THE AGGREGATE & QUARRY ASSOCIATION OF NZ

BRIEFING TO INCOMING MINISTERS

QUARRY SECTOR AND AGGREGATE SUPPLY

November 2023

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 9-tonne truckload per person.

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.

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, either directly or as part of materials such as concrete. Such infrastructure is always important and is at the core of the Infrastructure Commission's Rautaki Hanganga o Aotearoa, New Zealand's Infrastructure Strategy, accepted by the Government in 2022. There will be increased demand for aggregate and sand to build infrastructure and housing to meet population projections, and to address the nation's infrastructure deficit.

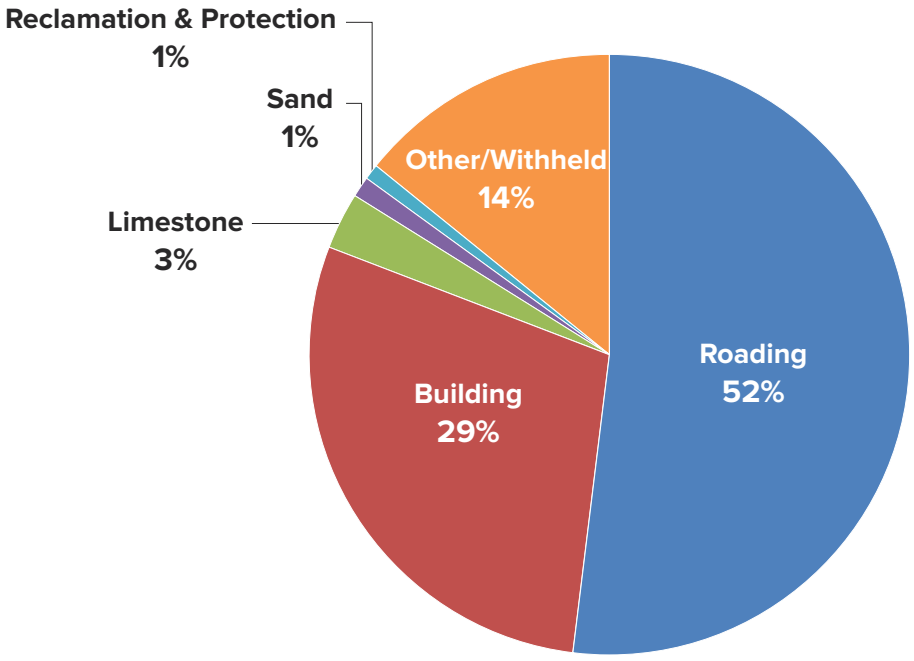
Additionally, as catastrophic weather events earlier this year confirmed, the impacts of climate change including rising sea levels will put added pressure on rock supply for sea walls, riverbank protection and restoration, and other adaptation strategies.

It is therefore critical that local aggregate resources throughout the country are identified, protected and effectively managed to build resilient new infrastructure and homes.

Our nation's urban spread and resulting development projects are already constrained by restricted availability of suitable local aggregate for construction. Planned regional growth projects and those now under construction involving major building and infrastructure developments are increasingly facing delays and 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.

In 2022 the AQA launched a sustainability Road Map for the Aotearoa New Zealand Quarry Sector. This road map sets out how the sector manages its material impacts on people and the environment, provides guidance on improvement, and suggests ways in which Government can help the sector deliver on its sustainability commitments, including climate change action. Individual quarry companies earn and retain their social licence to operate by engaging with iwi and communities in the rohe of which they live and work.

2021 Product Uses



KEY ISSUES

Access to Aggregate Resources

Adequate provision must be made now in planning documents to protect existing and potential aggregate 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 from other land uses, 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. An example is the Yaldhurst area in Christchurch. Such opposition from neighbours can see existing and future resources roped off which increases costs (and emissions) as quarries are forced to access more remotely sourced aggregate.

Resource Management Reform

Planning needs to be enabling so that resource consents are quicker to obtain and are less costly. Even where appropriate planning zones and controls exist, the time and cost for obtaining consents for a quarry can be horrendous. Even a favourable decision can take three to five years before a quarry will ever produce their first tonne of aggregate.

Inconsistent application of Resource Management Act (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.

Resource management 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. National direction and spatial planning are key requirements to ensure the positive effects of development are balanced with regional variations in community expectations and protection of the environment.

Current national planning instruments contain conflicting definitions, with some referring to aggregate extraction and others to quarrying activities. They also contain different gateway tests for that development that needs to occur in certain areas.

Quarrying and the Environment

Quarries fully expect to meet stringent environmental and resource management requirements for new or renewed consents. A good example here is Winstone Aggregates Pukekawa Quarry (https://aqa.org.nz/wp-content/uploads/2022/04/Pukekawa-Quarry-case-study.pdf) attached as Appendix 1.

