Queenstown Lakes District Council

Wanaka Airport Air Noise Boundary Plan Change

November 2010



TABLE OF CONTENTS

	Page
1.	INTRODUCTION1
1.1	PURPOSE OF THIS REPORT1
1.2	CONTENT OF THIS REPORT2
1.3	SCOPE OF PLAN CHANGE2
2.	REASONS FOR THE PLAN CHANGE3
2.1	WANAKA AIRPORT3
2.2	ECONOMIC CONTRIBUTION5
2.3	AIRPORT MASTER PLAN AND PROJECTED GROWTH6
2.4	REVIEW OF NOISE BOUNDARIES8
2.5	SUMMARY OF THE NEED FOR PLAN CHANGE10
3.	THE FORM OF THE PLAN CHANGE11
4.	STATUTORY FRAMEWORK12
4.1	RESOURCE MANAGEMENT ACT 199112
5.	CONSULTATION PROCESS20
6.	ASSESSMENT OF ALTERNATIVES21
6.1	INTRODUCTION21
6.2	OPTION 1 – STATUS QUO21
6.3	OPTION 2 – UPDATE NOISE BOUNDARIES22
6.4	OPTION 3 –NEW DESIGNATION24
6.5	OPTION 4 – REVISE THE DISTRICT PLAN PROVISIONS AND MAPS25
6.6	OPTION 5 – RELOCATE THE AIRPORT27
6.7	APPROPRIATENESS OF PROPOSED PLAN CHANGE PROVISIONS29
7.	RISK OF ACTING OR NOT ACTING43
8.	CONCLUSION43



LIST OF APPENDICES

APPENDIX A Existing Wanaka Airport Noise Boundaries

APPENDIX B Proposed Wanaka Airport Noise Boundaries

APPENDIX C Wanaka Airport Certificates of Title

APPENDIX D Additional Certificates of Title

APPENDIX E Master Plan – Peak Projects

APPENDIX F Addendum to Master Plan – Air Biz

APPENDIX G Marshall Day – Wanaka Airport Noise Boundaries

APPENDIX H Proposed Plan Provisions

APPENDIX I Proposed Noise Boundaries as they extend over the District Plan

Zones

1. INTRODUCTION

1.1 PURPOSE OF THIS REPORT

- 1.1.1 This report is provided on behalf of the Queenstown Lakes District Council (QLDC) in order to fulfil the statutory requirements of section 32 of the Resource Management Act 1991 (RMA or the Act). The report relates to the QLDC's proposal to amend the aircraft noise boundaries shown on the District Planning Maps for Wanaka Airport (the Airport) and amend existing provisions and introduce new provisions within the Plan Chapters relating to aircraft noise for Wanaka Airport.
- 1.1.2 A Notice of Requirement (NOR) to alter the existing Wanaka Airport Aerodrome Designation (Designation 64) in the Queenstown Lakes District Council Partially Operative District Plan (District Plan) has been lodged concurrently with this Plan Change. This introduces obligations on Wanaka Airport in relation to aircraft noise monitoring and engine testing.
- 1.1.3 A brief summary of the Plan Change is provided below:
 - At present, the District Plan maps show an L_{dn} 65dBA Air Noise Boundary (ANB) and an L_{dn} 55dBA Outer Control Boundary (OCB) for Wanaka Airport. These boundaries and associated objectives, policies, rules and methods are currently used to protect the Airport from potential reverse sensitivity effects associated with activities sensitive to aircraft noise and to manage the effects of aircraft noise on activities surrounding Wanaka Airport.
 - The existing ANB and OCB were established for Wanaka Airport in 1995 and the existing Aerodrome Designation (Designation 64) requires that the Airport is managed so the noise does not exceed a day/night level of (Ldn) of 65 dBA outside the Air Noise Boundary and 55 dBA outside the Outer Control Boundary.
 - A review of the Wanaka Airport aircraft noise boundaries commenced in 2008 in light of new master planning work. The review took into account future aircraft movements at Wanaka Airport until 2036 and determined that amendments are required to the ANB and OCB to provide for anticipated future growth in operations.
 - The purpose of this Plan Change report is to amend the District Plan maps and plan provisions in line with this new information.
 - The Aerodrome Designation (Designation 64) allows for night time flights to occur at Wanaka Airport, provided the existing noise contours are updated and a lighting plan is implemented. Although no night time flights are envisaged for Wanaka Airport in the short to medium term, the noise modelling has taken into account potential future night time flights. The Plan Change therefore seeks to introduce new provisions to enable the effects of any proposed night time flights to be effectively mitigated.
 - An alteration to the existing Wanaka Airport Aerodrome Designation (Designation 64) is submitted in conjunction with this Plan Change. The amendments to Designation 64 seek to provide for the existing and future growth and demand of infrastructure and services at Wanaka Airport. The



amendments to the designation also provide for the ongoing monitoring of Airport noise to ensure consistency with the revised aircraft noise boundaries and provide for engine testing at Wanaka Airport.

1.2 CONTENT OF THIS REPORT

- 1.2.1 This report has been prepared to meet the requirements of section 32 of the RMA. It has been structured as follows:
 - Section 1 of this report sets out the scope of the report and scope of the proposed Plan Change.
 - Section 2 of the report sets out the background to the Plan Change. This
 includes details of the past and present operations and facilities at Wanaka
 Airport, and economic benefits derived from Wanaka Airport, growth
 projections for the Airport to the year 2036, and the current and potential
 future noise effects generated by Airport operations.
 - Section 3 describes the form of the proposed Plan Change.
 - Section 4 provides an assessment of the relevant statutory documents.
 - Section 5 outlines the consultation that has occurred with respect to the proposed Plan Change.
 - Section 6 provides an assessment of options, and an evaluation of the efficiency, effectiveness and appropriateness of the proposed policies, rules and methods in achieving the objectives of the Plan.
 - Section 7 outlines the risks of acting or not acting in regard to this Plan Change.
 - Section 8 sets out the conclusion to this Plan Change.

1.3 SCOPE OF PLAN CHANGE

- 1.3.1 Aircraft noise for Wanaka Airport is currently addressed in the District Plan through a variety of methods. These are detailed in section 3 of this report. In summary, the District Plan Maps (Map 18a) currently identify an OCB and an ANB around Wanaka Airport. Both the OCB and ANB relate to objectives, policies and other methods in the District Plan, which set out controls and limitations on certain land use activities within these boundaries. Unlike the approach currently adopted for Queenstown Airport¹ there is no designation in the District Plan for the Wanaka Airport that provides specifically for the ANB.
- 1.3.2 Designation 64 that relates to the Wanaka Aerodrome requires that the noise contours are updated in accordance with the occurrence of scheduled commercial passenger flights and night time flights. This designation also requires that aircraft flights are managed in accordance with the ANB and OCB shown on the District Plan maps.
- 1.3.3 The existing aircraft noise boundaries extend beyond the Wanaka Airport (QLDC) land and extend northwest towards the Clutha and south east towards Luggate township. The existing boundaries are shown on the Plan attached as Appendix A. The existing noise boundaries were established in 1995 using



Although this is subject to Plan Change 35

data representing the predicted Airport operations until the year 2010. It is therefore timely that these boundaries are updated.

- 1.3.4 The proposed Plan Change seeks to increase the extent of the ANB and OCB and add an additional noise boundary, being the Night-time Noise Boundary (NNB). The plan attached as **Appendix B** shows the extent of the NNB and the revised boundaries. The amendments are necessary to update the noise contours to provide for the current scheduled commercial aircraft usage, and provide for the future development of the Airport in accordance with projected growth demands. The anticipated growth and demand of Wanaka Airport is discussed in section 2.3 of this report.
- 1.3.5 The Plan Change also proposes new and amended objectives, policies, rules and other methods in the District Plan to manage land use around Wanaka Airport in conjunction with these boundaries. Noise monitoring and engine testing will be provided for through the alteration to the Aerodrome Designation.
- 1.3.6 The land affected by the proposed Plan Change is zoned Rural General and Windermere Rural Visitor Special Zone.

2. REASONS FOR THE PLAN CHANGE

2.1 WANAKA AIRPORT

- 2.1.1 Wanaka Airport currently occupies approximately 38 hectares of land located immediately to the north of the Wanaka Luggate Highway (State Highway 6 (SH6)) approximately 13km southeast of the town of Wanaka and 2.5km west of the township of Luggate. Currently the Airport is legally described as:
 - Lots 10 and 11 DP24410
 - Lot 8 DP 22637
 - Lot 5 DP23517
 - Lot 7 DP22637
 - Lot 6 DP22636
 - Lots 1, 2, 3, 4 and 5 DP18824
 - Lot 6 DP24685
 - Lots 1, 2, 3 and 4 DP23517
 - Part Lot 1 DP16921²
 - Legal Road
- 2.1.2 Copies of the relevant Certificates of Title and title plans are attached as Appendix C. The Notice of Requirement to alter the Aerodrome Designation seeks to increase the Wanaka Aerodrome area. The additional land proposed to be included is legally described as:
 - Lots 4 and 5 DP340031
 - Lot 2 DP 368240

The legal description in the Designation has not been updated to reflect the subdivision and sale of land to the New Zealand Fighter Pilots Association in 2005.



- Lots 1 and 2 DP 26239
- Sec 1 SO 24776
- Legal Road
- 2.1.3 Copies of the relevant Certificate of Titles are contained at **Appendix D.**
- 2.1.4 Wanaka Airport is located on a flat elevated river terrace to the east of the Clutha River. The terrace drops away steeply to the south east some 500 metres from the end of the existing runway. The Clutha River is below the terrace to the east and the airport is screened from the township of Luggate by high ground leading to Mount Barker and by a complex of terraces. To the north lies farmland and the Poplar Beach Subdivision.
- 2.1.5 Wanaka Airport was opened in 1983, having been relocated from a location closer to the Wanaka township. The initial sealed strip was lengthened to 1,200 metres in 1986 with a grass-seeded extension. This was upgraded to a new sealed runway and taxiway by 1988. In addition to the sealed runway, the Airport comprises:
 - A grass runway, which runs parallel to the main runway, is 840m x 40m;
 - A sealed taxiway and apron adjacent to a terminal building for scheduled and charter passenger services;
 - Private general aviation (GA) and helicopter hangars (including the Warbirds over Wanaka base);
 - Three aircraft re-fuelling facilities and;
 - A meteorological station.
- 2.1.6 Wanaka Airport currently operates as a non-certified airfield. This means that the airport does not therefore, fall within the jurisdiction of Part 139 of the Civil Aviation Rules relating to the Certification of Aerodromes.
- 2.1.7 A non-certificated status means that Civil Aviation Rules place the responsibility on the operator of an aircraft to ensure that the airport is suitable for their particular aircraft. A non-certificated status also precludes the operation of scheduled flights for aircraft with seating capacities of 30 persons or over.
- 2.1.8 Current airfield operations at the Airport include:
 - Air New Zealand scheduled flights with Beech 1900D aircraft (19 seat passenger capacity);
 - Flight seeing (Britten Norman Islander and Cessna C177 and C206 aircraft):
 - Helicopter flight seeing, training and commercial operations with R22, R44, AS350B and H500 aircraft;
 - Tandem sky-diving flights (Cresco and C180 aircraft) including the landing of parachutists on the Airport;
 - Private general aviation with a large variety of aircraft fixed wing types;
 - Private helicopters; (R22 and R44);



- Tourist flights in Tiger Moth, Pitts Special and War birds aircraft including Aero L 39 Albatros and P51 aircraft;
- Non-scheduled charter operations (Business jets, Convair 580, ATR 72, Dash 8 and others;
- Military aircraft including King-Air, Hercules C130, Air trainers, Iroquois and Sea sprite Helicopters; and
- Specific aircraft movements associated with the bi-annual War birds over Wanaka Air show and other Air show events.

