

QLDC Council
16 September 2021

Report for Agenda Item | Rīpoata moto e Rāraki take 3

Department: Planning & Development

Title | Taitara Gorge Road Natural Hazards District Plan Review – Pre-Notification Public Consultation

PURPOSE OF THE REPORT | TE TAKE MŌ TE PŪRONGO

- 1 The purpose of this report is to outline a proposal for informal, pre-notification consultation with potentially effected landowners, occupiers and businesses across the land subject to the Gorge Road natural hazards district plan review. This consultation is to be based on the technical assessments commissioned to-date and attached to this report. Approval is sought for officials to undertake the proposed consultation.

EXECUTIVE SUMMARY | WHAKARĀPOPOTOTANGA MATUA

- 2 The Operative District Plan (**ODP**) is currently being reviewed. This process includes a site-specific review of zoning across two alluvial fans located off Gorge Road near the Queenstown CBD. These areas have not been zoned as part of the current plan review to-date, to allow the implications of the natural hazards in this area to be studied in further detail. The focus of this part of the plan review is to understand the nature and scale of natural hazard risk across these two alluvial fans, and what options are most appropriate to manage that risk. Recently completed geotechnical assessments in this area have shown some of the land as being subject to high levels of natural hazard risk.
- 3 Pre-notification consultation with the local community is a critical component of this plan review process. Council is directed by Chapter 28 (Natural Hazards) of the Proposed District Plan (**PDP**) to manage risk to a level that is 'tolerable to the community'. Consultation with the community directly affected by elevated levels of risk is proposed to seek feedback on possible risk management options. In addition, the technical risk information, and the assessments of the possible risk management options, will be explained and the opportunity provided for the community to ask questions. The pre-notification consultation is proposed for the fourth quarter of 2021.

RECOMMENDATION | NGĀ TŪOHUNGA

That Council:

1. **Note** the contents of this report and attached technical reports; and
2. **Approve** pre-notification consultation on risk management options for the Gorge Road study area being undertaken, based on the attached technical reports.

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1/09/2021

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CONTEXT | HOROPAKI

Background

- 4 The land being reviewed comprises two discrete locations near the Queenstown CBD, on the western side of Gorge Road (see **Attachment A**). These two areas are located on the surface of geological features known as ‘alluvial fans’. The northernmost alluvial fan is referred to as **Brewery Creek**, while the southernmost alluvial fan is referred to as **Reavers Lane**. Alluvial fans are commonly associated with natural hazards including rockfall, debris flows, liquefaction, and flooding. It is known that the Brewery Creek and Reavers Lane alluvial fans are subject to these natural hazards. Expert technical advice commissioned by the Council shows that high levels of risk from rockfall and debris flow are present across both alluvial fans.
- 5 Under the ODP, the Brewery Creek fan is zoned High Density Residential and Business, and the Reavers Lane fan is zoned High Density Residential. The areas are extensively developed, with residential, visitor accommodation, commercial, retail, and industrial land uses present. The area is subject to continuing re-development pressure given its close proximity to the Queenstown CBD.
- 6 The combination of areas of high risk from natural hazards with urban re-development pressure presents a challenging planning context. Work completed to-date includes undertaking detailed and robust technical assessments of the risk and of the options to manage risk. Part of the process of assessing management options is to consult with the community to understand attitudes and viewpoints about the range of options to respond to the risk.
- 7 One round of community consultation was undertaken in May 2019. This involved two community sessions where technical risk information was presented to those present, and an exercise to understand general tolerance to risk was undertaken. Since May 2019, further, more detailed technical assessments have been undertaken on the levels of risk, including information on risk to life, and work has progressed on options to address the levels of risk. Feedback on the response options can now be sought from the community, based on the information now available, which is summarised in the following sections of this report.

Risk Assessment

- 8 Beca Limited (**Beca**) were engaged to evaluate natural hazard risks affecting the Brewery Creek and Reavers Lane areas. The report “Risk Assessment Natural Hazards Affecting Gorge Road, Queenstown (November 2020)” (Attachment C) assessed rockfall, debris flow, liquefaction and flooding hazards.

Flooding and Liquefaction:

- 9 Beca assessed liquefaction and flooding hazards qualitatively. This means the hazards were evaluated using a pre-defined rating scale or set of matters known about the hazard. Beca’s outputs from this assessment provide a spatial representation of the area affected by the hazards and a description of their consequences.

