

10 June 2021

Via email: fireplans@fireandemergency.nz

Dear Sir / Madam,

SUBMISSION ON FIRE PLAN FOR OTAGO, TE KEI 2021-2024

Queenstown Lakes District Council (QLDC) would like to thank Fire and Emergency Management New Zealand (FENZ) for the opportunity to present this submission on the Fire Plan for Otago, Te Kei 2021-2024 (the Plan).

The duty of managing natural hazard risk (including from wildfire) in New Zealand is spread across many agencies. In the absence of national direction setting out the roles and responsibilities of these agencies and how they should be working together to achieve positive outcomes, it is critical that inter-agency frameworks are developed early in the plan making process. The development of the Plan is one such opportunity to achieve a joined-up approach to wildfire risk management.

Overall, QLDC supports the clear direction set out in the Plan to assess fire risk within Otago. The Plan highlights the need to move beyond an understanding of fire hazard alone, and transition towards a risk management approach. This risk management approach requires an evaluation of the likelihood of the hazard and its associated consequences. The Plan sets out a proactive intent to accurately understand relevant localised conditions that contribute to fire risk.

While this strategic direction is supported, QLDC does not consider that the Plan follows through effectively with this commitment. QLDC's submission feedback is primarily concerned with the lack of clarity over the risk assessment methodology, gaps in the stakeholder schedules (Appendix 1) and inconsistent selection of zone information attributes within the Central Zone and Lakes Zones (Appendix 2) for areas within QLDC boundaries. In addition, QLDC is concerned with the Plan's level of detail with regard to the timeframes for the completion of fire risk assessments and their spatial representation as well as lack of clear references to the update of tactical plans to support a coordinated wildfire response.

QLDC's submission requests that Fire and Emergency takes the time to consider how the Plan could better fulfil the risk management approach it is committing to and make corresponding amendments. We also seek that Fire and Emergency engage more directly and collaboratively with Otago Regional Council and relevant Territorial Authorities in amending the Plan to understand how fire risk assessments could be incorporated more effectively into the Plan. We note that this recommendation has recently been collectively raised by the Otago region through the Otago CEG structure.

QLDC would like to be heard on its submission.

Yours faithfully



Mike Theelen
Chief Executive

QLDC Submission on Fire Plan for Otago, Te Kei 2021-2024

1 Identification of Fire Risk

1.1 In QLDCs view, the Fire Plan for Otago, Te Kei 2021-2024 (the Plan) sets out clear expectations of Fire and Emergency New Zealand's (Fire and Emergency) commitment with respect to the identification of fire risk. In particular, the Plan states the following:

- *'According to Regulation 5 of the Regulations, the purpose of a fire plan is to ensure that the particular fire risk conditions in each local area are considered by Fire and Emergency when it establishes policies and procedures for, and exercises fire control powers within, that local area'*¹

1.1 The Plan goes on to state that Fire Plans

- *'must... describe the particular fire risk conditions that exist or are likely to exist in the local area. This means that each fire plan is accurate and relevant for its area...'*¹

1.2 In addition, the Plan outlines the following obligation for Fire and Emergency:

- *'Fire and Emergency will assess whether there is a potential for the fuel to cause harm or damage to people or property if a fire starts. We will assess the likelihood of a fire starting and the consequences in terms of risk to human life, structures and other values.'*²

1.3 QLDC supports this clear direction. However, it is not considered that the Plan achieves this function. The plan does not provide a holistic assessment of risk and appears to confuse the words 'risk' and hazard'. In its glossary, the Plan offers a definition of fire hazard³ but does not provide a definition of risk. In QLDCs view, a definition of risk needs to be included to clarify the substantive difference between hazard and risk, and to ensure Fire and Emergency is aware of the obligations the Plan is placing on them. It is requested that the following definition of risk be included in the Plan's glossary

- **Risk** - *The effect of uncertainty on objectives (as defined in AS ISO 31000:2018). It is estimated by considering and combining consequences and likelihoods.*⁴

1.4 A risk assessment is more meaningful to land use and emergency management than an assessment of the hazard alone. A hazard assessment looks only at the process or event that could result in harm or damage i.e. the fire process/event. A risk assessment evaluates the entire range of factors (combining likelihood and consequences) within an area (including the hazard process/event) and provides a qualitative (descriptive) or quantitative (numerical metric) output of the risk state.