2.2 ECONOMIC CONTRIBUTION

- 2.2.1 Currently the Wanaka area of the Queenstown Lakes District is experiencing one of the highest growths in permanent population and tourist numbers of any area in New Zealand. While this is in part due to Wanaka's proximity to Queenstown, it is also a reflection of the nature of its own tourist attractions, for example, Lakes Wanaka and Hawea and its ski fields.
- 2.2.2 The Wanaka area is part of the natural tourist route between Central Otago and Queenstown, and closely tied to tourism flows to this area.
- 2.2.3 International visitors made 289,400 visits to the Lake Wanaka Regional Tourism Office (RTO) in 2008. These trips generated 562,200 visitor nights. Domestic visitors made 425,900 visits to the Lake Wanaka RTO in 2008, generating 731,000 visitor nights. The Wanaka RTO attracted 715,400 international and domestic visitors in 2008 and total expenditure generated by visitors to the Wanaka RTO in 2006 was \$143m.
- 2.2.4 According to the New Zealand Regional Tourism Forecasts (2009 2015), total visits to Lake Wanaka RTO are expected to increase by 16.1% from 2007 2014. This is predicted to be the result of 29% international visitor growth and 3% domestic visitor growth. Total visitor nights in Lake Wanaka RTO are expected to rise 14.6% between 2007 and 2014 as a result of 27.5% international visitor night growth and 3.4% domestic visitor night growth. New Zealand Tourism Forecasts (2007 2013) expect total Tourism Expenditure in the Lake Wanaka RTO area to reach \$203m in 2013.
- 2.2.5 Overall visitor growth (as projected by the QLDC Growth Management Study) for the period 2006 to 2021 is 4.2% per annum.
- 2.2.6 Most visitors currently arrive by car or bus although a growing percentage are using air transport to both Queenstown and Wanaka Airports. The introduction of scheduled air services at Wanaka Airport resulted in nearly 12,000 scheduled passenger movements during 2006.
- 2.2.7 As permanent population and tourist numbers continue to grow, notwithstanding the possibility of Queenstown Airport becoming increasingly congested, the importance of Wanaka Airport as a flight destination at either the beginning or end of a tourist's trip is likely to increase. Accordingly, the ability to be able to provide for the future establishment of more frequent scheduled air services



could have significant social and economic benefits for the Wanaka area. Long term, the alpine and lake attributes of the Wanaka area are likely to be viewed as a genuine alternate to the Queenstown / Wakatipu Basin destination and the area will further expand to provide the necessary services to enable this to happen.

2.2.8 Overall, the current and potential future social and economic effects arising from Wanaka Airport are considered very positive for the District.

2.3 AIRPORT MASTER PLAN AND PROJECTED GROWTH

- 2.3.1 In 2008 Wanaka Airport Management Committee (WAMC), who operates the airport on behalf of QLDC, commissioned a Master Plan to define key tasks and works likely to be required at Wanaka Airport for the period 2009 2019. The Master Plan was prepared by Peak Projects International Limited (**Appendix E**).
- 2.3.2 A subsequent addendum to the Master Plan was prepared in 2010 by aviation consultants Airbiz to update growth projections and includes proposed revised noise contours and runway design, based on the revised projections (**Appendix F**). The addendum defined the likely growth of the Airport out to 2036.
- 2.3.3 The Master Plans used growth projections for Wanaka³ to forecast the air traffic growth scenario for Wanaka Airport. The findings were that there would be a gradual increase in Christchurch scheduled services using the Beech 1900D aircraft. From about 2013 there would be an increase in scheduled services capacity to Christchurch and perhaps Wellington with the use of larger Dash 8 and ATR aircraft. From about 2020 the introduction of domestic jet aircraft to/from Christchurch (and potentially Wellington and Auckland) is possible. There is also likely to be an increase in flightseeing services and helicopter operations. Table 1 below sets out the forecast annual aircraft movements at Wanaka Airport to 2036 as taken from the Airbiz Master Plan addendum.

Table 1

CATEGORY/GROWTH RATE	2016	2026	2036		
Scheduled Domestic Aircraft					
High	1,420	2,370	2,990		
Median	1,250	1,830	2,090		
Low	1,100	1,390	1,310		
Non Scheduled Charter Aircraft					
High	177	262	388		
Median	113	151	203		
Low	54	65	80		
Flight Seeing Aircraft					
High	2,940	4,410	5,730		
Median	2,750	3,940	4,880		

Growth projections were taken from the Feb 2004 Queenstown and Wanaka Growth Management Options Study report to QLDC by Hill Young Cooper Ltd.



Low	2,570	3,510	4,150	
Other GA	,		,	
High	12,300	16,600	20,300	
Median	11,800	15,000	17,100	
Low	11,200	13,500	14,500	
Helicopters				
High	7,460	11,600	15,590	
Median	6,980	10,330	13,220	
Low	6,520	9,190	11,210	
Total High	24,300	35,200	45,000	
Total Median	22,900	31,300	37,500	
Total Low	21,400	27,700	31,200	

- 2.3.4 The 2008 Master Plan goes on to analyse the aerodrome operational requirements to accommodate the growth in air traffic. The recommendations of the 2008 Master Plan and the subsequent addendum include:
 - An extension to the existing runway of 550m to provide a runway length of 1750m contained within a strip measuring 2,300m long by 150m wide.;
 - Provision for Runway End Safety Areas (RESA) on the existing runway of 240m both ends,
 - A future replacement sealed runway 1700m long by 30m wide, centrally located in a strip 2,300m long by 150m wide. The centreline of this runway will be located parallel to and 93m north east of the centreline of the existing sealed runway. Provision will also be made for runway end safety areas of 240m at both ends of the parallel runway.
 - Taxiways;
 - An expansion of the main apron area to a depth of approximately 80m from the existing building line;
 - Expansion of the apron to the southwest to provide for flight seeing operations;
 - New hangars and associated apron areas;
 - Dedicated helicopter aprons and associated touch-down and lift-off areas (TALO's);
 - New passenger terminal and control tower;
 - Increased car parking for staff, rental car companies and passengers.
- 2.3.5 As mentioned above QLDC has also lodged a Notice of Requirement (NOR) to extend the existing Aerodrome Designation to provide for the recommendations in the Master Plan. In addition, to providing for the expanded aerodrome, the NOR seeks to include obligations relating to the management and monitoring of aircraft noise at Wanaka Airport.
- 2.3.6 This Plan Change is lodged concurrently with the NOR. The proposed Plan Change seeks to expand the noise boundaries and to amend the rules relating to the boundaries in the District Plan. The NOR ensures that the Airport will be



managed and monitored in accordance with the revised boundaries. The NOR also seeks to control engine testing at Wanaka Airport. Engine testing is exempt from the noise boundaries and therefore separate controls are required in order to ensure the effects of engine testing can be adequately managed.

2.4 REVIEW OF NOISE BOUNDARIES

- 2.4.1 In light of the current use and growth projections for Wanaka Airport (as outlined in the Master Plan), a review of the Wanaka Airport noise boundaries was undertaken by acoustic consultants Marshall Day. A copy of this report prepared by Marshall Day is attached as **Appendix G**.
- 2.4.2 Computer modelling has been used to predict aircraft noise in the vicinity of the airport. The Marshall Day report describes in detail the modelling undertaken for Wanaka Airport to update the noise contours to the year 2036.
- 2.4.3 The noise modelling programme known as the Integrated Noise Model (INM) has been used. The INM was developed by the US Federal Aviation Authority and is the most widely used of the noise models and is the model recommended in New Zealand Standard NZS6805:1992 'Airport Noise Management and Land Use Planning' (NZS 6085). The most current version of the INM is version 7a and this is the version used in the Wanaka Airport modelling.
- 2.4.4 The INM calculates the noise level at a large number of grid points by summing the 'noise energy' from each aircraft movement during a typical day's operation. The 'noise energy' is calculated using the hourly L_{eq}^{4} value night-weighted by +10 dBA and then averaged over 24 hours to give the daily L_{dn}^{5} value at each grid point. The grid points with equal noise level are then joined graphically to give a plot of L_{dn} noise boundaries.
- 2.4.5 Marshall Day then used the AirBiz growth projections and inputted the following information into the model:
 - Aircraft type;
 - Time of day;
 - Runway usage;
 - Departure, arrival or training circuit tracks;
 - Stage length at take-off.
- 2.4.6 The noise modelling shows that the ANB and OCB need to be extended to provide for the anticipated growth in aircraft operations to 2036. The introduction of a NNB is also proposed. The proposed noise boundaries form the basis for this Plan Change and are contained in **Appendix B**.
- 2.4.7 The effects of the proposed increase in noise and the extent of the proposed noise boundaries have been developed and assessed by Marshall Day. The



⁴ L_{eq}: Time average sound level or equivalent continuous sound level.

⁵ L_{dn}: The day/night level.