- 10 Liquefaction hazard was assessed in accordance with the MBIE (2017) methodology, which evaluates the vulnerability of damage to land during a specified seismic event. Beca found that liquefaction damage is possible for the lower areas of both Brewery Creek and Reavers Lane alluvial fans, and unlikely for the upper areas of the fans¹.
- 11 Beca evaluated flood hazard by updating the existing Queenstown flood model. At Brewery Creek, no overflow of flood waters is anticipated until it reaches Matakauri Wetland outside the area subject to this plan review. Minor flooding occurs on other parts of Brewery Creek where it is not conveyed by the existing pipe network. At Reavers Lane, bridges and culverts cause restrictions in flow resulting in overflow across private property. 'High flood hazard' areas are identified in the lower parts of Reavers Lane, primarily due to water depth rather than high water velocities².
- 12 A qualitative approach to assessing hazards does not attempt to assign measurable probabilities to the occurrence of hazard events. This approach was applied to liquefaction and flooding on the basis that these hazards are very unlikely to result in loss of life or significant property damage. It is appropriate that the level of assessment be commensurate with the nature and scale of the hazards being considered.

Rockfall and debris flow

- 13 Beca assessed rockfall and debris flow hazard quantitatively. This quantitative assessment requires the development of a detailed understanding of potential trigger events and debris sources, as well as comprehensive modelling of the resulting nature, location and scale of the hazard events. To obtain the depth and breadth of information required for this quantitative assessment, Beca investigated historical events, undertook field mapping and ground investigations, and developed models of potential hazard events. This more detailed assessment was applied to rockfall and debris flow hazards as their consequences are more significant than liquification and flooding, and they are more likely to result in loss of life and property damage. Given this, Beca sought to develop measurable probabilities for loss of life and property loss from debris flow and rockfall events.
- 14 The probability metric applied by Beca to understand loss of life is 'Annual Individual Fatality Risk' (**AIFR**). This sets out the probability of an individual most at risk of being killed in any one year as a result of a debris flow or rockfall event. Beca followed the Australian Geomechanics Society (**AGS**) Guidelines for Landslide Risk Management (2007) methodology to quantify AIFR.
- 15 The probability metric applied to understand property loss from rockfall and debris flow hazard is 'Annual Property Loss' (**APR**). This sets out the annual probability of total property loss as a result of a debris flow or rockfall event. The methodology applied to this assessment also follows the AGS guidelines.

¹ Appendix M 'Liquefaction Vulnerability' of Beca's report contains maps illustrating the areas subject to liquefaction hazard

² Appendix N 'Flood Maps' of Beca's report contains the maps illustrating the areas subject to flooding

16 Beca combined the rockfall and debris flow AIFR values to determine overall slope stability risk in Brewery Creek and Reavers Lane areas. These combined AIFR values are presented spatially as ‘risk contours’. The resulting risk contour maps³ are shown at Attachment B of this report. The risk contours contain AIFR values ranging from 10^{-6} to 10^{-3} . This probability metric can be understood in a number of different ways (see Table 1 below). The key output of Beca’s investigation is that a range of life risk values have been identified which show that risk changes significantly across the Brewery Creek and Reavers Lane areas.

Probability 1 in... (per year)	Is the same as (per year)	Is the same as (per year)	Is the same as (per year)	Is the same as (over lifetime)*	Is the same as (over building life)†
1,000	10^{-3}	0.001	0.1%	8%	5%
10,000	10^{-4}	0.0001	0.01%	0.8%	0.5%
100,000	10^{-5}	0.00001	0.001%	0.08%	0.05%
1,000,000	10^{-6}	0.000001	0.0001%	0.008%	0.005%

Table 1: Different ways of expressing risk probabilities

17 Table 1 assists in illustrating that life risk probabilities exist on a continuum. A life risk probability of 10^{-3} represents a high risk. It can also be understood as an 8% chance of a person being killed during their lifetime⁴. A life risk probability of 10^{-6} represents a lower risk. It can be understood as a 0.005% chance of a person being killed during their lifetime. Beca found that this full range of life risk probabilities are present across the Brewery Creek and Reavers Lane alluvial fan areas.

18 At Brewery Creek, Beca’s assessment shows higher levels of risk are present in the upper parts of the fan and in the area surrounding the Brewery Creek channel. At Reavers Lane risk levels follow a more concentric pattern, being higher in the upper parts of the fan and lower in the lower areas of the fan.

