Submission from the AQA to Auckland Council on the Auckland Future Development Strategy

July 2023

Introduction

The Aggregate and Quarry Association (AQA) is the industry body representing quarrying companies which produce 45 million tonnes of aggregate and quarried materials consumed in New Zealand each year.

Funded by its members, the AQA has a mandate to increase understanding of the need for aggregates to New Zealanders, improve our industry and users' technical knowledge of aggregates and assist in developing a highly skilled workforce within a safe and sustainable work environment.

We would like to thank the Auckland Council for the opportunity to comment on the draft Auckland Future Development Strategy (the draft strategy).

Key Points

- Aggregate is an essential ingredient in the building of infrastructure, roading and housing as well as climate change adaption. Increased supply will be needed to achieve the growth and development of Auckland as anticipated in the draft strategy.
- Aggregate will either need to be produced locally or imported from outside the region at a much higher cost.
- We are concerned that the plan does not address the need for new quarries. For example, the map on page 44 has existing quarries only. Auckland will need new quarries if its growth targets are to be achieved.
- There are already shortages of aggregate in Auckland. There is the risk of increased shortages if sterilisation occurs as residential areas are allowed to expand on to or near potential quarry land.
- In order to future proof Auckland, land for existing and future aggregate extraction activities must be adequately identified and protected from encroachment of non-compatible land uses.

The Importance of Aggregates and Auckland

Aggregate (crushed rock, gravel and sand) is an essential resource for the construction of housing, roading projects and other transport infrastructure. It is used for general construction - in concrete, asphalt, mortar and other building products.

Aggregate is also important for increasing resilience and adapting to extreme weather events and climate change.

Due to the unprecedented levels of construction and infrastructure development activity, aggregate is increasingly in short supply in Auckland as well as other parts of New Zealand.

Not only is there high demand in Auckland, but supply is also constrained. Aggregate deposits are 'location specific' – limited in quantity, location and availability. They can only be sourced from where they are physically located and where the industry is able to access them.

This characteristic means it is important that the location of aggregate resources are identified by councils generally and access is not inadvertently shut off through encroachment of non-compatible land uses.

The Auckland Future Development Strategy

The draft Auckland Future Development Strategy aims to influence where and how growth occurs in the region over the next 30 years.

We are concerned that insufficient attention has been given in the draft strategy to aggregates in achieving this growth and to ensuring that land for future aggregate extraction activities is available. Auckland needs new quarries.

According to the draft strategy, Auckland's population is expected to grow by around 520,800 people over the next 30 years to a total of 2,230,800. Households are forecast to grow by 34% or just under 200,000 net additional dwellings.

At 250 tonnes per dwelling this equates to an extra 50 million tonnes of aggregate and sand that will be needed over the next 30 years for housing alone. This is the equivalent of just under 1.7 million additional tonnes per annum. Auckland currently produces 7.9 million tonnes and has to import the rest of its demand from other regions in New Zealand particularly Waikato but this isn't sustainable. Because quarried products are high volume this contributes to pressures on roads, adds to congestion, increases emissions and adds to costs to the consumer – the cost of aggregate doubles when transported 30 kilometres from its source. Auckland already imports one truckload in six from outside the region.

In terms of emissions, transport accounts for 40% of Auckland's emissions. 86% of these come from road transport. The draft strategy acknowledges that key to reducing emissions is reducing the amount of vehicle kilometres travelled (VKT). The

location of quarries will have an impact on this.

Auckland will clearly need new quarries if its growth targets are to be achieved so it is of great concern that the draft strategy does not seem to allow for them. For example, the map on page 44 has existing quarries only, suggesting no new sites are planned.

In the meantime, Auckland's growing population means areas of aggregate supply and appropriate quarrying land are at risk of sterilisation as residential areas and competing industrial land uses expand. Building too close to quarries brings reverse sensitivity issues due to the nature of extractive industry operations including noise, vibration and dust. Residential and industrial development areas should ideally be as close as reasonable to identified areas of aggregate but not too close.

We are concerned about the increasing difficulty to get quarries approved in Auckland as pressure from affected communities grow. A case in point is McCallum's sand dredging operation at Pakiri which was initially declined by an Auckland Council hearings panel. Without sand from Pakiri, which is currently barged into Auckland, around 1,000 extra truck movements would be needed on Auckland motorways every month.

Areas of Aggregate Opportunity

In order to future proof Auckland, land for existing and future aggregate extraction activities must be adequately identified and protected from encroachment of non-compatible land uses. Steps should be taken to achieve this and included in the Implementation actions set out in appendix 12 of the draft strategy.

GNS Science has almost completed a modelling study to highlight areas of aggregate opportunity in the Auckland region. The project was commissioned by the New Zealand Infrastructure Commission and has used geological, land use, environmental and statistical data to identify areas of the region where the best opportunities are for aggregate resources.

The study covers the land area from Whangārei in the north to Hamilton in the south, and as far east as Whakatāne to encompass the regions of future development and resource sources for Auckland City. So far hundreds of sites have been identified as having an aggregate opportunity in the region.

In the meantime, GNS Science has done some initial, high level work outlining where the areas of hard rock potential for Auckland are. This is shown in the appendix of this submission.

We are particularly concerned that future urban and business areas, both industrial and residential, could be in, and near, areas of high aggregate potential. This development could sterilise future access to aggregate if care is not taken.

Highly Productive Land

The draft strategy makes several references to highly productive land in the context of highly productive soil for agriculture identifying the need to protect it from sterilisation and residential expansion. It should be noted that land supporting quarrying development is also highly productive – in fact it is more productive than agricultural land – quarrying generates many times more revenue per hectare than dairy, beef/lamb or horticulture.