- report attached as **Appendix G** describes in detail the methodologies employed, an assessment of noise effects, and the mitigation required.
- 2.4.8 The New Zealand Standard NZS6805:1992 "Airport Noise Management and Land Use Planning", provides a recommended approach for territorial authorities dealing with airports and land affected by airport noise. The standard aims to manage the adverse effects of airport noise by controlling the use of land around airports, and by ensuring that airport and aircraft activity does not exceed the future noise contours used for the planning process. The Standard recommends two boundaries, an ANB defined by the Ldn 65dBA contour and an OCB, defined by the Ldn 55dBA contour. These boundaries already exist for the Wanaka Airport, however refinement in accordance with the predicted growth is required.
- 2.4.9 The updated set of noise contours for Wanaka Airport is based on projected aircraft activity to the year 2036. The adoption of the 2036 planning horizon takes into account such issues as:
 - The forecast intentions of airport based operators;
 - Visitor arrivals for the Wanaka area;
 - Population statistics for Wanaka;
 - Tourism statistics for Wanaka and surrounding area;
 - Local business activities and growth;
 - A comparative assessment of actual and forecast growth at Queenstown Airport;
 - QLDC planning studies relating to regional growth and future population estimates;
 - Airline planning and marketing initiatives;
 - Airport planning and development proposals;
 - Airline and other operator's choice of aircraft type, size, frequency and schedules:
 - Assessment of alternative transport choices (car, bus etc. versus air).
- 2.4.10 The proposed noise boundaries represent a maximum growth scenario, and provide robust protection of the Airport's ability to operate.
- 2.4.11 The report explains that there is wide variation in the perceptions of noise. It states that the subjective response to a change in noise level is widely variable from individual to individual and is also different for a change that occurs immediately, compared with a change that occurs slowly over a number of years, as will be the case for Wanaka Airport.
- 2.4.12 The report notes that the noise level in close proximity to the Airport is currently high and there would be significant adverse effects on any noise sensitive activities in this location.. However the report determines that the actual change in average noise level as a result of the proposed noise boundaries is not significant as it is in order of 1 2 decibels. When compared to the existing noise boundaries at Wanaka Airport, the noise effects from the revised contours are no more than minor. This takes into account the predicted small change in noise level, the lack of existing activities that are sensitive to aircraft noise



- within the proposed ANB, the importance of Airport growth to the region and the realistic expectations of residents living adjacent to a regional airport.
- 2.4.13 In addition to the overall change in average noise levels that would occur as result of this Plan Change and the revised noise boundaries, consideration is given to the change in noise level from individual events, such as night time flights. Night time flights at Wanaka Airport are permitted via the existing Aerodrome Designation provided the Airport installs an appropriate lighting system, and undertakes a revision to the noise contours. Although not proposed in the short term, night time flights at Wanaka Airport could commence in this planning period (2036). The noise contours have been revised allowing for future night time flights. The noise report has assessed the effects of these night time flights occurring in this planning period.
- 2.4.14 The New Zealand Standard (NZS6805) recommends an assessment of individual maximum noise levels from aircraft operating at night time, but does not define a level of acceptability. Marshall Day has determined that a Sound Exposure Level (SEL), being a measure of the total noise energy of an individual aircraft movement, is appropriate to manage the effects of aircraft flying at night at Wanaka Airport. The noise report attached as **Appendix G** determines that there are no significant sleep disturbance effects below SEL 85 dBA (outdoor sound level) and that SEL 95 dBA (outdoors) defines a point of significant sleep disturbance. The NNB is set based on this SEL 95 dBA contour.
- 2.4.15 It is noted that there are no existing noise sensitive activities located inside the proposed NNB at Wanaka Airport and therefore sleep disturbance is unlikely to occur. In order to maintain this situation and to ensure that significant adverse noise effects do not occur as a result of future night time aircraft movements, it is proposed via this Plan Change to prohibit all noise sensitive activities within the NNB. It is noted that there are a number of approved residential build platforms (without residential dwellings) currently within the NNB. QLDC does not intend to remove the rights of land owners to construct these already approved building. Existing activities and future buildings on approved building platforms will require appropriate acoustic insulation.

2.5 SUMMARY OF THE NEED FOR PLAN CHANGE

- 2.5.1 In summary, it is considered that this Plan Change is necessary in order to provide for the ongoing and future efficient use of Wanaka Airport. The noise contours that are currently in the District Plan were established in 1995 and predicted noise levels for Wanaka Airport until the year 2010. It is therefore appropriate that these contours are reviewed and updated now.
- 2.5.2 Projections for aircraft movement to the year 2036 predict an increase in activity at the Airport. Noise boundaries generated using the projected growth in aircraft movements at the Airport differ from those currently contained in the District Plan. Airport growth can therefore only occur in conjunction with an amendment to the noise boundaries within the District Plan.



2.5.3 Wanaka Airport is considered a significant asset to the Central Otago and Lakes District areas. It is a popular tourist and holiday destination which will be enhanced through increased accessibility to the area via the Airport. This will have a direct positive contribution to the local and regional economy. The Plan Change will enable these positive effects to continue whilst ensuring that noise generated by aircraft is managed in a manner that appropriately recognises the need to provide for the health and wellbeing of the local community.

3. THE FORM OF THE PLAN CHANGE

- 3.1 As previously mentioned in this report, the District Plan currently identifies an OCB (55dBA contour) and an ANB (65dBA) around Wanaka Airport, as shown on the District Plan maps.
- 3.2 Currently within the Rural Zone buildings used for residential, visitor accommodation or community activities on an approved building platform within the OCB are controlled activities subject to appropriate insulation requirements. These activities are prohibited in the ANB. Within the Windermere Rural Visitor Zone buildings used for residential, visitor accommodation, commercial or community activities are a controlled activity and must be appropriately insulated within the OCB.
- 3.3 The proposed Plan Change seeks to manage activities on land affected by aircraft noise identified by the revised contours and the proposed NNB through objectives, policies, rules and other methods in the District Plan. A copy of the proposed plan provisions is attached at **Appendix H**.
- 3.4 It is proposed that the District Planning Maps will identify three different noise control boundaries:
 - ANB: 65dBA Ldn Air Noise Boundary (ANB)
 - OCB: 55dBA Ldn Outer Control Boundary (OCB)
 - NNB: SEL 95dBA Night time Noise Boundary (NNB)
- 3.5 The proposed ANB and OCB generally extend beyond the ANB and OCB currently incorporated into the District Plan maps. The new noise boundaries have been devised using projections of aircraft activity out to 2036. The plan in **Appendix I** shows the proposed boundaries as they extend over the District Plan zones. Changes to the zone provisions are also proposed and these are discussed below.
- 3.6 It is also proposed to introduce a NNB. An SEL of 95dBA has been chosen as it has been shown to be the limit whereby sleep disturbance effects could be significant. This is explained further in the Marshall Day report (**Appendix G**)
- 3.7 The proposed Plan Change seeks to introduce objectives and policies to facilitate the ongoing operation of the Airport while managing adverse effects of aircraft noise on the community through the avoidance of inappropriate development, which is exposed to aircraft noise or through the implementation of methods to mitigate the effects of aircraft noise.



Rural Zone

- 3.8 In the Rural Zone the Plan Change seeks to prohibit new activity sensitive to aircraft noise within the OCB (unless otherwise stated the OCB includes the ANB and the NNB). No new building platforms or buildings will be allowed within the OCB. The construction of buildings on already approved building platforms and extensions or alterations to existing activities sensitive to aircraft noise will be a controlled activity subject to appropriate acoustic insulation.
- 3.9 Consultation has taken place with the owners of properties affected by the revised noise boundaries. This is described in section 5 to this report. Other than the approved building platforms, there are no existing activities within the ANB or NNB that are sensitive to aircraft noise. Landowners within the OCB and NNB will not be prevented from building on approved building platforms, subject to appropriate insulation being required.

Rural Visitor Zone

- 3.10 In the Windermere Rural Visitor Zone the Plan Change seeks to prohibit all new activity sensitive to aircraft noise within the NNB. No new building platforms or buildings will be allowed within the NNB in this Zone. There are no existing activities sensitive to aircraft noise in this Zone.
- 3.11 New activities sensitive to aircraft noise, and alterations or extensions to existing buildings to be used for an activity sensitive to aircraft noise within the OCB will require appropriate acoustic insulation.

4. STATUTORY FRAMEWORK

4.1 RESOURCE MANAGEMENT ACT 1991

4.1.1 The proposed Plan Change affects land that is within the jurisdiction of QLDC. Section 74 (matters to be considered by territorial authority) of the RMA states that any change to its District Plan must be made in accordance with the functions for territorial authorities set out in section 31, the provisions of Part 2, the duties under section 32 of the Act, and any regulations.

PART 2 CONSIDERATIONS

Section 5

- 4.1.2 This Plan Change has been prepared as a means of achieving the purpose of the Act, which is set out in section 5 as follows:
 - (1) The purpose of this Act is to promote the sustainable management of natural and physical resources.
 - (2) In this Act "sustainable management" means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural wellbeing and for their health and safety while —



- (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
- (b) Safeguarding the life-supporting capacity of air, water, soil and ecosystems; and
- (c) Avoiding, remedying or mitigating any adverse effects of activities on the environment.
- 4.1.3 The Plan Change meets the purpose of the Act by enabling the operation and growth of Wanaka Airport to be managed in an efficient and sustainable way.
- 4.1.4 Wanaka Airport is an important, existing strategic asset to the Lakes District and Central Otago area. It provides a national transport link for the local and regional community and contributes to the Region's economy. The Airport is therefore important to the social and economic wellbeing of the community and the Plan Change will enable the continued operation of the Airport.
- 4.1.5 The Plan Change will enable the proper management of airport noise, which is important in the interests of the health and well-being of the local community and through a statutory framework that is similar to other New Zealand airports.
- 4.1.6 The Plan Change will sustain the potential of the Airport as a physical resource now and for future generations. The Plan Change will not affect the life supporting capacity of air, water and soil ecosystems and through the adoption of effective objectives, policies, rules and methods, the adverse effects on the environment can be avoided.

Section 6

- 4.1.7 Section 6 of the Act sets out matters of national importance as being:
 - (a) The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development;
 - (b) The protection of outstanding natural features and landscapes from inappropriate subdivision, use and development;
 - (c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna;
 - (d) The maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers;
 - (e) The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga;
- 4.1.8 The Plan Change area does not contain areas of national importance and it does not promote any physical works, therefore (a) (c) above are not relevant. The Plan Change will not prevent public access to and along the coastal marine area, lakes and rivers and will not affect the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga.