19 Importantly, risk from rockfall and debris flow have been identified on parts of both fans that exceed published guidelines for risk tolerability⁵ and which have been the subject of land use management intervention in other parts of New Zealand (i.e. Awatarariki Fanhead, Matata and Port Hills, Christchurch). Figure 1 below assists in illustrating the continuum of life risk probabilities and compares the probabilities identified at Brewery Creek and Reavers Lane with a number of other known risks to life. Figure 1 also identifies the levels of life risk that triggered land use planning intervention at the Port Hills (10^{-4}) and at Matata (10^{-5}).

³ Appendix J ‘Slope Stability Life Risk Maps’ of Beca’s report

⁴ Assuming an 80 year lifetime

⁵ Australian Geomechanics Society (2007)

20 Beca’s findings with respect to rockfall and debris flow risk have been peer reviewed by natural hazard risk experts at the Institute of Geological and Nuclear Science (GNS Science). This peer review process has found Beca’s assessment process and associated findings to be robust. It should be noted that Beca’s findings on liquefaction and flooding hazard have not been peer reviewed. As discussed above, this approach is commensurate with the level of risk posed by liquefaction and flooding which are much less likely to result in loss of life or substantial property damage.

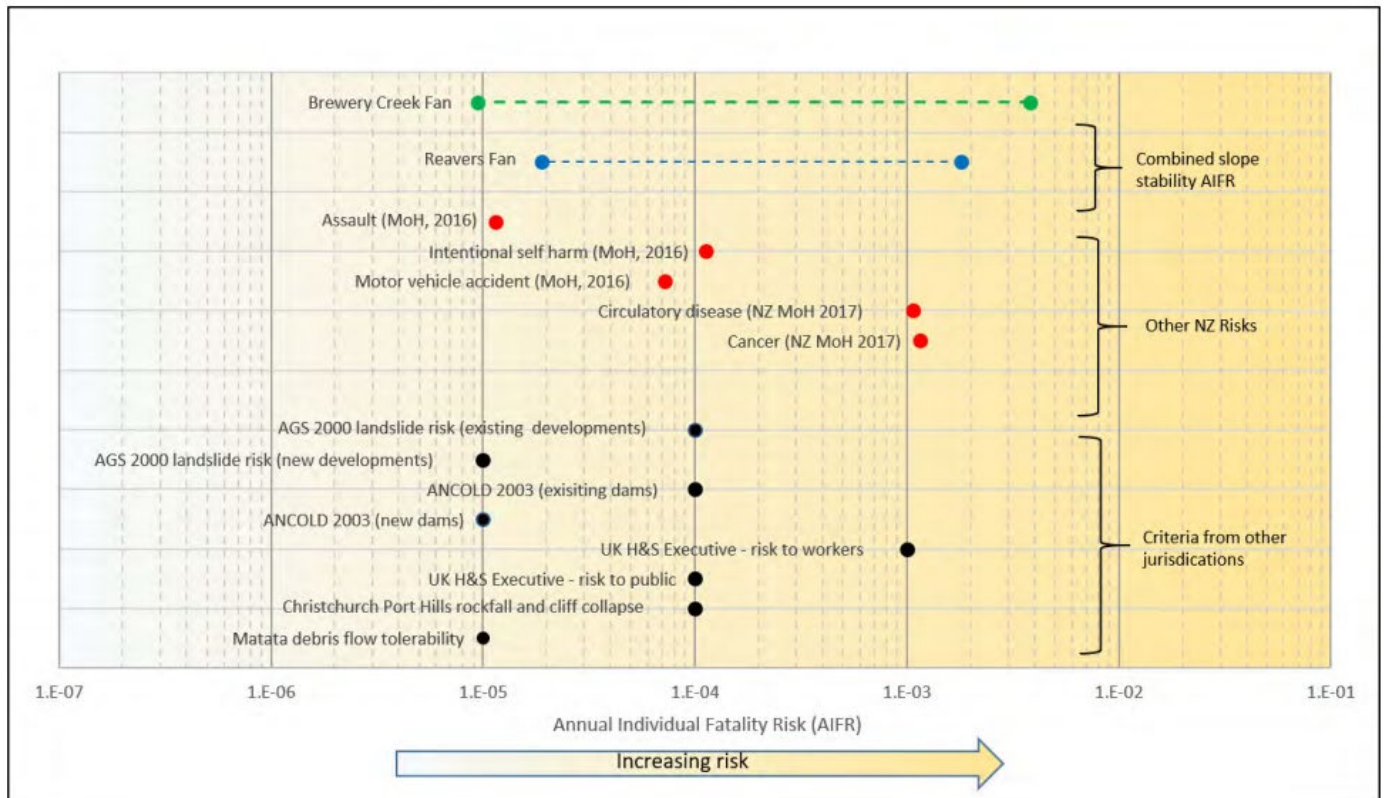


Figure 1: Summary of common risks and risk tolerability limits

Summary of risk management options

21 Four possible risk management options have been developed by officers to address the identified rockfall and debris flow risk in the Gorge Road area. These risk management options include:

- a) Status quo
- b) Engineering
- c) Manage
- d) Reduce

22 These risk management options have been developed with the applicable Resource Management Act 1991 (RMA) policy framework in mind. The RMA policy direction for addressing risk in the Queenstown Lakes District is provided in Chapter 28 (Natural

Hazards) of the PDP and Section 4.1 of the Otago Regional Policy Statement. Key policy directions include:

- Manage to a level tolerable to the community⁶;
- Avoid activities that result in significant risk⁷;
- Restrict activities where risk is intolerable⁸;
- Minimise risk in already developed areas⁹;
- Not preclude development within tolerable limits¹⁰; and
- Reduce the use of hard engineering¹¹.

23 Table 2 below provides an overview of these four risk management options and the type of intervention that each is likely to apply to the different levels of natural hazard risk that have been identified.

Risk Level	Option A - Status quo	Option B – Engineering	Option C – Manage	Option D – Reduce
Significant	Risk assessed on a case by case basis	Construct mitigation structures AND enable development	Same built form – no change/increase, same or less vulnerable use	Remove all built form and uses
Intolerable			Small/limited increases in built form, same or less vulnerable use	
Tolerable			Allow development and vulnerable uses within tolerable limits	No further development, same or less vulnerable use
Low risk	No intervention			

Table 2: Summary of common risks and risk tolerability limits

24 Option A – Status quo would largely represent a continuation of the current approach to managing natural hazard risk in the Brewery Creek and Reavers Lane areas. Natural hazard risk would not be considered unless a resource consent was required, and the activity status or matters of control or discretion, enabled natural hazards to be considered by Council in undertaking its assessment of the activity.

25 Option B – Engineering would see physical engineering structures established in and around the assessment areas in an attempt to reduce, deflect or contain rocks or debris

⁶ Objective 28.3.1 A

⁷ Policy 28.3.1.4

⁸ Policy 28.3.1.7

⁹ Policy 28.3.1.5

¹⁰ Policy 28.3.1.6

¹¹ Policy 28.3.1.11

to reduce risk to life. Zoning and planning controls would be the same as the status quo option.

- 26 Option C – Manage would apply a more risk specific approach using land use rules in the District Plan to apply responses specific to the different levels of risk that have been identified. More restrictive rules would apply in higher risk areas that would prevent any further development, while less restrictive rules would apply in areas of lower risk to ensure levels of risk do not exceed tolerable levels.
- 27 Option D – Reduce would ensure risk levels are reduced where they are significant or intolerable. This would require managing existing use rights in higher risk areas, possibly by removing people and built form.
- 28 Beca’s risk assessment has also identified a large area of land that is not subject to levels of risk that would require intervention. In these lowest risk areas, each of the management options would be more enabling of development.
- 29 It should be noted that these risk management options do not address flooding or liquefaction hazards at this time. As noted earlier, these hazards do not present a substantial threat to people or property in the same way as rockfall and debris flow. The need for specific policy intervention to address flooding and liquefaction will be considered in due course. These hazards can commonly be addressed on a site-by-site basis through resource consenting processes.

Options assessment: engineering options

- 30 Beca were engaged to assess the potential for engineered hazard management options to reduce life risk from rockfall and debris flow. The report “Gorge Road Natural Hazards - Engineering Options Report (March 2020)” is included as Attachment D. Beca were asked to focus their assessment on rockfall and debris flow hazard as it is known that these hazards present the greatest risk to life. Beca were not asked to investigate engineering options to address flooding or liquefaction hazard as these present a much lower risk to life.
- 31 As part of this work, Beca developed three concept engineering options for each alluvial fan. Each option was developed taking into account the unique circumstances of the Brewery Creek and Reaver Lane areas. The three engineering options include:
 - a) Debris flow channels or bunds¹² – These structures are designed to allow debris to be directed away from people and property. They aim to direct debris to safe run out locations.
 - b) Debris flow fences¹³ – These structures comprise flexible ring net barriers that are constructed across the main channel of the debris flow path. They are designed to

¹² Appendix A ‘Debris Flow Channel Design’ of Beca’s engineering options report contains the conceptual channel design details

¹³ Appendix B ‘Debris Flow Fences’ of Beca’s engineering options report contains the conceptual debris flow fence design details

resist the load of debris as it travels down the channel and trap some of the material before it reaches populated areas.