1.5 Given the Plan has does not contain a risk assessment, it is requested that Fire and Emergency provide a description of the methodology they intend to follow to carry out fire risk assessments across Otago and indicative timeframes for this work to commence and to be completed.

1.6 The National Rural Fire Authority has produced a document titled 'Otago Regional Wildfire Threat Analysis' (see Attachment 1). This document appears to have incorporated a wide range

¹ Page 2

² Page 14

³ Vegetation or other thing on the land that Fire and Emergency reasonably considers likely to endanger persons or property by increasing the risk of the outbreak or spread of fire

⁴ [ISO-31000:2018](#)

of inputs to produce a finegrained spatial analysis of ‘wildfire threat’ across Otago. The maps included in this analysis are indicated as being produced in May 2011. This analysis represents a step forward in the understanding of fire hazard in the Otago region, and it is strongly considered that Fire and Emergency consider a) updating this threat analysis to ensure it represents current land use situations, and b) incorporates this threat analysis into the Plan.

- 1.7 QLDC would also like to see greater visibility and commitment to an active programme of wildfire risk reduction activity that is led by FENZ within our district. This is particularly critical given the events in Ohau Village and the fact that we have several prohibited fire zones in the district that cover areas of residential development. This programme of activity should recognise and leverage other collaborative tools that can support with resilience building and risk reduction e.g. CDEM community training, land-use planning controls, bylaws etc. Councils can collaborate with FENZ and make an active contribution to fire risk reduction, however this requires clear action plans which are led and delivered by FENZ to coordinate an integrated risk reduction programme across partner agencies. This programme needs to strike a balance across the 4Rs (reduction, readiness, response and recovery) to ensure that communities are both prepared for and protected against a wildfire emergency event.

2 Appendix 1 – Schedule of Stakeholders

- 2.1 Appendix 1 of the Plan sets out a list of stakeholders who ‘...should be involved in the creation of these fire plan and their amendments...’⁵.
- 2.2 A number of the cells within Appendix 1 are blank and it is not clear if this is intentional. These blank cells needs to be updated with the different levels of involvement for every stakeholder (i.e. inform, consult, involve, collaborate, empower). A key/legend that defines what these these levels mean should also be included in the Plan.
- 2.3 With regard to the table detailing ‘National Level Stakeholders’⁶ it is concerning that the cells for Local Government NZ have not been completed. QLDC considers that a high level of consultation (i.e. involve or collaborate) should be afforded to Local Government NZ.
- 2.4 Further, Otago Regional Council (ORC) has not been identified as an area level stakeholder at all. ORC is a statutory land manager with responsibilities for managing natural hazards, As such, QLDC considers that ORC must be identified as a stakeholder in Appendix 1. In addition, it should be noted that that ORC employ staff who are technical specialists in the area of natural hazards.
- 2.5 It is also noted that the cells for ‘Fire plan development’ and ‘Fire plan amendment’ are blank for each of the local authorities within the region. QLDC considers that a high level of consultation (i.e. involve or collaborate) should be afforded to each local authority to help ensure that the needs of all communities are accounted for and the channels and networks of Local Government are leveraged effectively.

⁵ Page 17

⁶ Page 17

- 2.6 With regard to the table detailing 'Area Level Stakeholders'⁷ it is concerning that every cell for 'Mana-whenua Ngai Tahu' have been left blank. This stakeholder is the Crown's Treaty of Waitangi partner and must therefore be identified as a high-level stakeholder.