Section 7

- 4.1.9 Section 7 of the Act lists other matters to which persons exercising functions and powers under the Act must have regard to. Those matters relevant to this Plan Change are:
 - (b) The efficient use and development of natural and physical resources;
 - (c) The maintenance and enhancement of amenity values;
 - (f) The maintenance and enhancement of the quality of the environment;
- 4.1.10 Wanaka Airport is an established physical resource and should be protected as such. The Airport was opened at its current position in 1983, having been relocated from a location closer to the Wanaka township and has continued to develop and expanded its operations since this time. The Airport currently provides scheduled flights to and from Christchurch, and is a popular recreational Airport. The Plan Change is necessary to enable the continued use and development of this well-established resource. It is efficient that the Airport operations continue and expand at the current location.
- 4.1.11 The noise boundaries around Wanaka Airport set the noise limits for aircraft operations at the Airport to comply with as part of QLDC's obligations in terms of the proposed altered Aerodrome Designation. In doing so the effects on the surrounding land uses can be mitigated as far as practicable.
- 4.1.12 The noise boundaries seek to manage reverse sensitivity issues between the Airport and surrounding land uses to maintain the quality of the indoor environment for those living around the Airport.

Section 8

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

- 4.1.13 There are no known Treaty principles that will be affected by this Plan Change. QLDC has informed the Ngai Tahu Group Management Trust and Kai Tahu ki Otago Limited (KTKO) of the proposed Plan Change, and no cultural issues have been raised that QLDC are aware of.
- 4.1.14 Overall it is considered the Plan Change meets the purpose of the Act.

SECTION 72 – PURPOSE OF DISTRICT PLANS

4.1.15 Section 72 of the Act sets out the purpose of district plans, while sections 73 to 76 set out the processes and general content of district plans. Section 72 states:

The purpose of the preparation, implementation, and administration of district plans is to assist territorial authorities to carry out their functions in order to achieve the purpose of this Act.



4.1.16 Through the preparation of this section 32 report, regard has been given to section 72, and Part 2 of the Act (refer section 5.1.1 of this report).

SECTION 32

- 4.1.17 Section 32 of the Act requires that before adopting any objective, policy, rule or other method, both the Council and person seeking a plan change shall carry out an evaluation which considers the alternatives, benefits and costs.
- 4.1.18 Section 32(3) provides that:

An evaluation must examine—

- (a) the extent to which each objective is the most appropriate way to achieve the purpose of this Act; and
- (b) whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives.
- 4.1.19 The terms "efficiency" and "effectiveness" are directly relevant to the evaluation required under section 32. The evaluation requires the measurement of these factors to be made relative to the objectives, policies, rules or other methods.
- 4.1.20 A report summarising the section 32 evaluation and giving reason for the evaluation must be available for public inspection at the same time as the plan change (to which it relates) is publicly notified.
- 4.1.21 The report must therefore set out the rationale and process underpinning the proposal to change the Queenstown Lakes District Plan as it relates to Wanaka Airport and its surrounds.
- 4.1.22 Section 74 outlines the matters that the territorial authority must have regard to when considering a change to a District Plan:
 - (1) A territorial authority shall prepare and change its district plan in accordance with its functions under section 31, the provisions of Part 2 [a direction given under section 25A(2),] its duty under section 32 and any regulations.
 - (2) In additions to the requirements of [section 75(3) and (4)], when preparing or changing a district plan, a territorial authority shall have regard to-
 - (a) Any
 - (i) Proposed regional policy statement; or
 - (ii) Proposed regional plan of its region in regard to any matter of regional significance or for which the regional council has primary responsibility under Part 4; and
 - (b) Any -
 - (i) Management plans and strategies prepared under other Acts; and
 - (ii) Repealed
 - (iia) Relevant entry in the Historic Places Register; and



- (iii) Regulations ensuring sustainability, or the conservation, management or sustainability of fisheries resources (including regulations or bylaws relating to taiapure, mahinga mataitai, or other non-commercial Maori customary fishing), -
- to the extent that their content has a bearing on resource management issues of the district; and
- (c) The extent to which the district plan needs to be consistent with the plans or proposed plans of adjacent territorial authorities.
- 4.1.23 Through the preparation of this section 32 report, regard has been given to the Otago Regional Policy Statement, which is considered to be relevant in terms of section 74 of the Act.

THE REGIONAL POLICY STATEMENT FOR OTAGO

- 4.1.24 The Otago Regional Policy Statement (RPS) was made operative on the 1st October 1998 and is part of a framework established under the Resource Management Act 1991 for the sustainable integrated management of Otago's natural and physical resources.
- 4.1.25 The RPS provides an overview of the resource management issues of the Otago region and the ways of achieving the integrated management of its natural and physical resources.
- 4.1.26 The key sections of the RPS of relevance to this Plan Change are outlined below.
- 4.1.27 Section 5 relates to Land and the objective 5.4.1 is relevant to this Plan Change:
 - 5.4.1 To promote the sustainable management of Otago's land resource in order:
 - (a) ..
 - (b) To meet the present and reasonably foreseeable needs of Otago's people and communities.
- 4.1.28 Enabling the growth and consolidation of Wanaka Airport at the Airport's current location enables sustainable growth of an existing resource. The Plan Change is consistent with this objective.
- 4.1.29 Section 9 relates to the Built Environment and objective 9.4.1 is relevant to this Plan Change:
 - 9.4.1 To promote the sustainable management of Otago's built environment in order to:
 - (a) Meet the present and reasonably foreseeable needs of Otago's people and communities; and
 - (b) Provide for amenity values; and
 - (c) ...
 - (d)



4.1.30 The Plan Change provides for sustainable growth of Wanaka Airport, which will meet transport and economic needs of Otago's people and communities. Management and monitoring of noise effects will ensure that there are no significant adverse effects on surrounding amenity values.

4.1.31 Objective 9.4.2 reads:

To promote the sustainable management of Otago's infrastructure to meet the present and reasonably foreseeable needs of Otago's communities.

- 4.1.32 Wanaka Airport is an important physical resource which contributes to the Wanaka basin economy, particularly the tourism industry.
- 4.1.33 The Airport's continued operation and development will contribute positively to the community's social and economic well being and to the foreseeable needs of future generations.
- 4.1.34 The Master Plan for Wanaka Airport highlights future opportunities for growth that will maintain and enhance operating capacity at the Airport and which will enable sustainable future use of the Airport to accommodate the ongoing growth in general aviation activities and scheduled operations. This will provide the community with certainty as to the long term form of development at the Airport and is therefore consistent with objectives 9.4.1(a) and 9.4.2 above.

4.1.35 Objective 9.4.3 reads:

To avoid, remedy or mitigate the adverse effects of Otago's built environment on Otago's natural and physical resources.

- 4.1.36 Wanaka Airport has been operating as an Aerodrome at this location since 1983 and can be considered as one of the region's important physical transportation resources. The proposed Plan Change will provide for management of the surrounding built environment in a manner complementary to the continued operations at the Airport to the year 2036. The proposed Plan Change is consistent with this objective.
- 4.1.37 Policy 9.5.2 relates to infrastructure and those parts relevant to this Plan Change are:

To promote and encourage efficiency in the development and use of Otago's infrastructure through:

- (a) Encouraging development that maximises the use of existing infrastructure while recognising the need for more appropriate technology; and
- (b) ...
- (c) ..
- (d) Avoiding or mitigating the adverse effects of subdivision, use and development of land on the safety and efficiency of regional infrastructure.



- 4.1.38 Wanaka Airport is a major component of the regions transport infrastructure. The Plan Change will enable the efficient future operation of the Airport at its current location and will assist to manage subdivision and land use around the Airport in a manner which does not adversely affect the on-going operation of the Airport. The proposed Plan Change is consistent with this policy.
- 4.1.39 The relevant parts of policy 9.5.3 are:

To promote and encourage the sustainable management of Otago's transport network through:

- (a)...
- (b)...
- (c) ..
- (d) Promoting the protection of transport infrastructure from the adverse effects of land use activities and natural hazards.
- 4.1.40 Wanaka Airport forms part of Otago's transport network. The proposed Plan Change provides for the management of land use activities around the Airport in order to protect the on-going operation of the Airport. The Plan Change is therefore consistent with this policy.

THE OTAGO REGIONAL AIR PLAN

- 4.1.41 The Otago Regional Air Plan was made operative on the 1st January 2003 and contains objectives and policies to address the air quality issues facing Otago.
- 4.1.42 Section 4.9 of the Air Plan relates to Transport Emissions. This section recognises that emissions from aircraft can have intermittent and localised effects around the region's airports. However, the Air Plan states that it is impractical to manage the emissions from aircraft on a regional basis because they only visit the Otago region for a very short period and cause very localised effects.

THE QUEENSTOWN LAKES OPERATIVE DISTRICT PLAN

4.1.43 Chapter 4 of the District Plan sets out District Wide Issues, objectives and policies. Objective 3 relates to Rural Amenity and reads:

Avoiding, remedying or mitigating effects of activities on rural amenity.

- 4.1.44 The proposed Plan Change seeks to ensure that the Wanaka Airport is protected into the future to accommodate anticipated levels of growth.
- 4.1.45 Airport operations are an expected element of the rural amenity at this location. The Wanaka Airport Master Plan and addendum anticipate increased activity at the Airport, which is provided for in part through the proposed designation (submitted concurrently with this Plan Change). This proposed Plan Change seeks to amend the noise boundaries in order to ensure that aircraft noise effects are mitigated on the surrounding rural environment. The proposed Plan Change is therefore consistent with objective 3.



- 4.1.46 The Transportation Section of the District Plan (Chapter 14) identifies the direct link between regional and district policy and endeavours to give effect to the Regional Council's policy requiring protection and maximising the cost effectiveness of existing transport corridors and infrastructure. Objective 8 of the District Plan relates specifically to air transport. The objective seeks to provide for effective and controlled Airports within the District, which are able to be properly managed as a valuable community asset in the long term. The policies set out to achieve Objective 8 which are relevant to this Plan Change are listed below:
 - 8.3 To establish an Air Noise Boundary and Outer Control Boundary for Queenstown and Wanaka airports.
 - 8.5 To provide for appropriate recreational airport facilities at Wanaka.
 - 8.6 To ensure buildings at both airports have regard for and are sympathetic to the surrounding activities, and landscape and amenity values by way of external appearance of buildings and setback from neighbouring boundaries.
- 4.1.47 The proposed Plan Change is entirely consistent with Objective 8.3. The revised noise contours recognise the existing activity at Wanaka Airport and the likelihood of this activity increasing. The existing noise contours were established in 1995 and are no longer applicable. The existing contours do not take account of scheduled air services and no longer adequately reflect the continuing rapid growth in aviation activity at the Airport.
- 4.1.48 The Windermere Rural Visitor Zone containing the Toy & Transport Museum has frontage to SH6 and abuts the western flank of the airport perimeter. The rules that apply to this zone recognise the importance of protecting Wanaka Airport from reverse sensitivity issues.
- 4.1.49 The adoption of the revised noise boundaries gives certainty to the surrounding community as to the scope and extent of the effects of aircraft noise on adjacent land uses.
- 4.1.50 Overall, the Plan Change seeks to provide for the on-going operational capability of the Airport and to avoid activities sensitive to aircraft noise in inappropriate locations. This is entirely consistent with the objectives of the District Plan.