- c) Rockfall barrier fences¹⁴ – These structures comprise a system of steel cables, ground anchors and mesh to absorb rockfall impact energy. They are designed to prevent released rocks from travelling into populated areas.
- 32 Beca assessed each engineering option by simulating their interaction with the hazard events identified in their earlier risk assessment. Following this, Beca re-modelled the AIFR (life risk probability) outputs to understand their effectiveness in reducing risk to life.
- 33 In the case of debris flow hazard, it was found that the engineered options are only capable of mitigating small debris flow events which have a smaller impact and more frequent return period¹⁵. For medium¹⁶ and large¹⁷ debris flows events which have a much greater level of impact and a longer return period, the engineering options are not considered to be effective as they would not be capable of containing the amount of material being released. As a result, life risk for parts of both alluvial fans would continue to exceed published guidance for life risk tolerability, with AIFR values continuing to reach 10^{-3} in some areas. In addition, Beca found that the engineering options would result in a transfer of risk across the alluvial fan surface, meaning that some properties previously assessed as having tolerable levels of risk would become intolerable.
- 34 For rockfall, it was found that the engineered option is effective at reducing life risk to tolerable levels.
- 35 Beca's findings demonstrate that engineering options alone are not effective at reducing life risk to tolerable levels, particularly in the case of debris flow hazard.

Options assessment: Loss modelling

- 36 This report was prepared by GNS Science and provides information on the monetary losses as a result of building damage during rockfall and debris flow hazard events. The report "Queenstown Debris Flow and Rockfall Loss Modelling for Land Use Planning Policy Options (May 2021)" is included as Attachment E. It is a scenario-based assessment, which uses the loss modelling tool RiskScape. Initially, the model generated results for the amount of building damage that could occur based on the current day buildings present in the area. As expected, a small event results in the least losses, and a large event results in the highest losses – approximately \$40M from a large debris flow on Reavers Fan.
- 37 The modelling tool was used to show the degree of losses incurred with each of the risk management options in place. This allows a comparison of the benefits of each option, in

¹⁴ Appendix C 'Rockfall' of Beca's engineering options report contains the conceptual rockfall fence design details

¹⁵ Small events were defined by Beca as having a 50 – 200 year return period in Brewery Creek and a 100 – 2,500 year return period in Reavers Lane.

¹⁶ Medium events were defined by Beca as having a 200 – 2,500 year return period in Brewery Creek and a 2,500 – 6,700 year return period in Reavers Lane.

¹⁷ Large events were defined as having a 2,500 – 10,000 year return period in Brewery Creek and a 6,700 – 20,000 year return period in in Reavers Lane.

terms of the losses avoided by having that management option in place. To emphasise the comparison, maximum development under each of the options was taken as the future built environment to which the hazard scenarios were applied.

38 As might be expected, the status quo option results in the largest losses, as this is the option that allows the greatest amount of built development to occur with no comprehensive mitigation measures applied. The greatest benefit, in terms of the greatest reduction in losses, results from the Reduce option, which by removing built form and stopping further development in high risk areas, results in the smallest number of buildings to be impacted by an event (for example, reduction in losses of 100% for small debris flow events, 97% reduction for medium events, and 84% reduction for large events on Reavers Fan compared to the status quo option).

Options assessment: socio-economic assessment

39 This report was prepared by Market Economics and assesses the social and economic impacts of implementing each of the risk management options, helping to fulfil the requirements of section 32 of the RMA, to identify and assess the benefits and costs of the environmental, economic, social, and cultural effects anticipated from the implementation of options. The report “Gorge Road Hazards: Social and Economic Impacts Report (July 2021)” is included as Attachment F.

40 In this context, social impacts are changes to individuals and communities as a result of implementing each option. One of the key questions addressed is *would the community be better or worse off after a hazard event, had the management option been in place?* This question is answered for a range of social and economic outcomes, based on the Treasury’s Living Standards Framework, which focuses on the four wellbeing capitals of human, financial and physical, social, and natural. Costs to Council are also considered. The question is answered in a way that allows a comparison of the options, by using a scale of most negative to most positive.

41 A traditional Cost Benefit Analysis is incorporated within the assessment. This considers whether the economic benefits of an option outweigh the economic costs. The results of this assessment are monetised values. These monetised results are considered alongside the less tangible costs and benefits through the Living Standards Framework, noting that international literature suggests that social impacts can be 2.4 times those of tangible insurance costs.