3 Appendix 2 – Zone Information

- 3.1 Appendix 2 of the Plan provides information on each of the 'Zones' within the Otago region. The first sentence of the appendix describing its purpose⁸ is not complete and should be amended to clarify the intent of this part of the Plan.
- 3.2 The identified zones do not follow territorial authority boundaries and this has resulted in the northern part of the Queenstown Lakes District i.e. Wanaka, Hawea etc being within the 'Central Zone' and the southern part of the Queenstown Lakes District i.e. Queenstown, Arrowtown etc being within the 'Lakes Zone'. The rationale for this separation is not clear. Land use management controls within each territorial authority differ and will result in different land use management outcomes with respect to natural hazards. It would be more efficient and effective for FENZ to align these zone boundaries with territorial authority boundaries to ensure consistent management of hazards and clarity of points of contact for both response partners and the community, rather than pursuing their own unique zone structure.
- 3.3 Additional rationale should be provided with regard to the identification of these zone boundaries (i.e. are they based on critical fire hazard related characteristics to ensure consistent management of fire risk). If it is not possible to align these Zone boundaries, QLDC considers that the Plan should set out how linkages between each Zone will be achieved to ensure consistent outcomes.
- 3.4 The information in Appendix 2 briefly sets out characteristics of each zone. It is not clear how the information contained within Appendix 2 contributes to managing fire risk within each Zone. No additional analysis has been provided in regard to how these particular characteristics contribute to the likelihood or consequences of fire hazard within each Zone. Given this, QLDC does not consider that Appendix 2 comprises a risk assessment. While the information contained within Appendix 2 requires further clarification in our view (see comments below), it is considered that Appendix 2 should be developed further to evaluate how these characteristics contribute to the risk profile for each Zone. Further, QLDC considers that the Appendix should take into account the changing nature of each Zone (i.e. population growth, urban development pressures, and climate change impacts) to ensure it takes a long term and holistic perspective of fire risk.
- 3.5 Appendix 2 includes reference to a 'Fire Hazard Removal Case Management System' a number of times. This system is not described or defined in the Plan and no linkages are provided to explain how this system will be used to fulfil the purpose of the Plan. QLDC requests that further detail be provided in the Plan in regard to this system.

⁷ Page 19

⁸ Page 22

4 Appendix 2 - Central Zone

- 4.1 A number of the cells within the 'Central Zone stakeholders' list⁹ are blank. It is not clear if this is intentional. As described in 2.2, a level of involvement should be identified for every stakeholder (i.e. inform, consult, involve, collaborate, empower). If none of these designations applies to a identified stakeholder then it is not clear why or how they could be a stakeholder. Queenstown Lakes District Council has not been identified as a stakeholder within the list for this Zone despite it being located within the District. QLDC considers that it must be identified as a stakeholder for the Central Zone.
- 4.2 Detail provided in regard to 'Land cover/land use'¹⁰ does not provide sufficient information on the range of land uses present within the Zone. It does not detail the nature, scale or growth of its urban environments. QLDC considers that this section should be amended to take into account urban environments within the Zone, including Wanaka, Hawea, Luggate and Albert Town. These details are considered important in determining fire risk.
- 4.3 The list of industries¹¹ for the Central Zone does not acknowledge the significant contribution that tourism plays within the Wanaka and Hawea area. QLDC considers that tourism should be included within this list of industries. This important sector needs to be carefully considered as it can directly contribute to increased risk of fire in high risk conditions. During peak summer months the population of tourists, holiday makers and remote owners of property significantly increases which escalates the likelihood of ignition sources and risk exposure.
- 4.4 Detail provided with regard to 'Recreational Locations'¹² suggests that there are no known locations of interest for fire risk. Further consideration should be given to this section as a number of prohibited fire zones in this area¹³ are recreational locations such as Mt Iron, Ruby Island, and the Albert Town Camp Ground.
- 4.5 The Mt Iron prohibited fire zone (along with other prohibited fire zones in the Wanaka area - Ruby Island, Stevensons Island, and the Albert Town Recreation Reserve¹⁴) are not located within the 'Special Risk Areas' list¹⁵. These appear to have been located within the Lakes Zone section. Clarification is sought as to the correct location of these special risk areas.
- 4.6 The 'Known Fire Hazards' section for this Zone specifies that 'There are no long-term fire hazards in this zone listed in the Fire Hazard Removal Case Management System'¹⁶. Further consideration should be given to this section as a number of prohibited fire zones are located within this area including Mt Iron, which is the subject of considerable attention at the time of writing this submission.
- 4.7 Grassland is identified as the 'predominant fuel type in this zone'¹⁷. However, there are a range of vegetation types within the Zone, and the areas identified as Prohibited Fire Zones¹⁸ do not

⁹ Page 27

¹⁰ Page 23

¹¹ Page 23

¹² Page 23

¹³ See Wanaka Prohibited Zone map on page 65

¹⁴ See Wanaka Prohibited Zone map on page 65

¹⁵ Page 24

¹⁶ Page 24

¹⁷ Page 24

¹⁸ See Wanaka Prohibited Zone map on page 65

appear to contain grassland i.e. Mt Iron contains Kanuka and Manuka. Clarification is sought in regard to the actual fuel type present in this zone.