Plan Change 35 – QLDC District Plan

4.1.51 In July 2008 Queenstown Airport Corporation lodged a Plan Change with QLDC seeking to extend the noise boundaries around Queenstown Airport and introduce additional boundaries, including a Night-time Noise Boundary (NNB). The Plan Change also seeks to amend existing and introduce new objectives, policies, rules and other methods to safeguard the future operational capability of Queenstown Airport and to mitigate the effects of aircraft noise on activities sensitive to aircraft noise in the vicinity of the Airport.



5. CONSULTATION PROCESS

- 5.1 Prior to the preparation of this Plan Change QLDC and its technical advisers have conducted a series of meetings and discussions over a three year period with the following groups and individuals considered to have a particular interest in the airport development and its effects on the environment:
 - Civil Aviation Authority
 - Department of Conservation (DoC)
 - Transit New Zealand (TNZ)
 - Community groups and some adjacent landowners
- 5.2 The outcomes of this consultation process are set out in this section.

Consultation Process for the Master Plan

- 5.3 Consultation with CAA, DoC and TNZ did not raise any matters of particular concern. Consultation with the community occurred between 2001 and 2002 as part of the draft Airport Master Plan process. In the period from 2006 into 2007 consultation with key stakeholders and the community has continued as set out below.
- 5.4 The draft Master Plan was reviewed at a special presentation to QLDC Councillors and members of the Wanaka Community Board in March 2007. Following that meeting major commercial airport users were advised that a discussion draft of the plan was available for their perusal and comment. Draft plans were sent to these airport users, including Air New Zealand, and comments received have been incorporated into the document. In the main this feedback consisted of minor corrections or clarification.
- 5.5 The Master Plan was then circulated by email to an extensive distribution list of airport users and other interested parties. Advertisements were inserted in local newspapers (The Messenger and Wanaka Sun) advising that copies of the Master Plan were available for public consideration. An electronic copy, in pdf format, was also lodged on the QLDC website in the Wanaka Airport subsection. In addition the Master Plan was featured in the QLDC information newsletter, Scuttlebutt.
- 5.6 The Master Plan was formally adopted by QLDC in September 2008.
- 5.7 At the time of preparation and finalisation of this report key stakeholder and community responses included receipt of four written submissions to the Master Plan. As a result of this consultation some amendments and additions were incorporated into the Master Plan.

Consultation Process for the Plan Change

5.8 QLDC in its role as the regulatory authority has prepared and issued a Discussion Document explaining the nature of the Plan Change. This document addresses the range of regulatory and non-regulatory methods that



could be used to address the control of aircraft noise and the control of activities sensitive to aircraft noise around the Airport perimeter.

Landowner Meetings

5.9 Meetings were also held with the owners of land within the proposed noise boundaries. Overall there was little opposition to the Plan Change, although the potential to relocate some of the approved building platforms to beyond the NNB and/or OCB is being explored.

Consultation Outcomes Summary

5.10 There were no significant environmental concerns identified that would otherwise affect the proposed Airport expansion or expansion of the noise boundaries.

6. ASSESSMENT OF ALTERNATIVES

6.1 INTRODUCTION

6.1.1 The various planning options for managing the effects of noise as the Airport continues to grow in the future are identified in Table 2 and discussed below.

Table 2: Planning Options

Options	Explanation
Option 1 – Status Quo	Retain the existing noise boundaries and provisions in the District Plan relating to Wanaka Airport. The effect of this option is to effectively do nothing.
Option 2 – Maintain the existing plan provisions but revise the Planning Maps.	Incorporate the revised noise boundaries but retain the existing provisions in the District Plan relating to Wanaka Airport.
Option 3 - Designation	Include the revised noise boundaries and provisions relating to land use restrictions within a new designation for Wanaka Airport in the District Plan.
Option 4 – Update the noise boundaries and revise the plan provisions.	Amend the District Plan maps with the proposed noise contours and revise the Plan provisions.
Option 5 – Move the Airport	Shift the physical location of the Airport from its existing site to an alternative green field area.

6.2 OPTION 1 – STATUS QUO

Explanation

6.2.1 Aircraft noise from Wanaka Airport is already managed through the existing District Plan maps and the objectives, policies, rules and other methods within the District Plan. One option is to retain the status quo, and do nothing with respect to the existing maps and provisions as they relate to Wanaka Airport.



Effectiveness

- 6.2.2 The existing noise contours were established over 10 years ago and provide for aircraft movements at Wanaka Airport to the year 2010. Retaining the existing noise contours is not considered effective in providing a comprehensive approach to the ongoing management and growth of Wanaka Airport.
- 6.2.3 This option effectively turns its back on the anticipated growth of the Airport, and leaves no or limited ability for expansion of the Airport as anticipated in the Wanaka Airport Master Plan (**Appendices E and F**).

Benefits

6.2.4 The benefit of this option is that it negates the requirement for a Plan Change and so does not introduce any additional land use controls for activities in the Rural Zone or Rural Visitor Zone that surrounds the Airport.

Costs

- 6.2.5 The Wanaka Airport Master Plan and addendum anticipate that there is increasing demand for air travel to and from Wanaka. The cost of this option is that the Airport must manage aircraft noise to within the current noise boundaries. The existing noise contours are out of date, and need to be revised to provide for the existing and future operation and growth of the Airport. Maintaining the existing contours would not provide for the growth anticipated in the Master Plan and would have a detrimental effect on the growth of the local and regional economy.
- 6.2.6 Wanaka Airport is a valuable existing resource. The 'do nothing' approach would not realise the economic and social importance of the Airport and would not represent sustainable management of the resource.

Efficiency

6.2.7 The status quo provisions if left in place, are neither sufficient to both protect and encourage the long term growth of the Airport, nor to protect the surrounding from the effects of aircraft noise.

Appropriateness

6.2.8 This option is not considered to be the most appropriate option as the status quo planning maps and plan provisions do not provide for the existing and future use of Wanaka Airport, nor do they adequately manage the adverse effects of noise on the environment.

6.3 OPTION 2 – UPDATE NOISE BOUNDARIES

Explanation

6.3.1 This option would be to propose no changes to Volume 1 of the District Plan but to replace Planning map 18a with the new noise boundaries.



Effectiveness

- 6.3.2 Under this option the existing rules would remain. In the OCB and the Rural Zone activities sensitive to aircraft noise are controlled, subject to the provision of appropriate acoustic insulation. In the ANB activities and the Rural Zone sensitive to aircraft noise are prohibited. In the Windermere Rural Visitor Special Zone activities sensitive to aircraft noise are not prohibited in either the OCB or ANB. There are no provisions relating to the NNB.
- 6.3.3 Objective 8 and associated policies of the District Plan (Section 14 Transportation) will be implemented through a number of methods including:
 - (a) Identification of the ANB and OCB locations and implementation of controls relating to these in order to manage aircraft activity at the airports.
 - (b) Provisions managing noise sensitive activities in areas with existing noise sensitive activities.
 - (c) Provisions prohibiting further intensive development, particularly noise sensitive development from areas adjacent to airports which have not been recognised for noise sensitive activities in former Plans or have not been developed for these activities.
 - (d) District Plan provisions, particularly policies, to encourage the retention of existing Rural Zones within areas affected by airport noise, in order to provide a buffer for noise and safety reasons between airports and other land use activities.
- 6.3.4 The existing rules do not achieve the objectives of the District Plan. The existing rules in the District Plan are reflective of the status of the Airport at the time the District Plan was first drafted. The Airport was solely a recreational airfield, with flights occurring on an irregular and intermittent basis. Scheduled commercial flights now occur at Wanaka Airport, and in line with the Master Plan projections such activities are likely to continue to grow. The existing provisions in the Plan are not effective in achieving this.

Benefits

6.3.5 This option would be relatively straightforward and simple to understand, essentially being a substitution of the new contour plans in the District Plan. Updating the existing noise contours is entirely consistent with the existing objectives and policies of the District Plan.

Costs

6.3.6 Adopting this option would mean that the existing and future operations of Wanaka Airport are not adequately recognised or protected in the District Plan provisions. In addition, potentially significant reverse sensitivity effects could arise from the encroachment of activities that are sensitive to aircraft noise around the periphery of the Airport. The existing land use controls need to be revised to reflect the existing status of the airport, and ensure that any adverse effects of noise on the surrounding environment is mitigated.



Efficiency

6.3.7 This option offers some short-term and limited efficiency in that no changes to the objectives, policies or rules are made, resulting in a potentially less contentious plan change process. However, relying on the existing provisions in the District Plan does not promote an efficient means of providing for the future development, growth and protection of Wanaka Airport.

Appropriateness

6.3.8 Updating the District Plan maps to provide for the revised noise contours for Wanaka Airport is considered to be appropriate, in terms of providing for the existing and future use of the Airport. However, this option will not achieve the comprehensive management of the land surrounding the Airport. This option is not considered to be the most appropriate option as it does not address potential or actual reverse sensitivity effects.

6.4 OPTION 3 – NEW DESIGNATION

Explanation

6.4.1 This option would be to remove the existing rules relating to land use activities surrounding the Airport, include the revised noise contours in the planning maps, and provide for these via a new designation in the District Plan.

Effectiveness

- 6.4.2 QLDC has the ability to designate land for Airport related activities. This option would be effective in providing for the existing and future use of Wanaka Airport, by designating the land that is subject to the noise boundaries. However, a designation in favour of QLDC would allow the Airport to do anything that is in accordance with the designation, and no other person may do anything that could prevent or hinder the work without the prior written consent of the Airport.
- 6.4.3 The designation overrides any zone rules and could potentially restrict all land use activities. This would be effective in protecting the interests of the Airport, but would not provide an integrated planning approach to land use development surrounding the Airport. This option is not considered an effective way of achieving consistency with the RPS and District plan objectives and policies relating to rural areas.

Benefits

- 6.4.4 This option would protect the existing and future use of Wanaka Airport. The designation would override the zone rules and no activity could occur within the designation unless the approval of the Requiring Authority (QLDC) had been obtained.
- 6.4.5 Individual landowners could require QLDC to purchase or lease the affected land. This would have financial benefits for those individual landowners that seek to pursue this as an option.