42 The results of this assessment show that:

- The status quo will have the worst result for social and economic outcomes, but will also have the lowest costs.
- The ‘reduce’ option will have the greatest benefits for social and economic outcomes following a hazard event, but will also cost the most, and those costs may exceed the benefits.
- The ‘manage’ option will have the least benefits after the status quo, but the costs associated with this option are likely to be lower than the benefits.

- The costs of the ‘engineering’ options are higher than the ‘manage’ option, and the benefits will also be greater.
- 43 The assessment provides valuable information for consultation with the Community, but should not be used in isolation to select a preferred option. This is because selection of a preferred option will require a value judgement to be placed on the outcomes achieved by each of the options, and what the community and Council are prepared to pay for achieving those outcomes. It is acknowledged that a decision-making framework will be required, following the community consultation, in order to work through the selection of a preferred option.

Consultation: Reasons for consultation

- 44 In order to meet the legal requirement to give effect to the higher level policy direction to manage risk to a level tolerable to the community, it is necessary to have an understanding of what the community thinks of that risk through engaging directly with the community.
- 45 This consultation with the community will provide an opportunity to explain the latest risk information, in person, to those to whom it directly relates. This information is technical in nature and difficult to understand by simply reading a report, or through online communications.

ANALYSIS AND ADVICE | TATĀRITANGA ME NGĀ TOHUTOHU

- 46 It is intended to undertake community engagement to seek feedback on the possible options to manage risk. Planning of the engagement process is underway, and it is likely to take place in the fourth quarter of 2021.
- 47 Risk is understood and felt differently by different people. The procedure for understanding must therefore allow the full range of views to be expressed and taken into account within the plan review process.
- 48 Rate payers are traditionally the focus of engagement processes and are generally well represented. However, it is acknowledged that not all people who may be affected by this plan review process will be engaged by the usual forms of local government consultation. It is known that the Brewery Creek and Reavers Lane community is made up of a people from a wide range of backgrounds and different socio-economic characteristics. In particular, transient households comprising seasonal, tourism and hospitality workers, and other groups whose household incomes are lower than in other parts of the District. Further, it is understood that a significant proportion of dwellings in this area are rented/not owner occupied. In addition, the two alluvial fans accommodate a range of commercial visitor accommodation, industrial and service type activities that employ a large number of people. Officers are live to this diversity and the unique characteristics of the community in this area and as such, special efforts are proposed to ensure all community groups have the best opportunity to engage in the consultation process.

Options for consultation

- 49 There are numerous ways to approach consultation, however in this assessment there is only one reasonably practicable option (section 77 of the Local Government Act 2002) for seeking feedback on risk management options. The proposed consultation option is an intensive community engagement process of targeted, independently facilitated, face-to-face sessions with those most affected by the elevated levels of risk. This option is explained in more detail below.
- 50 The option of undertaking no consultation is dismissed, as it would not be possible to form a robust understanding of the community's tolerance to risk or its thoughts on the management options without first asking them. A lack of understanding of these matters would threaten the quality and robustness of the section 32 RMA process.
- 51 The option of an arms-length consultation process (involving a mail-out and written feedback) is also not preferred as this provides no ability to ensure people understand the risk information, and has a risk of low participation, both of which would make it hard to gauge community tolerance and response to management options, threatening the quality and robustness of the section 32 RMA process.

The proposed consultation

- 52 The proposed consultation is an intensive community engagement process of targeted sessions. Some of the proposed management options are likely to have significant implications. The scale of these possible implications suggests a bespoke, targeted approach to community engagement is required.
- 53 It is acknowledged that this type of intensive, targeted consultation can only take place under alert level 1 or 2 and would need to be well managed under both alert levels. Plans are underway to ensure consultation is safe and compliant with relevant alert level rules.
- 54 There are three key outputs of the community engagement process:
- a) To inform the community of the updated information on the levels of risk present in the area.
 - b) To inform the community of the technical assessments that have been prepared to understand the costs and benefits of the four proposed management options.
 - c) To seek feedback from the community on their preferences of the four proposed management options.
- 55 The consultation will seek to understand the community's risk tolerance by gauging what responses they consider necessary to address the different levels of risk that have been identified. For example, if feedback favours preventing residential activities in the worst affected areas, it can be concluded that the highest levels of risk are not tolerable to the community.