Where the draft strategy emphasises that productive farmland should be protected it needs to do the same for productive land incorporating aggregate and other mineral resources.

We note that quarrying is part of the primary production definition in the National Planning Standards which supports this argument.

Climate Change

We strongly support Principle 2 of the draft strategy – Adapt to the principles of climate change.

It is important to note the role of aggregates in strengthening resilience to natural hazards and climate change. Aggregates such as armour rock, for example, are needed for flood protection and to adapt to sea level rise and coastal erosion through strengthening of sea walls etc. They will be needed to repair damage to coastal infrastructure and to make infrastructure generally more resilient to greater intensity storms and extreme weather events.

Aggregates have had an essential role recently as part of the post cyclone and flood rebuild.

Quarries are not Permanent

Note that quarries have a finite life, they are not permanent. Once the rock is extracted the land is returned to the community and can be used in a variety of ways. It is not inconceivable that housing and other developments can occur on and around former quarry land that has had the rock extracted. An example of this in East Auckland is Stonefields, which is a suburb built on a former quarry.

Wayne Scott
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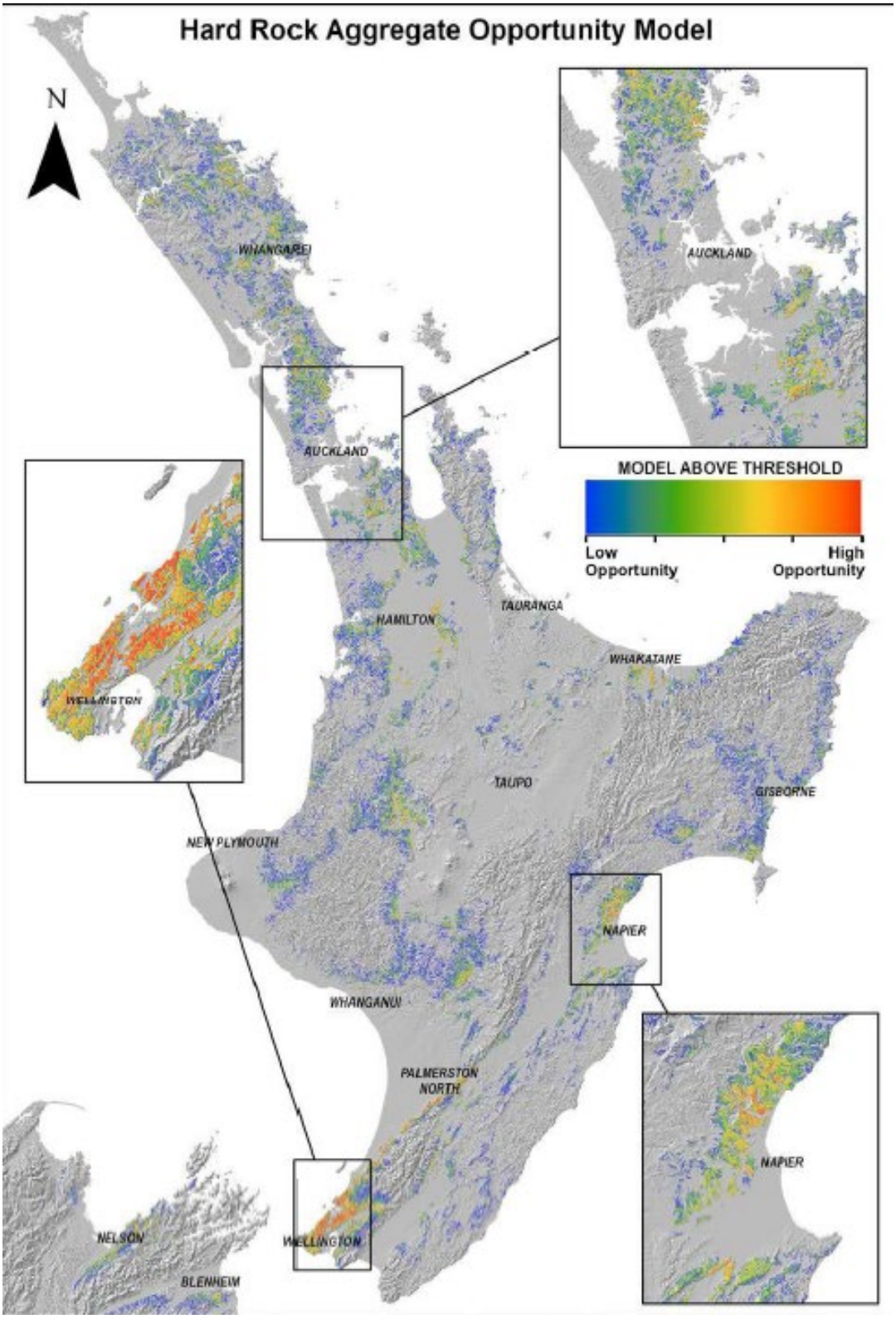
Appendix 1


Hard Rock Aggregate Opportunity Model
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WHANGAREI
AUCKLAND
AUCKLAND
MODEL ABOVE THRESHOLD
Low Opportunity
High Opportunity
WELLINGTON
HAMILTON
TAURANGA
WHAKATANE
TAUPO
GISBORNE
NEW PLYMOUTH
NAPIER
WHANGANUI
PALMERSTON NORTH
NAPIER
NELSON
WELLINGTON
BLENHEIM