Costs

- 6.4.6 A designation in favour of the Airport could adversely affect land owners surrounding the Airport. Consent from QLDC would be required for development within the noise boundaries, and could be reasonably withheld for activities sensitive to aircraft noise regardless of the existing uses and/or the underlying zoning.
- 6.4.7 The land that is affected by the proposed noise boundaries is zoned Rural General and Rural Visitor Zone. It is considered appropriate to have controls that are specific to these zones and which adequately recognise existing uses. A designation does not provide any discretion in this regard.
- 6.4.8 QLDC may be required to purchase the land that is to be designated. The financial costs associated with this could be significant and may potentially outweigh any economic benefits derived from the ongoing use of the Airport, at least in the short to medium term.

Efficiency

6.4.9 A designation to control land use activities outside the Airport is not considered an efficient method. The designation would need to extend over a number of land holdings, and two different zones. This option does not provide for existing uses and anticipated development in these zones. It is not an efficient method in achieving the RPS and District Plan objectives and policies relating to rural activities, and airport management.

Appropriateness

6.4.10 A designation in favour of QLDC relating to aircraft noise is considered to be appropriate, in terms of protecting the existing and ongoing use and growth of Wanaka Airport. However, this option results in potentially significant costs for both land owners and QLDC, and is not considered the most appropriate option as it does not provide an integrated solution for the provision and management of aircraft noise and land use activities immediately surrounding the Airport.

6.5 OPTION 4 - REVISE THE DISTRICT PLAN PROVISIONS AND MAPS

Explanation

- 6.5.1 This option introduces new noise boundaries accompanied by appropriate District Plan provisions which address issues associated with noise and reverse sensitivity in a comprehensive manner. The introduction of new noise boundaries will provide clear guidance on areas where noise nuisance is likely to occur. The introduction of associated objectives, policies and rules will ensure that development in the surrounding Rural General and Rural Visitor Zones is appropriately managed.
- 6.5.2 This option would result in a comprehensive planning outcome for the management of noise effects and activities surrounding Wanaka Airport.



6.5.3 This option would update the existing ANB and OCB for Wanaka Airport and introduce a new NNB for the provision of night time flights to occur in the future. The introduction of new objectives, policies and rules would seek to manage activities that are sensitive to aircraft noise and mitigate any potential adverse reverse sensitivity effects.

Effectiveness

6.5.4 The objectives and policies of the RPS and District Plan seek to protect and enhance significant physical resources and recognise the importance of the transportation network in the area. Relevant objectives also seek to avoid, remedy or mitigate adverse effects from noise generation on rural amenity values. This option seeks to ensure the continued operation of Wanaka Airport in association with managed noise limits. The noise limits have been generated using projected future aircraft movements. This option seeks to provide for the continued and future operation of Wanaka Airport and is effective in achieving consistency with the relevant objectives and policies of the RPS and District Plan.

Benefits

- 6.5.5 This option promotes a set of noise boundaries that can be easily understood and implemented. The noise boundaries clearly identify those areas that may be affected by aircraft noise and sets out the appropriate land use controls to ensure any adverse reverse sensitivity effects are appropriately avoided or mitigated.
- 6.5.6 The setting of noise boundaries to the year 2036 protects the Airport as a significant physical resource. The proposed objectives, policies and rules seek to manage the development of land use activities that are sensitive to aircraft noise around the periphery of the Airport. The provisions are zone specific and consistent with the objectives and policies of the District Plan.
- 6.5.7 This option will provide for the future ongoing operation and future expansion of the Airport, which will result in economic benefits for the surrounding area through increased tourism and visitor numbers.

Costs

- 6.5.8 This option will restrict the ability to establish new activities sensitive to aircraft noise within the noise boundaries.
- 6.5.9 In the Rural General Zone any new activity sensitive to aircraft noise within the OCB will be prohibited. Any new development within the NNB in the Rural Visitor Zone will also be prohibited. Any alterations or extensions to existing building that house activities sensitive to aircraft noise in these areas must be acoustically insulated to an appropriate standard at the developer/land owners cost.
- 6.5.10 There will be financial costs involved in the ongoing monitoring of noise at Wanaka Airport. These costs will be met by QLDC.



Efficiency

- 6.5.11 This option would provide good efficiencies in terms of achieving the objectives of the RPS and District Plan through providing for the Airport as a significant physical resource that should be protected for the use of current and future generations.
- 6.5.12 The noise boundaries are an efficient and effective tool to identify the locations where the effects of aircraft noise need to managed. The most appropriate controls or mitigated can then be implemented within the boundaries, such as the avoidance of activity to aircraft noise where the effects are greatest, or the requirement to insulate buildings for activity sensitive to aircraft noise where this would adequately mitigate the effects. Zone specific rules to manage activity sensitive to aircraft noise around the Airport are an effective and efficient way of managing the effects of aircraft noise by ensuring only appropriate development takes place around the Airport.
- 6.5.13 This option is considered an efficient means of managing potential or actual reverse sensitivity effects and providing for the ongoing and future use of the Airport.

Appropriateness

6.5.14 The proposed amendments to the noise boundaries for Wanaka Airport, coupled with additions and amendments to the Rural General and Rural Visitor Zone provisions are considered to be the optimal approach for the comprehensive management of noise at Wanaka Airport.

6.6 OPTION 5 – RELOCATE THE AIRPORT

Explanation

6.6.1 This option would require the existing Airport to be relocated elsewhere within the Wanaka area.

Effectiveness

- 6.6.2 Wanaka Airport is ideally located on flat terrace land with few existing activities sensitive to aircraft noise, yet it is close enough to the Wanaka township to make it easily accessible. To date significant investment has been made into the Airport. QLDC has invested heavily in the existing airport and recently spent \$700,000 re-sealing the main runway. In addition it spent in excess of \$1.2M purchasing additional land to provide for the proposed expansion. This purchase has meant that the QLDC can provide for the immediate future need for an expanded public airfield.
- 6.6.3 To purchase and develop a completely new airfield on a 'green fields' site would not be an effective way of utilising an existing physical resource and would not be effective in achieving consistency with the objectives of the RPS or District Plan with respect to regionally significant infrastructure.



Benefits

6.6.4 There are no benefits realised with this option.

Costs

- 6.6.5 The financial costs involved in developing a new site for Wanaka Airport would be significant. A number of consents, plan changes and/or designations would be required which would create additional time and cost constraints.
- 6.6.6 Further, the potential environmental effects of a green field site, including noise effects could be more significant. Heavy aircraft (C130 and Convair 580 for example) already use Wanaka from time to time. Moving the Airport to a site further along SH6 is not feasible because of the proximity of the river terrace.
- 6.6.7 An alternative airport site on the lower river terraces would conflict with existing rural land uses as well as raising the possibility of operational constraints because of obstacles and the greater incidence of fog on the lower terraces.

Efficiency

6.6.8 This option would not represent the efficient use and development of an existing physical resource.

Appropriateness

6.6.9 This option is not considered appropriate.



6.7 APPROPRIATENESS OF PROPOSED PLAN CHANGE PROVISIONS

6.7.1 The above assessment of alternatives has determined that Option 4 is the most effective, efficient and appropriate option to pursue. Section 32(a) and (b) then requires an assessment of the extent to which each objective is the most appropriate way to achieve the purpose of the Act, and whether having regard to their efficiency and effectiveness, the policies, rules or other methods are the most appropriate for achieving all relevant objectives (both existing and proposed). The following table summarises the findings of this assessment relevant to the objectives, policies, rules and other methods that are intended to be changed or added by the plan change.

Table 3: Assessment of Policies, Rules and Other Methods

Proposed Change	9	Effectiveness	Efficiency	Appropriateness
4 District Wide Is: 4.9.3 Objectives a				
Section 4.9.3 Proposed Objective 9	Add new objective as follows: Maintain and promote the on-going operation of the airport while managing reverse-sensitivity effects on surrounding land uses.	This objective seeks to promote the continued operation of Wanaka Airport in association with managed noise levels. The noise limits have been generated using the projected future aircraft figures for Wanaka Airport. The continued operation of Wanaka Airport is consistent with sustaining the potential of a physical resource (the airport) to meet the reasonably foreseeable needs of future generations. Introduction of the noise boundary will enable the continued operation of the Airport and management of the adverse effects of noise on the environment. The adoption of the air noise and outer control boundaries effectively places a ceiling on future aircraft operations and gives certainty to the surrounding community as to the scope and extent of the effects of aircraft noise on adjacent land uses.	The objective is efficient, as it will ensure that Wanaka Airport is protected and that reverse sensitivity issues are appropriately addressed. Implementation of this objective will avoid an ad hoc approach to the future planning of this regionally significant asset.	The new objective is considered to be the most appropriate way to achieve the purpose of the Act.
4.9.3 Proposed Policy 9.1	Insert new policy: Ensure appropriate noise boundaries are established and maintained to enable operations at Wanaka Airport to continue and to expand over time.	This policy promotes the establishment of noise boundaries at Wanaka Airport. The policy effectively achieves the objective by promoting the establishment of noise boundaries, which will set appropriate noise limits to enable the effects of aircraft to be managed and to ensure noise sensitive activity does not occur in inappropriate locations.	The policy is efficient in implementing the objective in that it enables operations at Wanaka Airport to continue to expand over time in line with the predicted growth rates within the Master Plan and the Master Plan Addendum. This will result in positive economic benefits for Wanaka and the Otago region.	The new policy is considered appropriate for achieving the objective.
4.9.3 Proposed Policy 9.2	Insert new policy: To prohibit all new activity sensitive to aircraft noise within the Outer Control Boundary and/or the Night-time Noise Boundary in the Rural Zone around Wanaka Airport.	Aircraft noise can have an adverse impact on the quality of lifestyle for people living in residential properties near airports. Appropriately designed and developed buildings will significantly mitigate the effects of noise associated with airport activities. However, people soon forget they have built or bought near an operating airport facility and new residents moving into the area may be less aware of non-visual elements of the existing environment. This can result in reverse sensitivity issues, where activities sensitive to an existing activity choose to locate nearby but subsequently attempt to inhibit its operation. Wanaka Airport has sought to obtain no complaint covenants on neighbouring residential property developments wherever possible to ensure current and future property owners recognize the presence of the airport and do not seek to limit its operation. While this has been effective to date, there is no certainty or guarantee that such covenants can be agreed. This policy seeks to prohibit all new activity sensitive to aircraft noise within the	This policy is efficient in that it avoids activities sensitive to aircraft noise from being developed within the Rural General Zone surrounding the Airport. It also provides certainty for the future operation of the Airport. Such measures will ensure the health and well-being of the community	The new policy is considered appropriate for achieving the objective.
		defined Outer Control and the Night Time Noise boundaries in the Rural		



