



A BRIEFING TO THE INCOMING MINISTERS

QUARRY SECTOR AND AGGREGATE SUPPLY

November 2020

INTRODUCTION

The Aggregate and Quarry Association (AQA) is the industry body representing construction material companies which produce an estimated 45 million tonnes of aggregate and quarried materials consumed in New Zealand each year – about a truckload per person.

Funded by its members, the AQA has a mandate to increase New Zealand's understanding of the need for aggregates, improve our industry and users' technical knowledge of aggregates, assist in developing a highly skilled workforce within a safe and sustainable work environment, and work with local, regional and central government on plans and regulations.

BACKGROUND

Accessing, extracting, processing and transporting aggregate (crushed rock, gravel and sand) is needed for the construction of infrastructure in New Zealand: this material forms the foundation of every road and building. Such infrastructure is always important and is at the core of the Government's response to the economic downturn caused by Covid-19. There will be increased demand for aggregate and sand to build 'shovel ready' and longer-term projects. Additionally, the impacts of climate change including rising sea levels are going to put added pressure on rock supply for sea walls, riverbank protection and restoration.

It is therefore more vital than ever that local aggregate resources throughout the country are identified, protected and effectively managed.

New Zealand's urban spread and development projects are already constrained by restricted availability of suitable local aggregate and earth materials for construction. Planned regional growth projects and those now under construction involving major building and infrastructure developments are increasingly facing escalated costs due to a lack of nearby, consent-approved aggregates. For many projects, the cost of transporting suitable material is adding significantly to project costs. Recent examples of this include the initial Ōpōtiki Wharf Project costings and the Transmission Gully Highway Project.



KEY ISSUES



Quarrying and the Environment

It is the rural environment that has provided the aggregates, food, infrastructure, water, and electricity to support a growing population which resides in the built-up urban environment. If environmental bottom lines were to be expanded so as to restrict quarrying on rural land the Government's infrastructure programme, much of which requires aggregate, would be impacted in the short term and the urban population will end up paying the price for aggregates having to be trucked over much longer distances.

We have recently seen the immediate impact of Regulation 53 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020, which preserves every natural wetland from mining or quarrying, regardless of its ecological value, size, and/or local abundance. In its current form, this regulation will have a serious impact on aggregate supply across the country, most notably the Auckland area, which currently consumes 12 million tonnes of aggregate and sand p.a., and where already two extensions of existing major quarries are now at stake. The preservation of most areas of wet grass and puddles in New Zealand could lead our country over time to import aggregates from overseas at greatly elevated expense to local supplies, and increased carbon emissions through longer cartage distances.

We are also concerned at proposed changes outlined in the proposed National Policy Statement on Indigenous Biodiversity (NPS-IB) that will require territorial authorities to “avoid” development within Significant Natural Areas (SNAs). This ignores the fact that activities can, and do, operate while preserving and often enhancing indigenous biodiversity. The creation of wetlands to manage water run-off and biodiversity offsetting and compensation are common requirements for modern quarrying.

Currently 45% of potential aggregate land is classified “indigenous vegetation” and 14% of such land is classified “exotic vegetation”. It is likely that almost all of New Zealand will be classified as “significant” and of “high value”, in terms of biodiversity under the proposed NPS-IB. If quarrying had to be avoided on this land, the demand for aggregate for infrastructure, housing, natural disaster repairs, and climate change mitigation would be impossible to meet from domestic supply.

Quarries and other extractive industries currently make a substantive contribution to the restoration, enhancement and reconstruction of areas identified in resource management plans and regional biodiversity strategies. We support developing a NPS which sees the restoration and enhancement of areas that align with national priorities for environmental restoration and enhancement, together with areas identified under targets for increased vegetative cover.

National Aggregates Study

The Government, in consultation with the aggregates sector, needs to confirm the available sources of aggregate and sand throughout the country, including aggregate quality, accessibility, and proximity to markets so that those sources are identified as critical for the country’s future growth, and that they are protected and remain accessible to meet future demand. This is now critical to support the infrastructure focus of the prolonged economic recovery from Covid-19. The cost for GNS Science (GNS) to complete the mapping of aggregate needed for billions of dollars of infrastructure is around \$600,000. Actioning this needs to be one of the first acts of the new Government if it wants to avoid putting infrastructure builds at risk.

Mapping of resources also needs to be easily accessible to local government, planners, developers, and the community.