However, some quarries have very low impact on the environment or local iwi and communities; the quarry sometimes sit idle due to fluctuations in demand, returning to activity in response to events such as natural disasters. To ensure the continuity of supply of aggregate, the resource management system needs to allow for these fluctuating demands and periods of quarry inactivity. This will create an enduring industry which can respond quickly and appropriately to natural disasters and sudden changes in market conditions.

Quarrying on Conservation Land

The AQA was extremely concerned at reports that the Government plans to implement a ban on **all** extractive sector activities on public conservation lands and waters. This would have profound implications for quarries across New Zealand. While it is unclear how such a ban would apply to quarries, the Aggregate Opportunity Modelling for New Zealand report released by the Infrastructure Commission in 2021 identified that 20-32% of future hard rock reserves are situated on Department of Conservation (DOC) administered land; most of this is on stewardship land which has generally lower conservation value. Any sterilisation of available quarry resources across the DOC estate would add a heavy cost to New Zealand's infrastructure and housing ambitions, including on iwi and regional communities.

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 facilities. An example is the extraction 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 dollar amount – and considerable carbon dioxide emissions – to the alternative of trucking material a long distance from an existing quarry.

Diamond Peak, Gore

AQA's Recommended Policies to Government

Recommendation 1: The Government, in consultation with the quarrying sector, develop a National Environment Standard (NES) for Quarrying to streamline resource consenting and ensure quarrying is conducted in an environmentally and socially responsible way, while providing direction to local authorities on the protection of existing quarries from encroachment of non-compatible land uses.

Recommendation 2: National direction and spatial planning balance the positive effects of development with regional variations in community expectations and protection of the environment. To do this resource management reforms need to clearly articulate how such conflicts will be addressed by setting 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.

Recommendation 3: The National Planning Instruments need to contain a consenting pathway for quarrying due to the locationally constrained nature of aggregates and sand, and the need to have quarries near to their markets to reduce transport cost and carbon emissions. This pathway will be subject to a consistent gateway test and undefined terms replaced with terms defined in the National Planning Standards (e.g. quarrying activities).

Recommendation 4: The Department of Conservation has processes in place for granting access to obtain aggregate quickly if there is need. These processes should be retained so that access to public conservation land is available to quarrying activities.

APPENDIX 1 – CASE STUDY

Conserving natural wetlands at Pukekawa quarry.

Pukekawa Quarry

On the banks of the Waikato River, Winstone Aggregates has taken quarrying to the next level in a partnership with local iwi, and nature conservation work. At Pukekawa quarry, the wetlands and other waterways are on the rebound.

Introduction

Pukekawa quarry has been operating on the banks of the Waikato River since the 1920s, a hard rock basalt quarry, and for the past 10 years, a sand extraction operation from the Waikato River. As part of the ongoing development and future of this North Waikato / South Auckland site, Winstone Aggregates prioritises the managing of environmental impacts, and engagement with iwi and local community.

Twelve people are employed on site, each multiskilled to cover a full range of materials extraction, processing and sales loadout. River dredging brings sand ashore for processing through a series of screens and gravity spirals, while basalt is blasted from the rockface and fed through a four-stage crushing and screening process, to produce a broad range of sand, roading and building products.

Managing Overburden

As is the case for quarrying generally, overburden management is the largest waste stream and can only be managed economically on site. Four years ago, Winstone's renewed its resource consents for storing overburden, best placed in gullies to absorb the volume in as small a space as practicable. Therein lies an issue of managing impacts on ephemeral waterways, and wetted pasture areas, under resource consent conditions.

To offset the impacts, Winstone Aggregates fenced off 4.8ha along a nearby stream, tributaries and wetlands, in all, 2.3km of fencing to exclude livestock on land leased to a drystock farmer. The company has controlled weeds, including willow, pampas grass, woolly nightshade and gorse; and animal pests, in particular, mustelids (stoats, weasels, ferrets).

Part of this work is the western stream enhancement, which started in 2017. This entailed 400 metres of fencing around the perimeter of the stream and an associated wetland.

Weed control and planting occurred first in the area referred to as Stream B (Appendix). Wetland 3b has been the focus since 2019, where willow was prolific. There have been three seasons of treating the willow with a drill-and-poison method.

Works have proceeded in a staged manner, to improve the condition of streams and wetlands in the gully environment. 5300 eco-sourced native seedlings have been planted within this ecological restoration area, including kānuka, mānuka, mahoe, pittosporum, and harakeke/flax.

A stream diversion for placing overburden necessitated the collection of native in-stream fauna and moving them to unimpacted habitat. To date Winstone Aggregates has translocated 9 longfin and 39 shortfin tuna (eels), 18 kōura (freshwater crayfish), one banded kōkopu, and 4 inanga (whitebait). More translocations will occur as overburden is progressively placed.