4.9.3 Proposed Policy 9.3	Insert new policy: To discourage plan changes or land use proposals which are promoted or initiated on land within the Outer Control Boundary and/or the Night-time Noise Boundary at Wanaka Airport where these incorporate provisions for activity sensitive to aircraft noise on the basis that such activities have the potential to compromise the ongoing operational efficiency of the airport.	General Zone surrounding the Airport. The noise boundaries define those areas which are potentially susceptible to aircraft noise. It is therefore prudent that all new activities sensitive to aircraft noise are prevented in these locations. In order to ensure no future, unmitigated reverse-sensitivity issues arise in respect of aircraft noise, it is appropriate to discourage further plan changes that would introduce activity sensitive to aircraft noise within the airport noise boundaries.	considering plan changes within the Airport boundaries.	appropriate for achieving the objective.
	Insert new Implementation Methods as follows: Implementation Methods i. District Plan The provision of rules to prohibit or otherwise control activity sensitive to aircraft noise within the Outer Control Boundary and/or the Nighttime Noise Boundary in the Rural Zone around Wanaka Airport. ii Other Methods Consultation with Wanaka Airport on any Plan Change or other land use proposal affecting land within the Airport Outer Control Boundary, Night-time Noise Boundary or Air Noise Boundary.	Consultation will facilitate effective communication between Wanaka Airport and developers around the Airport. The implementation methods will ensure the operation of Wanaka Airport is not affected by reverse-sensitivity issues and will consequently provide for the ongoing operation of the Airport. This will result in a positive economic benefit brought to the Region by the Airport.	The new method is required to explicitly link the new policies to the proposed rules.	These methods are considered appropriate for achieving the objective.
	Explanation and Principal Reasons for Adoption Some types of activity on land adjacent to the airport may give rise to issues of reverse sensitivity. It is essential for the current and future operation of Wanaka Airport that appropriate measures are taken in regard to noise sensitive activity in the vicinity of the Airport to ensure reverse sensitivity issues are avoided. Such land use management will also avoid the potential adverse effects on residential amenity (in particular indoor amenity) and community well-being by avoiding unnecessary exposure to higher than desirable levels of aircraft noise.	The proposed Explanation and Principal Reasons for Adoption are effective in communicating the reasons why such provisions are necessary within the District Plan.	·	appropriate for achieving the



5 Rural Areas Objectives and	Policies			
Existing	Objective 3 - Rural Amenity			
Objective	Avoiding, remedying or mitigating adverse effects of act	ivities on rural amenity.		
Section 5 Rural Areas	Insert new policy as follows:	The District Plan anticipates some residential activity in the Rural Zone by providing for it as a Discretionary Activity. The part of the Rural Zone included	Prohibiting activity sensitive to aircraft noise in the Rural General Zone surrounding the	This Policy is considered appropriate to achieve the
Proposed	To prohibit all new activity sensitive to aircraft noise on	in the Airport noise contours will be subject to a higher level of noise from	Airport will ensure there are no adverse	objective.
Policy 3.6	any Rural zoned land within the Outer Control	aircraft than the rest of the Zone and may not provide the rural amenity of other	effects from reverse-sensitivity.	
	Boundary, Night-time Noise Boundary and Air Noise	parts of the Zone. The policies and rules therefore seek to prevent the		
	Boundary at Wanaka Airport to avoid adverse effects	establishment of activities that are likely to be sensitive to aircraft noise within	This policy will be effective in ensuring that	
	arising from aircraft operations on future activities	the noise boundaries. This is effective in avoiding adverse amenity effects.	the potential for adverse effects from	
	sensitive to aircraft noise.		aircraft noise on activities sensitive to	
		Prohibiting activity sensitive to aircraft noise in the Rural Zone will ensure there	aircraft noise is avoided, in the interests of	
		are no adverse effects from reverse-sensitivity.	the health and well being of the community.	
	Insert new Implementation method as follows:	The implementation methods provide for future on-going operation and future	Utilisation of the appropriate industry	These methods are considered
		expansion of the Airport, which will result in an increased economic benefit	standards for Airport Noise Management	appropriate for achieving the
	Implementation Method	brought to the Region by the Airport.	and Land Use Planning are considered the	objective.
	(v) The provision of rules to prohibit new activity		most efficient means of implementing the	
	sensitive to aircraft noise within the Outer	The implementation methods will result in some activities not being permitted	objectives and policies.	
	Control Boundary, Night-time Noise Boundary	at some locations and will require additional sound insulation works to be		
	and Air Noise of Wanaka Airport.	implemented for some new buildings housing activity sensitive to aircraft noise.		
	(vi) The New Zealand Standard 6805:1992 -			
	"Airport Noise Management and Land Use			
	Planning" will be used as the basis for			
	establishing noise boundaries and associated			
	rules in the District Plan in relation to controlling			
	noise from airports in the District while also			
	protecting those airports from the reverse			
	sensitivity effects associated with activities			
	which are sensitive to aircraft noise.			
	Amend Objective 7 as follows:	The policies and methods prohibit the establishment of activities sensitive to aircraft noise around Wanaka Airport. This will result in a buffer between	Amendment to the existing objective in this manner is considered efficient.	This is the most appropriate way to ensure the operation capability
	Retention of a greenfields area within an airport	activities sensitive to aircraft noise and the Airport, which is the most	Thanker to considered emotern.	and integrity of the airport is
	Outer Control Boundary to act as a buffer between	appropriate and effective way in which to achieve the objective.		maintained, which will benefit the
	airports and other land use activities. Retention of	appropriate and encouve way in which to define to the objective.		local economy.
	a greenfields area or an area for Airport related			local coolidity.
	activities or where appropriate, an area for activities			This is also the most appropriate
	not sensitive to aircraft noise, within an airport's Outer			way to ensure the protection of
	Control Boundary to act as a buffer between airports			the health and well-being of the
	and other land use activities.			community through avoiding
	and other land use activities.			, ,
				development in inappropriate locations or requiring sound
				insulation.
	Insert new policy as follows:	The District Plan anticipates some residential activity in the Rural Zone by	Prohibiting activity sensitive to aircraft noise	This Policy is considered
	, , , , , , , , , , , , , , , , , , , ,	providing for it as a Discretionary Activity. The part of the Rural Zone included	in the Rural General Zone surrounding the	appropriate to achieve the
	7.4 To prohibit the location of any new activity	in the Airport noise contours will be subject to a higher level of noise from	Airport will ensure there are no adverse	objective.
	sensitive to aircraft noise on land within the	aircraft than the rest of the Zone and may not provide the rural amenity of other	effects from reverse-sensitivity.	
	-	parts of the Zone. The policies and rules therefore seek to prevent the		
	Total Double 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	in a positive and interest to provone the	I .	I .



		_		
	Boundary and Air Noise Boundary around Wanaka Airport.	establishment of activities that are likely to be sensitive to aircraft noise within the noise boundaries. This is effective in avoiding adverse amenity effects. Prohibiting activity sensitive to aircraft noise in the Rural Zone will ensure there	This policy will be effective in ensuring that the potential for adverse effects from aircraft noise on activities sensitive to aircraft noise is avoided, in the interests of	
		are no adverse effects from reverse-sensitivity.	the health and well being of the community.	
	Insert new policy as follows:	In order to ensure no future, unmitigated reverse-sensitivity issues arise in	The policies provide guidance for people	This Policy is considered
	7.5 To discourage plan changes or land use proposals which are promoted or initiated on land within the Outer Control Boundary, Nighttime Noise Boundary and Air Noise Boundary at Wanaka Airport where these incorporate provision for activity sensitive to aircraft noise on the basis that such activities have the potential to compromise the ongoing operational efficiency of the Airport.	boundaries.	considering plan changes within the Airport boundaries.	appropriate to achieve the objective.
	(f) Provision of zone rules prohibiting activities sensitive to aircraft noise within the Air Noise Boundary and Nighy-time Noise Boundary and Outer Control Boundary shown on the planning maps around the Wanaka Airport.	The implementation methods set out effective ways to manage activity sensitive to aircraft noise in the Airport noise boundaries to ensure reverse sensitivity issues do not arise. Such reverse sensitivity issues may have the potential to affect the operational capacity of the Airport now or in the future. This implementation method is required to explicitly link the new policy to the proposed new rules.	Inclusion of a linking provision is considered efficient and will assist in providing certainty and continuity within the District Plan.	This method is considered appropriate for achieving the objective.
Rural Areas – Rules 5.3.1.1 Rural General Zone	Amend the purpose of the Rural General Zone as follows: The purpose of the Rural General Zone is to manage activities so they can be carried out in a way that: - protects and enhances nature conservation and landscape values; - sustains the life supporting capacity of the soil and vegetation; - maintains acceptable living and working conditions and amenity for residents of and visitors to the Zone; - protects the on-going operations of Wanaka Airport.	Zone purpose is therefore appropriate as it will protect the long term efficient	social and economic wellbeing for the	This revision to the Rural General Zone Purpose is considered appropriate to achieve the objective.
5.3.3.2 Controlled Activities	5.3.3.2 Controlled Activities vii Buildings within the Outer Control Boundary - Wanaka Airport Buildings or part of a building to be used for residential activities, visitor accommodation or community activities on any land within the Outer Control Boundary as indicated on the District Plan Maps, in respect of the design, construction, orientation and location of the building to achieve adequate indoor sound insulation from aircraft noise.	The proposed amendments to Rule 5.3.3.5(ii) seek to prohibit ASAN's establishing within the Air Noise Boundary Outer Control Boundary or the Night-time Noise Boundaries proposed for Wanaka Airport. Rule 5.3.3.2(vii) is therefore redundant as there will be no controlled activity new buildings within these boundaries.	provisions within the District Plan to remove	Deletion of this Rule is considered appropriate for achieving the objective.