5 Appendix 2 – Lakes Zone

- 5.1 A number of the cells within the ‘Lakes Zone stakeholders’ list¹⁹ are blank. It is not clear if this is intentional. As described in 2.2, different levels of involvement should be identified for every stakeholder (i.e. inform, consult, involve, collaborate, empower). Involvement of the Queenstown Lakes District Council within this table has not been sufficiently defined, particularly for ‘fire plan development’ and ‘fire plan amendment’. It is considered that a high level of consultation (i.e. involve or collaborate) should be afforded to QLDC for these key plan development stages.
- 5.2 Detail provided in regard to ‘*Land cover/land use*’²⁰ does not provide sufficient information on the range of land uses present within the Zone. It does not detail the nature, scale or growth of the urban environments located within the Zone. QLDC considers that this section should be amended to take into account the urban environments of Queenstown, Arrowtown, Arthurs Point, Shotover Country and Lake Hayes Estate, Frankton (including Queenstown Central, Five Mile and Remarkables Park), Jacks Point/Hanley’s Farm, and Kingston. These details are considered important in determining fire risk within the Zone.
- 5.3 The list of industries²¹ for the Lakes Zone does not acknowledge the significant contribution that tourism plays within this wider area. QLDC considers that a wider range of tourism related activities should be included within this list of industries. As with the Central Zone, this important sector needs to be carefully considered as it can directly contribute to increased risk of fire in high risk conditions. During peak summer months the population of tourists, holiday makers and remote owners of property significantly increases which escalates the likelihood of ignition sources and risk exposure.
- 5.4 The description provided for ‘*Recreational Locations*’²² within the Zone requires further consideration in our view. It is not the case that the Queenstown Lakes District receives visitors and other transient populations during holiday periods alone as visitor numbers are high during all times of the year. Although the effects of Covid19 have curtailed tourism numbers at present, this effect is anticipated to be short lived. In addition, it is considered that further consideration be given to the effect of this tourist population on the risk profile of the Zone as it is known that short term visitors are more vulnerable to hazard events.
- 5.5 Details provided with regard to ‘*Cultural and recreational activities and events*’²³ requires further consideration. It is not clear why the three events identified in the plan were selected over the wide range of other large events that take place within the Queenstown Lakes District.
- 5.6 The ‘*Special risk areas*’²⁴ section includes a number of areas that are not identified as being located within the Lakes Zone map²⁵ including Mt Iron, Ruby Island and Stevensons Island, and

¹⁹ Page 55

²⁰ Page 50

²¹ Page 51

²² Page 51

²³ Page 51

²⁴ Page 51

²⁵ Page 54

the Albert Town Recreation Reserve. QLDC requests that further consideration be given to the location of these special risk areas.

- 5.7 This section also indicates that there are *'tactical plans'* in place the Mt Iron and the Queenstown Red Zone areas. This is the only reference to tactical plans for coordinating a wildfire response in the Plan. There is no further explanation of these tactical plans, nor is there any linkage between the Plan and these tactical plans. It is considered necessary that a reference to these tactical plans be appended the Plan and further detail be provided on the revision status of these tactical plans. QLDC was a party to the "[Queenstown RedZone Plan](#)" that was developed in 2011, but is unaware of any revision updates to this important response plan. If this plan has not been updated then this needs to be prioritised as much of the content is out of date, including the designation of Department of Conservation as lead agency.
- 5.8 The *'Known Fire Hazards'* section for this Zone specifies *'There are no long-term fire hazards in this zone listed in the Fire Hazard Removal Case Management System'*²⁶. Further consideration should be given to this section as a number of prohibited fire zones are located within this area.

