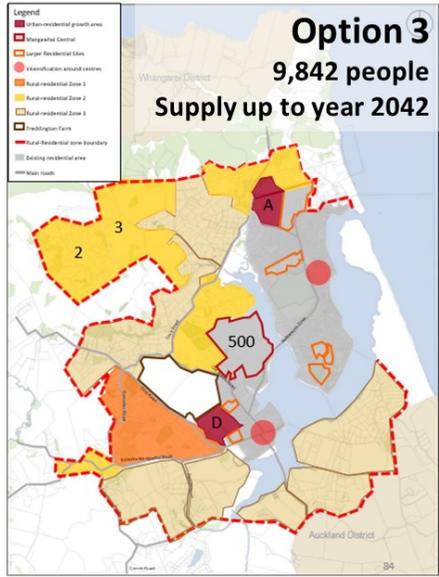
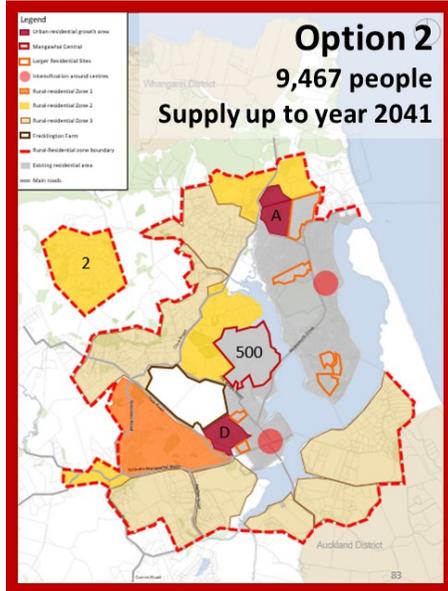
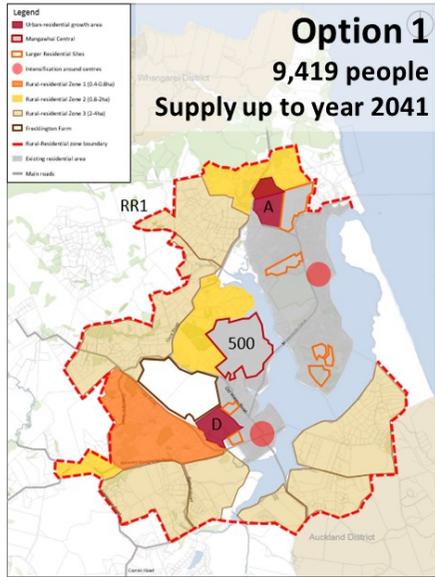


APPENDIX E - GROWTH OPTIONS CONSIDERED

The growth options considered are shown in the maps on this page.

The major variation between these is the extent of the rural residential activities, to be provided for in the recommended new rural residential zone(s).

As explained, Options 2 and 6 are preferred, with the difference between these the assumption for the number of dwellings to be provided in the Mangawhai Central development.



APPENDIX F - CURRENT DISTRICT PLAN EMPLOYMENT LAND CAPACITY CALCULATION

		Business-Commercial	Business-Industrial	Total
Existing	Mangawhai Heads	1.89ha	2.77ha	4.66ha
	Mangawhai Heads North		1.34ha	1.34ha
	Mangawhai Village	3.69ha		3.69ha
	School*			4.80ha
	SUBTOTAL			14.49ha
Additional Future	Mangawhai Central (as per existing District Plan)	4.00ha	3.20ha	7.20ha
	Mangawhai Central (Plan Change)	3.90ha**	6.17ha	10.07ha
TOTAL (existing District Plan)		9.58ha	7.31ha	16.89ha
TOTAL (Plan Change)		9.48ha	10.28ha	19.76ha

* Mangawhai School (4.8 hectares) is not zoned for business but employs approximately 50 people

**accommodates 6,032sqm retail buildings and 4,801sqm non retail buildings