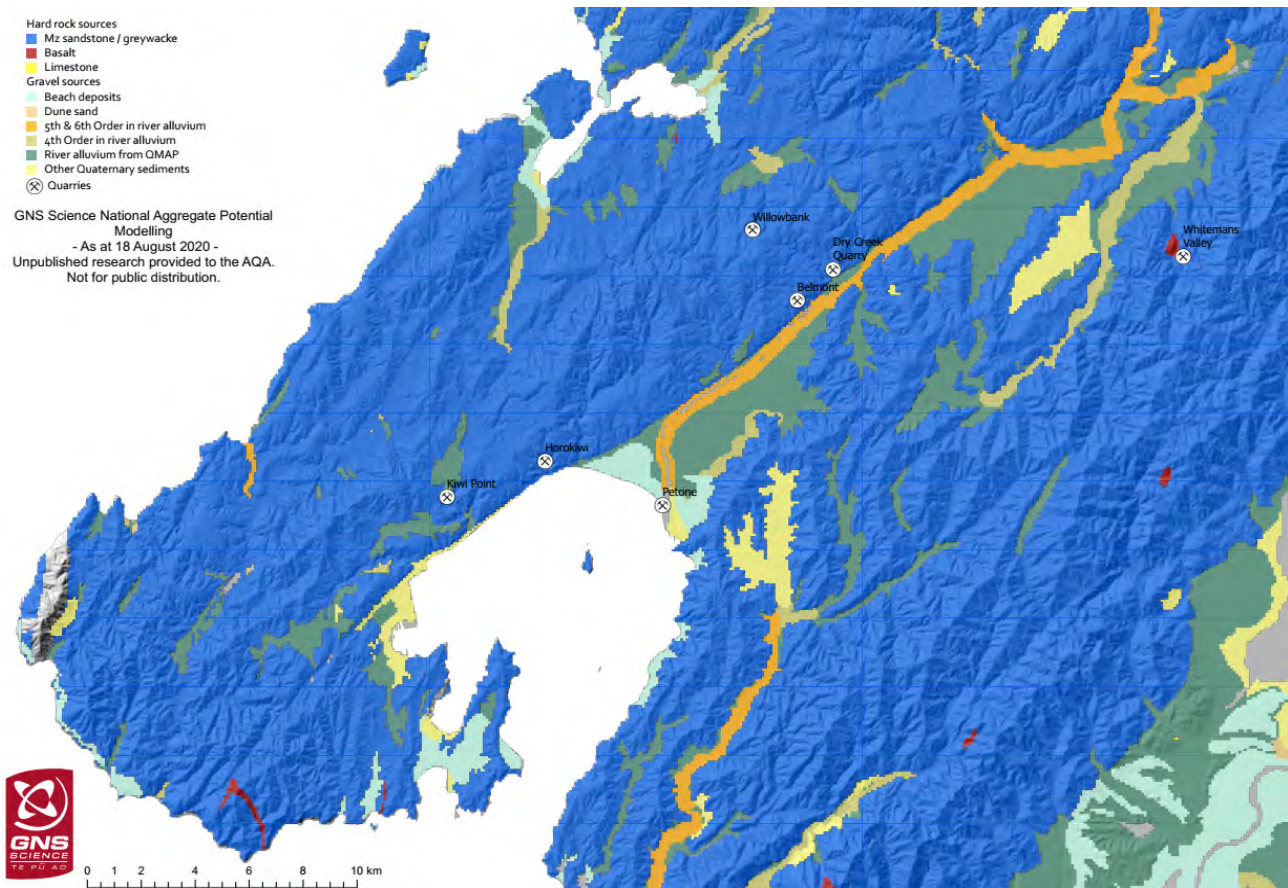
Access to Aggregate and Sand Resources

Adequate provision must now be made in planning documents to protect existing and potential aggregate and sand deposits and provide for their extraction. Quarry materials are not universally available and can only be sourced from where they are located. Without planning to secure adequate access to resources, at workable locations, and protect them from encroachment, there is the real risk of losing access to such proximate resources.

An important issue for quarries operating in areas of expanding residential growth is reverse sensitivity – people complaining about quarries after moving into an existing quarrying area. This has the potential to sterilise existing and future resources which means increased costs and emissions to obtain more remotely sourced aggregate and lost opportunities for the local economy.