Shortfin eels (tuna)

Kōura (freshwater crayfish)

Inanga (whitebait)

Flax for Māori Weavers

Winstone Aggregates has built a strong relationship with three local iwi, Ngāti Tamaoho, Ngāti Te Atua, and Ngāti Amaru. Established as part of the sand extraction from the Waikato, a kaitiaki forum helps select plant species for site rehabilitation and ecological restoration.

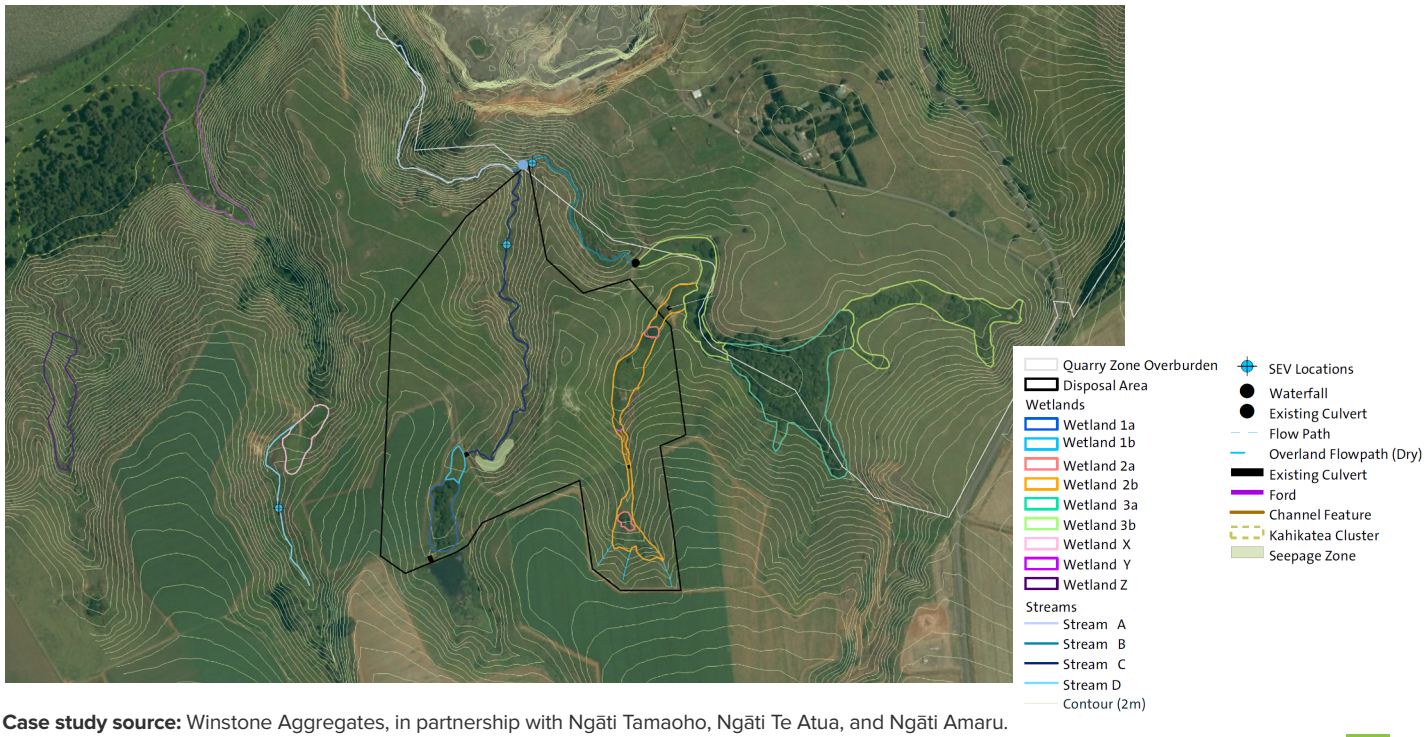
In conjunction with the kaitiaki forum, Winstone Aggregates is planning to plant harakeke of a type suitable for local weavers to harvest. The area has to be accessible, provide open space for processing harakeke, and not be located within active quarrying operations. The company holds regular hui four times a year with the kaitiaki forum to discuss kaitiakitanga (stewardship) responsibilities in relation to quarrying operations and environmental management.

Local Māori are also interested in other plant species of cultural importance, eg for traditional medicinal use (rongoā), and again, a priority is to provide access to these plants.

Winstone Aggregates has also safeguarded access to a cultural site of significance for iwi, a tohu (landmark) in the form of a very large stone.

Held at the quarry, the hui are also an opportunity to share information on upcoming works of interest, and also what's happening for iwi of interest. Both sides also explore opportunities for partnership, for example funding an ecological survey of Namuheiriro Island further down the Waikato River and supply of aggregate product to enable improved access to a burial area.

Figure 1: *Areas to be legally protected from stock are the new fencing areas around Wetland 3 and the western gully. The existing stock crossings shall remain available for stock crossing purposes.*



Case study source: Winstone Aggregates, in partnership with Ngāti Tamaoho, Ngāti Te Atua, and Ngāti Amaru.

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