6 Appendix 3 – Prohibited fire zones

- 6.1 Appendix 3 sets out details for the *'Prohibited Zone Otago'*²⁷. QLDC requests clarification in regard to the effect of this part of the Plan. In particular, are the Prohibited Zones subject to the details provided in Appendix 3 only, or is it the Plan's intent to integrate the details in Appendix 2 and 3 for these areas. It would be of assistance to provide a section at the beginning of the Plan outlining its structure and how its sections relate to one another.
- 6.2 The *'Demographics'* section outlines that *'Mount Iron and a zone around Mount Iron, Including Albert Town Recreation Reserve, the Queenstown Red Zone and Shag point are areas of high risk rural/urban interface'*²⁸. As detailed earlier in this submission, is not considered that a risk assessment has been undertaken as part of the Plan's preparation. As such, it is not clear how Fire and Emergency can identify these areas as being subject to high levels of risk.
- 6.3 The Prohibited Zones of Ruby Island, Stevensons Island, Mou Waho, Mou Tapu, Pig and Pigeon Islands have been identified on the basis of *'their high value conservation'*²⁹. While these areas may have high conservation values, they are not the only areas of rare or important indigenous biological diversity in Otago. Clarification is requested on the rationale for selecting these specific areas on the basis their conservation values.
- 6.4 Given Fire and Emergency's view that these areas are subject to high risk, it is not considered that sufficient detail has been provided in the *'Land cover/land use section'*³⁰ of Appendix 3. Additional details should be provided within the Plan on land use which is specific to each of the identified Prohibited Zones such as the nature of any urban environments located within these areas.
- 6.5 The *'Industry'*³¹ details provided within Appendix 3 are not considered sufficiently representative of the range of activities and associated investment in the Prohibited Zones. For

²⁶ Page 52

²⁷ Page 61

²⁸ Page 61

²⁹ Page 61

³⁰ Page 61

³¹ Page 61

- example, the areas in and around Queenstown support a significant number of visitor accommodation, commercial, office and retail related activities. QLDC requests that further consideration be afforded to this section given the 'high risk' classification proposed by Fire and Emergency.
- 6.6 It is not considered that the details provided in regard to '*Recreational locations*'³² provide sufficient information on the wide range of recreational related activities that take place or are enabled within the different Prohibited Zones. For example, a range of walking tracks are present on Mt Iron. QLDC requests that further consideration be given to this section.
- 6.7 A range of '*Special Risk Areas*'³³ are identified in Appendix 3. It appears that each of the Prohibited Zones has a special risk area. QLDC requests that Fire and Emergency identify these areas as priority locations for detailed fire risk analysis and that the outcomes of this analysis be incorporated into the Plan as separate chapters or appendices.
- 6.8 Appendix 3 outlines that there are '*no long-term fire hazards in this zone listed in the Fire Hazard Removal Case Management System*'³⁴. This is somewhat confusing given the identification of these areas as high risk Prohibited Fire Zones. Clarification is sought on the applicability of this statement to these areas.
- 6.9 It is not clear how the information included for each zone has been used to identify the 'Prohibited Zones'³⁵. While these are understood to be areas subject to special rules regarding the lighting of fires, it is not clear if these are also intended to be fire hazard maps. It is requested that the Plan provide a clear statement in regard to this matter to inform how the prohibited fire zones should be incorporated into land use decision making.

7 General Mapping comments

- 7.1 The prohibited fire zone maps contained within the Plan³⁶ are not of sufficient clarity. It is requested that the clarity of these maps be improved to assist plan users understanding of the location and extent of the prohibited fire zones.
- 7.2 It is preferred that Fire and Emergency prepare a live link to the GIS data (through an ArcGIS REST service), rather than static/paper maps. This allows us to include the data in our internal and external interactive maps and improves the accuracy of land use decisions to manage fire risk.
- 7.3 Other live data that would be useful for territorial authorities is the different Otago zone boundaries and the public conservation land layer, since much of it falls in the Lakes Zone.
- 7.4 Clarification is sought from Fire and Emergency as to the most relevant fire hazard mapping for land use management reasons. In particular, should the prohibited fire zones be used, or should the 'Otago Regional Wildfire Threat Analysis' (Attachment 1) be used.

³² Page 61

³³ Page 62

³⁴ Page 62

³⁵ Such as those included for the Lakes Zone on page 63 – 66

³⁶ Pages 64 - 66