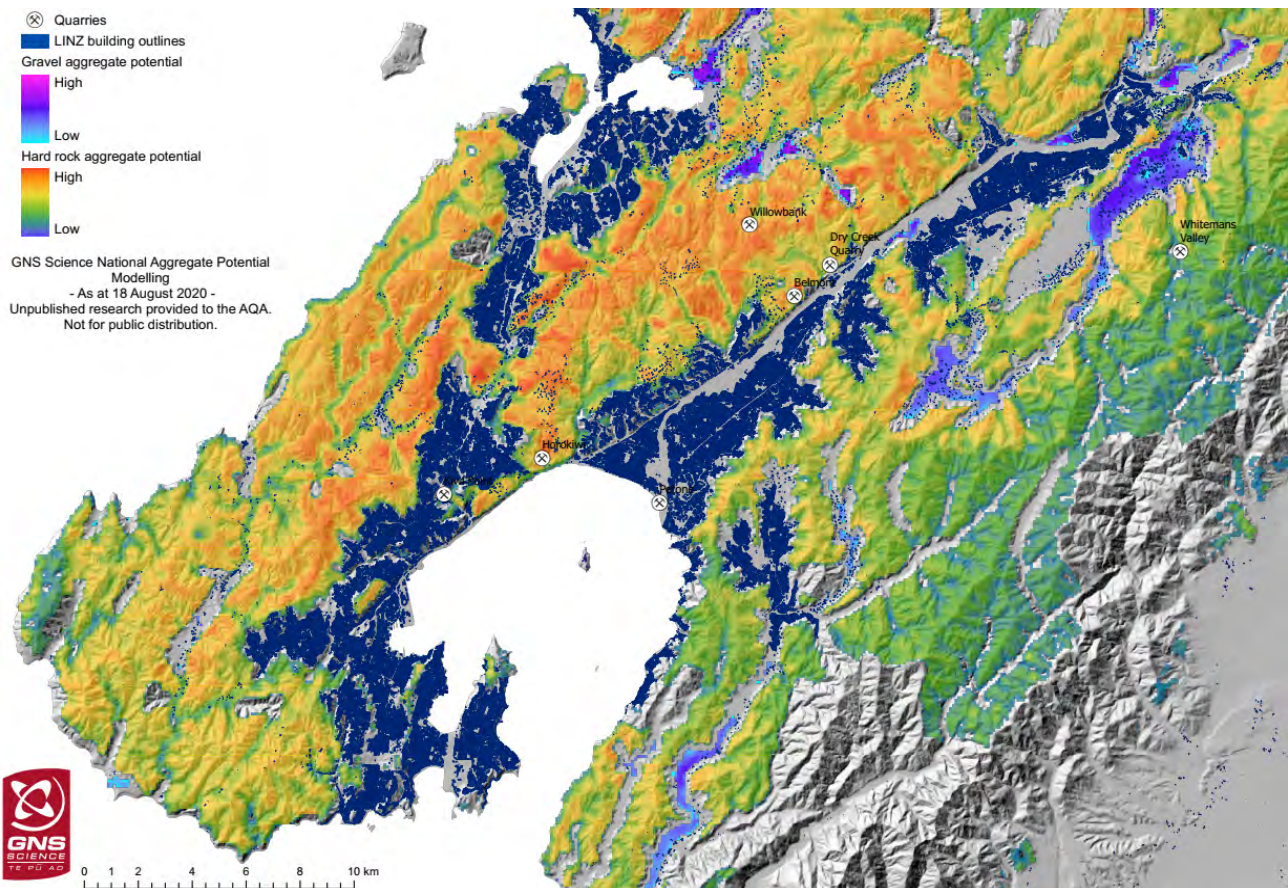
As an example, *Map A* shows potential aggregate sources (in blue) in the Wellington Region and *Map B* shows potential aggregate now available (in yellow and green) following housing growth, environmental constraints and alternative land uses.

Map A: Wellington Region aggregate rock sources



As can be seen below in *Map B*, housing growth (in dark blue) is having a significant impact on future aggregate supply and high residential growth areas are impacting heavily on aggregate potential areas.

Map B: Wellington Region aggregate potential



Quarrying on Conservation Land

The AQA was disappointed with the status given in the Government's 2019 Resource Strategy to the No New Mines on Conservation Land proposition. We strongly believe it would have made more sense to consider this in the context of the Government's Resource Strategy, not as a pre-condition. While it is unclear how this proposition will apply to quarries, recent work by GNS has identified that 20-32% of future hard rock reserves are situated on Department of Conservation (DOC) land. Most of this is on stewardship land which has much lower conservation values. Any sterilisation of available quarry resources will further impact heavily on the Government's infrastructure ambitions as well as on iwi and regional communities in terms of jobs, availability and the increased cost of aggregates and sand.