- 56 Officers have engaged an independent expert facilitator to assist in the development of a consultation methodology. This methodology is being informed by the previous engagement undertaken with the Brewery Creek and Reavers Lane community, as well as the facilitator's other experiences of community engagement on natural hazard issues, and discussion with key staff across Council and from Otago Regional Council.
- 57 While the consultation methodology has not been finalised, it will require the combination of several component parts to ensure optimal engagement levels are achieved. These components may include the following:
- a) Public drop-in sessions – These drop in sessions will seek to provide the Brewery Creek and Reavers Lane community with an update on the latest technical assessments that have been prepared. The focus will be to share information as opposed to collecting views, however any general feedback will be welcomed, collected and taken into account as we move towards the engagement process. These drop in sessions may include a multi-agency approach, (i.e. other agencies that deal with natural hazards and emergency response such as ORC, QLDC, Redcross and Civil Defence Emergency Management), and elected member engagement will be sought.
 - b) Targeted consultation sessions – These sessions will be highly structured and focused on bringing together parts of the community that are subject to similar levels of natural hazard risk. These sessions will provide officers with specific feedback on community preferences with regard to the risk management options and their associated outcomes.
 - c) Community reference/invited parties' session – These sessions will seek to ensure feedback is received from a representative range of community members, including those that are not easily engaged through other means (i.e., those connected with recent immigrants/itinerant residents, development/property interests, business community and their employees). These sessions will allow more in-depth discussions and provide a 'touchstone' for a wider range of current and future interests connected with the area.
 - d) Independent consultation/engagement - Engagement with other interested groups and statutory bodies will also be undertaken. This may include consultation with Aukaha and Te Ao Marama, ORC, and central government organisations such as the Ministry for Education and Ministry for the Environment.
- 58 The advantages of this consultation proposal include:
- a) The process allows for meaningful discussion of the latest technical information that has been prepared and the options to address risk with those most affected, ensuring the community has the best opportunity to understand information relevant to them. This potentially increases the trust the community has in the Council for managing the risk.
 - b) The process recognises the unique characteristics of the Brewery Creek and Reavers Lane community and looks to apply a range of best practice engagement approaches

to ensure that feedback is received that is genuinely representative of the different groups likely to be affected by the plan review.

- c) The process is being developed in consultation with an independent expert facilitator experienced in natural hazards related community engagement.
- d) The process is being developed using a cross-organisational and cross-agency approach to ensure that the full range of opportunities and risks are canvased and addressed at the outset.
- e) Opportunity is provided to the community to have an influence on the option selected to address risk, meaning greater 'buy-in' to the process and final option taken through to notification of a plan change. Greater buy-in means submissions on the notified plan change are likely to be more focused and targeted, which should result in a more efficient hearing process.
- f) The proposal allows the greatest understanding of the community's tolerance for risk and preferences for risk management, as it should result in a larger number of people directly affected providing feedback. This should result in a robust section 32 assessment to better inform decisions.

59 The disadvantages of the proposal include:

- a) The proposed process of direct engagement is reasonably time-intensive to implement. To help manage this, an external facilitator has been engaged to help organise, plan and run the process.
- b) The process involves a number of sessions or 'streams' of engagement designed to increase its effectiveness. This approach will increase the complexity and overall length of time needed to complete the engagement, and subsequent analysis of feedback. The length of time required for this engagement may cause a level of uncertainty for the community.
- c) Face-to-face discussions of issues where participants can be expected to have high emotions and strong opinions being raised. The information being shared relates to risk to life and property and will have implications for future property values, so it is likely to be of concern to participants and involve conflicting perspectives and interests. It is intended to manage this by using an independent facilitator and having the technical experts available to answer questions.
- d) Councillor presence at the community sessions will help to reassure people that Council is taking ownership of these issues, but could see Councillors being lobbied directly by those affected and expected to respond independently of their decision-making role.

60 Overall, the valuable information that the proposed consultation process will provide is considered to outweigh the disadvantages of the proposal. In addition, the disadvantages can be managed.

CONSULTATION PROCESS | HĀTEPE MATAPAKI:

> SIGNIFICANCE AND ENGAGEMENT | TE WHAKAMAHI I KĀ WHAKAARO HIRAKA

- 61 This is an informal, non-statutory consultation process which nevertheless will be relied on in subsequent statutory reports and processes. The Council is being asked to approve a consultation process going ahead, rather than to make a decision on a particular option to manage risk. The decision to approve the pre-notification consultation is therefore a matter of low significance, as determined by reference to the Council's Significance and Engagement Policy.
- 62 Regarding the four criteria for determining significance:
- a) The consultation process is bespoke and specific to a confined area close to the Queenstown CBD. There is no general impact of the consultation process to the wider District.
 - b) While Council's final decision on a risk management approach is likely to be of wider interest, the community of interest for the consultation process is confined to the specific study area and particularly those subject to elevated levels of risk.
 - c) The consultation proposal is consistent with existing Council policies and strategies.
 - d) There is no anticipated impact from the consultation proposal on Council's capability and capacity.

