

# Submission from the AQA on Future Selwyn

# August 2024

# Introduction

- 1. 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.
- 2. We would like to thank the Selwyn District Council for the opportunity to comment on <u>Future Selwyn</u>, the Future Selwyn Strategy
- 3. The purpose of Future Selwyn is to provide "a strategic framework that will guide where and how Selwyn District grows into the future".
- 4. The Aggregate and Quarry Association is interested in the strategy because of the need to protect aggregate and other quarry materials from competing land use and future development of the district, and to highlight its role in that development.

## Key points

- 5. The Future Selwyn Strategy needs to be clear that continued access to sand and aggregates will be planned for, and access will not be impeded by future development and alternative land uses.
- 6. Council planning must identify where rock is located and protect those areas from other development and alternative land uses so that access to such resources is not lost.

#### Aggregate and Selwyn

- 7. 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.
- 8. It is also important for increasing resilience and adapting to extreme weather events and climate change.
- 9. Due to recent and ongoing levels of construction and infrastructure development activity in the district, there is a growing demand for aggregate.
- 10. Selwyn District in particular, is a fast-growing district where aggregate is needed to support infrastructure, housing and other construction activity.
- 11. The population projections on page 7 of the Strategy show that the population is



expected to grow from 86,000 plus in 2024 to 153,000 plus by 2054.

- 12. This means on average an additional 2,233 houses per year will be needed over the next 30 years. This equates to approximately 625,000 additional tonnes of aggregate and sand per year<sup>1</sup> on top of what is needed for relevant infrastructure to support the increase in housing.
- 13. We congratulate the Future Selwyn document recognising some of the existing operational quarries. These operational quarries, along with areas where aggregate deposits are known, need to be acknowledged and protected.
- 14. There are also significant roading developments occurring, which will be a drain on local quarries' aggregate resources, including the Canterbury RONS, not to mention construction throughout other parts of the greater Christchurch area as a result of the post-earthquake rebuild which has already had a significant impact on the region's aggregate resources.

## Protect access to potential aggregate resources

- 15. For these reasons, we consider the lack of any real mention of sand and aggregate in the Future Selwyn Strategy to be a concern.
- 16. We believe there needs to be an acknowledgement of the role and contribution of aggregate and quarrying in Selwyn's future development and, in particular, Future Selwyn Strategy needs to be clear that continued access to sand and aggregate will be provided for, and access will not be impeded by future development and alternative land uses such as housing.
- 17. The AQA would be happy to talk to the council about what is known about where potential aggregate resources lie and the work being done at the national level on this.
- 18. It is also important to be aware that aggregate deposits are 'location specific'. They can only be sourced from where they are physically located and where the industry is able to access them economically.
- 19. Council planning must identify where the rock is located and protect those areas from new development and alternative land uses so that access to such resources is not lost. Attached, in the appendix, is a map of Selwyn showing known aggregate opportunity.
- 20. Due to its weight and volume, aggregate is very expensive to transport. An additional 30kms of travel typically doubles the cost of aggregate. This highlights that shifting large volumes from outside the region or far from where it is to be used is very expensive and would increase the cost of many of the proposed projects and residential development.

<sup>&</sup>lt;sup>1</sup> Based on the rule of thumb of 280 tonnes of sand and aggregate per house.



21. The aforementioned characteristics of aggregate deposits mean that quarries should be close to residential and other areas where the aggregate is likely to be needed, but not too close to cause problems for either the quarry or the residential area and associated activities in terms of reverse sensitivity issues.

#### Increasing resilience

- 22. Aggregates will play a major role in increasing Selwyn's resilience and adapting to extreme weather events and climate change. Reliable aggregate supply will be a key contributor to Direction number 4 under Resilient Communities: "Reduce risks faced by communities from natural hazards and the impacts of climate change".
- 23. River flooding is already an issue in the district with the Waimakariri and Rakaia rivers where aggregate will be needed for stop banks and other flood protection structures.

## Conclusion

24. To future proof the district and minimise the risk of future shortages of quarry materials, the strategy needs to protect aggregate resources from future development. Failure to do so will mean it will have to be sourced, at some expense, from outside the district.

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#### Appendix



Unpublished and preliminary aggregate opportunity modelling for the Selwyn District based on process developed by Hill & Chilton (2024). Results should not be used without consultation and review of relevant documentation and source data.



|                                      | 1. Contract (1. Contract)           |                                    |
|--------------------------------------|-------------------------------------|------------------------------------|
| High<br>Opportunity                  | Low<br>Opportunity                  | Hig<br>Opportunit                  |
| NE - PALEOGENE<br>NE MODEL RESULTS   | FELSIC VOLCANIC                     | S MODEL RESULT                     |
| High<br>Opportunity<br>MODEL RESULTS | Low<br>Opportunity<br>GRAVEL & SAND | Hig<br>Opportunit<br>MODEL RESULTS |
| High<br>Opportunity                  | Low<br>Opportunity<br>SAND MODE     | Hig<br>Opportunit                  |
| High<br>Opportunity                  | Low                                 | Hig                                |

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