Currently extraction of aggregates on DOC land is essential for flood mitigation, river restoration, bridge protection and the construction and maintenance of tracks, carparks, and structures in National Parks and on other DOC land. An example is the extraction by DOC of rock and gravel from conservation land adjoining the Waiho River near Franz Josef Glacier to help protect its walking tracks. This sensible and pragmatic decision saved DOC a four-fold amount and considerable carbon emissions from the alternative of trucking material a long distance from an existing quarry.

Overseas Investment Act (OIA)

The relatively low threshold for overseas investment leads to the unintended consequence that many New Zealand companies are caught up in this legislation due to minority overseas shareholdings. The aggregates sector has experienced significant delays in OIA considerations of relatively minor land acquisitions for buffer land around quarries when there are more appropriate mechanisms for environmental regulation.

Circular Economy

We acknowledge the importance of the circular economy in the aggregates sector and generally, maximising the use and re-use of the same resources for as long as possible. However, while increased recycling and resource efficiency will have some impact, the technology is nowhere near ready to fully replace the need for extraction of natural aggregates.

Currently there is little incentive for recycling and re-use due to the cost of processing these products relative to natural products and the reluctance of customers to specify and/or allow the use of recycled products. These customers include central and local government which are both significant users of aggregates and sand.

Resource Management Act (RMA)

Planning needs to be enabling so that resource consents are quicker to obtain and less costly. Even where appropriate planning zones and controls exist, the time and cost for obtaining consents to a quarry can be significant. In the event of a favourable decision, it is often more than three to five years from commencement of the consenting process before many quarries will ever produce their first tonne of aggregate.

Variation within RMA processes across the country creates uncertainty for resource users and has led to poor outcomes for both the built and the natural environments. Processes are complex, litigious and costly, and frequently disproportionate to the decision being sought, or the risk or impact of the proposal. This complexity is caused in part by having development/planning and environment considerations in one legislative document.

While we are neutral on whether there should be separate legislation dealing with environmental management and land use planning for development, legislation should set clear and specific ways of regulating environmental issues based on outcomes and at the same time provide the tools to allow balanced decision making about where and how development can occur. In order to ensure balance, the positive effects of development need to be considered as do regional variations in community expectations, environment, and development needs.

AQA'S RECOMMENDATIONS TO GOVERNMENT

RECOMMENDATION ONE: Government urgently make changes to Regulation 53 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 to remove the prohibited activity status on earthworks around wetlands thus enabling local authorities to consider resource consent applications and apply the environmental hierarchy of avoid, mitigate, offset or compensate for the impacts on wetlands.

RECOMMENDATION TWO: The Government urgently fund the completion of the National Aggregates Study, for which funding was withdrawn in 2017. This work will:

- Better characterise the physical properties of different aggregate and earth materials represented by geological map units
- Better define the spatial distribution of different aggregate and earth materials, both nationally and regionally through a pilot study
- Build an aggregate and earth materials resource model that enables source-transport-application decisions and improved planning using geological, engineering data and environmental, social, cultural and financial constraints.

RECOMMENDATION THREE: Government give local authorities greater direction in planning for key resource areas, in order to protect existing and future quarries from encroachment of non-compatible land uses such as urban expansion and rural lifestyle developments, thus reducing the potential for reverse sensitivity effects to arise.

RECOMMENDATION FOUR: The Overseas Investment Act be amended around the Ministerial veto power and the use of environmental barriers to overseas investment, particularly where overseas interests have minority shareholdings.

RECOMMENDATION FIVE: A cost/benefit analysis for recycling and re-use of construction waste be conducted by Government in consultation with industry, in order to establish the types of incentives, and/or penalties needed to achieve positive outcomes from the principle of a circular economy.

RECOMMENDATION SIX: Minerals such as aggregates are key to the functioning of our economy, and critical minerals such as cobalt, vanadium and rare earth elements, will likely be essential in a low emissions economy. It is critical that the purpose of the RMA retains its emphasis on promoting the sustainable management of natural and physical resources.

RECOMMENDATION SEVEN: Remove the distinction between high value and medium value Significant Natural Areas from the proposed NPS Indigenous Biodiversity, therefore allowing quarrying to be considered on land through application of the effects management hierarchy.



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