> MĀORI CONSULTATION | IWI RŪNANGA

- 63 Council has an agreement with Aukaha and Te Ao Marama regarding consultation on District Plan review processes. Both organisations have been informed of the project with no issues raised to date. Officers will directly engage with iwi and rūnanga representatives as part of this consultation process, as well as formally as required by the RMA prior to publicly notifying the plan review.

RISK AND MITIGATIONS | NGĀ RARU TŪPONO ME NGĀ WHAKAMAURUTANGA

- 64 This matter relates to the Community & Wellbeing risk category. It is associated with RISK00056 Ineffective Provision for the Future Planning and Development Needs of the District within the QLDC Risk Register. This risk has been assessed as having a moderate inherent risk rating.
- 65 The approval of the recommended option will support the Council by allowing the implementation of additional controls for this risk. The consultation process provides an opportunity to understand community tolerance to risk and seek feedback on response options, which will allow more robust district planning provisions to be developed.

FINANCIAL IMPLICATIONS | NGĀ RITENGA Ā-PŪTEA

- 66 Works associated with the proposed pre-notification consultation can be funded from the existing district plan review budget. Any other actions necessary to undertake the proposed consultation will not require changes to the Annual Plan or Ten Year Plan and can be funded from existing budgets.
- 67 The detailed funding implications of the four risk management options have not been undertaken at this time. It is considered appropriate that such work not be undertaken until the community's risk management preferences have been canvassed through the proposed consultation process. It is considered that sufficient high level information on the possible costs and benefits of the proposed risk management options have been obtained at this time (i.e. through Beca's engineering options assessment and the Market Economics socio-economic impacts assessment) to robustly inform the community consultation process.

COUNCIL EFFECTS AND VIEWS | NGĀ WHAKAAWEAWE ME NGĀ TIROHANGA A TE KAUNIHERA

- 68 The following Council policies, strategies and bylaws were considered:
- Vision Beyond 2050. The proposed consultation process is part of a project directly relevant to the 'disaster-defying resilience' and 'thriving people' principles of this strategy.
 - Communications Policy. The proposed consultation is consistent with this policy, and planning staff are working closely with communications staff on this matter.
 - The notified and partially operative Otago Regional Policy Statement
 - QLDC Proposed District Plan
- 69 The consultation proposal is consistent with the principles set out in the named policy/policies.
- 70 This consultation proposal is not separately identified in the Ten Year Plan or Annual Plan, but it is part of the district plan review process, which is covered in these plans.

LEGAL CONSIDERATIONS AND STATUTORY RESPONSIBILITIES | KA TURE WHAIWHAKAARO, ME KĀ TAKOHAKA WAETURE

- 71 The proposed consultation process is not a statutory requirement. However, it will help gain an understanding of community tolerance to risk, as required by the RMA policy direction, and therefore fulfil statutory responsibilities under sections 32 and 73(4) of the RMA.

LOCAL GOVERNMENT ACT 2002 PURPOSE PROVISIONS | TE WHAKATURETURE 2002 O TE KĀWANATAKA Ā-KĀIKA

- 72 Section 10 of the Local Government Act 2002 states the purpose of local government is (a) to enable democratic local decision-making and action by, and on behalf of, communities; and (b) to promote the social, economic, environmental, and cultural well-

being of communities in the present and for the future. Support of the recommendation will help officers with robust understanding of the preferred management approach and tolerance of affected community members;

73 The proposed consultation:

- Can be implemented through current funding under the Ten Year Plan and Annual Plan;
- Is consistent with the Council's plans and policies; and
- Would not alter significantly the intended level of service provision for any significant activity undertaken by or on behalf of the Council, or transfer the ownership or control of a strategic asset to or from the Council.

ATTACHMENTS | NGĀ TĀPIRIHANGA

A	Areas under review
B	Slope Stability Annual Individual Life Risk Contours
C	Beca Limited Risk Assessment Natural Hazards Affecting Gorge Road, Queenstown (November 2020) (Executive Summary and full report)
D	Gorge Road Natural Hazards - Engineering Options Report, (March 2020)
E	Queenstown Debris Flow and Rockfall Loss Modelling for Land Use Planning Policy Options, (May 2021)
F	Gorge Road Hazards: Social and Economic Impacts Report (July 2021)