5.3.3.5 Prohibited Activities	Amend existing rule 5.3.3.5(ii) as follows: 5.3.3.5 Prohibited Activities ii New Building Platforms and Activities within the Air Noise Boundary Outer Control Boundary or the Night-time Noise Boundary - Wanaka Airport On any site located within the Air Noise Boundary Outer Control Boundary or Night-time Noise Boundary, any new residential activities, visitor accommodation or community activities activity sensitive to aircraft noise or new building platform to be used for an activity sensitive to aircraft noise shall be a Prohibited Activity.	Air noise boundary rules currently exist in the QLDP for Wanaka Airport (refer to rule 5.3.5.2(x)). However these rules were not formulated to take account of scheduled air services and no longer adequately reflect the continuing rapid growth in aviation activity at the airport. The physical effect of the proposed revisions is to prohibit noise sensitive activities (ASAN) from establishing inside the Ldn 65 contour where aircraft noise levels will create an unacceptable noise environment for residential, medical (hospitals and clinics), educational (schools) and similar activities. The new rules establish the extent of predicted noise levels in year 2036 and these can be monitored in order to ensure that airport noise is managed to comply with the rules.	This rule is considered efficient as inappropriate development within the Airport noise boundaries will be avoided or mitigated, which will ensure the health and welfare of the community is protected.	This Rule is considered appropriate for achieving the objective.
Rule 5.3.5.2 Zone Standards v Noise	Insert new exception to Rule 5.3.5.2 (v) as follows: (iii) Noise from aircraft operations at Wanaka Airport are exempt from the above noise standards, but are subject to the conditions attached to the designation.	The existing District Plan provisions do not currently provide an exemption for aircraft noise generated from activities at Wanaka Airport. The Notice of Requirement to amend the existing designation (which will be submitted concurrently to this plan change) will include a list of amended conditions which will include noise limits based on the noise modelling undertaken by Marshall Day. These noise limits will be specifically designed for the nature and type of activity that occurs at the Airport. Reliance on such empirical founded limits will be effective.	formulated especially for airport related	This Rule is considered appropriate for achieving the objective.
Rule 5.3.5.2 Zone Standards viii Wanaka Airport Building Line	Viii Wanaka Airport Building Line No building shall be erected, constructed or relocated within the area defined by a line 150m on the western side of the centre line of the Wanaka Airport main runway, the Airport Purposes Designation boundary at either end of the main runway, and a line 200m on the eastern side of the centre line of the Wanaka Airport main runway.	The Airport building line was formerly partly outside the Airport designation but it is now proposed to extend that designation to cover all the land which has subsequently been acquired for the airport so it is unnecessary to have controls in the District Plan.		Deletion of this Rule is considered appropriate for achieving the objective.
Rule 5.3.5.2 Zone Standards X Airport noise – Building within the Outer Control Boundary – Wanaka Airport	Airport main runway. Amend existing rule 5.3.5.2(x) as follows: X Airport Noise - Building with the Outer Control Boundary - Wanaka Airport Alteration or addition to existing buildings or construction of a building on an building platform approved before 20 October 2010 within the Outer Control Boundary and/or Night-time Noise Boundary at Wanaka Airport (a) Within the Night-time Noise Boundary (NNB) - The construction of, alteration, or addition to any building containing an activity sensitive to aircraft noise shall meet	The airport noise contours provide the basis for the implementation of New Zealand Standard NZS 6805 in the District Plan. The current noise contours contained within the District Plan were developed in 1995, with data representing the predicted airport operations for the year 2010. The purpose of the current modelling exercise is to include more up to date operational data and thus provide revised noise control boundaries. These replacement standards are in accordance with recent best practice being applied at other provincial airports.	standards for Airport Noise Management	The amendments to this Rule are considered appropriate for achieving the objective.



	for sound insulation (Table 1) and	
	mechanical ventilation (Table 2) set out in	
	Appendix 14 of the District Plan.	
(a)	On any site within the Outer Control	
	Boundary as indicated on the District Plan	
	Maps, any buildings or part of a building	
	to be used for residential activities, visitor	
	accommodation or community activities	
	shall be insulated from aircraft noise so	
	as to meet an indoor design sound level	
	of 40 dBA Ldn, except for non-critical	
	listening environments where no special	
	insulation is required.	
(b)	Within the Outer Control Boundary (OCB) –	
	The construction of, alteration, or addition	
	to any building containing an activity	
	sensitive to aircraft noise shall meet the	
	acceptable construction requirements for	
	sound insulation (Table 1) and mechanical	
	ventilation (Table 2) set out in Appendix 14	
	of the District Plan.	
(b)	This control shall be met in either of the	
	following two ways:	
	EITHER:	
	(i) By providing a certificate from a	
	recognised acoustic engineer	
	stating that the proposed	
	construction will achieve the	
	internal design noise level.	
	OR	
	(ii) The building shall be constructed	
	and finished in accordance with the	
	provisions of Table 1 in part	
	5.3.5.2.	
(c)	Where construction alternatives to those	
	listed in Tables 1 and 2 of Appendix 14 are	
	proposed to be used, a certificate from a	
	person suitable qualified in acoustics	
	stating that the proposed construction will	
	achieve a similar standard of acoustic	
	insulation or ventilation to critical listening	
	environments shall be provided to Council.	
/.n	M/hore a vantilation avatem (or avatems) is	
(a)	Where a ventilation system (or systems) is	
	required by this rule, noise from such a	
	system shall not exceed the levels set out	
	in Table 3 of Appendix 14.	



	Delete Table 1 – Acoustic Insulation of Buildings Containing Noise Sensitive Activities (Except Non- Critical Listening Areas)			
Delete Assessment Matter 5.4.2.3.ix	ix Controlled Activity - Addition or alteration to Buildings within the Outer Control Boundary - Queenstown Airport and Buildings within the Outer Control Boundary - Wanaka Airport	This assessment matter becomes redundant by virtue of Rule 5.3.5.2(x) and should therefore be deleted.	It is efficient to remove unnecessary provisions within the District Plan to remove uncertainty, prevent confusion and to provide clarity.	
	Conditions may be imposed to ensure the design, construction, orientation and location of buildings for residential activities, visitor accommodation or community activities within Wanaka Airport's Outer Control Boundary, or the alteration or addition to an existing building or part of a building used for residential activities, visitor accommodation or community activities within Queenstown Airport's Outer Control Boundary is such to ensure the indoor design—sound—levels—specified—in—Zone Standards 5.3.5.2(viii) and (x) are met.			
Section 12.3	Amend existing policy 12.3.4(6) as follows:	Existing Policy 12.3.4 (6) recognises the need for activities which occur within	Utilisation of the appropriate industry	This Rule is considered
Rural Visitor	7 the fid existing policy 12.0.4(b) as follows.	the Windermere Rural Visit Zone to minimise the potential for reverse	1	
Zones	12.3 RURAL VISITOR ZONES	sensitivity. However, the existing policy allows for ASAN to be located within		objective.
	a. Amend Policy 12.3.4 (6) as follows:	the zone and this needs to be amended accordingly. In addition, the existing	_	,
Amend Policy	Within the Windermere Rural Visitor Zone	provisions are vague and create uncertainty particularly in terms of levels of		
12.3.4(6)	minimise the potential for reverse sensitivity effects on with Wanaka Airport by:	development which are considered appropriate and the degree of noise insulation required for buildings within this Zone.		
	• Prohibiting all new activity sensitive to			
	aircraft noise (this includes visitor	The proposed amendments to this Policy create certainty as to what is/is not		
	-	acceptable within this Zone. It removes uncertainty over the nature and type of		
	Noise Boundary:	development which is allowed/prohibited and requires compliance with an		
	Requiring compliance with an acoustic treatment performance standard for any	acoustic treatment performance standard for any new or altered buildings.		
	treatment performance standard for any new, altered or extended visitor	Further, there is no effects basis for treating visitor accommodation and		
	accommodation or permanent residential	residential activity within the Windermere Rural Visitor Zone differently than		
	accommodation approved between the	those same activities in the surrounding Rural General zone.		
	Outer Control Boundary and Night-time	and delivered in the carroanianing fraid Content 25.16.1		
	Noise Boundary shown on the planning			
	maps.			
	Noise insulating buildings			
	 Designing and orientating buildings to 			
	minimise exposure to noise			
	 Encouraging noise sensitive activities to be 			
	located with maximum separation from the			
	airport			
	 Avoiding landscaping and development 			
	that may be hazardous to aircraft			
	 <u>Limited</u> permanent residential 			



	accommodation			
Rule 12.4.3.2iii (a)iii Buildings	Delete existing Rule 12.4.3.2iii (a)iii as follows: iii Buildings (a) All Buildings in respect of: i the coverage, location, external appearance of the buildings and associated earthworks, access and landscaping, to avoid or mitigate adverse effects on landscape and visual amenity values, nature conservation values and the natural character of the rural environment; and ii the provision of water supply, sewage treatment and disposal, electricity and telecommunication services. iii Windermere - the design, construction, orientation and location of the building to achieve adequate indoor sound insulation from aircraft noise.	The proposed amendments to this Policy 12.3.4 (6) create certainty as to what is/is not acceptable within this Zone. It removes uncertainty over the nature and type of development which is allowed/prohibited and requires compliance with an acoustic treatment performance standard for any new or altered buildings. Existing rule 12.4.3.2(a)iii is therefore redundant and should be deleted.	Removal of this requirement is considered efficient.	Amendment to this Rule is considered appropriate for achieving the objective.
Delete Controlled Activity Rule 12.4.3.2.vi(g)	Delete Controlled Activity Rule 12.4.3.2.vi(g) as follows: vi Visitor Accommodation Activities (v) and (vi) above are controlled in respect of the following matters: (g) Windermere airport noise	All new buildings or alterations or additions to existing buildings within the Outer Control Boundary will be controlled by the revised standards proposed within Appendix 14. There is no need therefore to include specific provisions relating to airport noise relating to the Windermere Special Zone and as such Rule 12.4.3.2.vi (g) should be deleted.	Removal of this requirement is considered efficient.	Amendment to this Rule is considered appropriate for achieving the objective.
Amend existing Rule 12.4.3.5 Prohibited Activities	Amend existing rule 12.4.3.5 Prohibited Activities as follows: 12.4.3.5 Prohibited Activities The following shall be Prohibited Activities: (i) Panelbeating, spray painting, motor vehicle repair or dismantling, fibreglassing, sheet metal work, bottle or scrap storage, motorbody building, fish or meat processing, or any activity requiring an Offensive Trade Licence under the Health Act 1956. (ii) Buildings to be used for an activity sensitive to aircraft noise on any land within the Wanaka Airport Night-time Noise Boundary.	The amendment to this Rule to prevent ASAN is efficient as it reinforces the intention of the proposed objectives and policies and provides continuity and certainty within the District Plan. This rule ensures that activities sensitive to aircraft noise cannot establish within the Air Noise Boundary or the Night-time Noise Boundary in the Rural Visitor Zone near Wanaka Airport.	This rule is efficient in ensuring that activities sensitive to aircraft noise cannot establish within the Air Noise Boundary or the Night-time Noise Boundary in the Rural General Zone near Wanaka Airport.	Rules to manage activity sensitive to aircraft noise around the Airport are an effective way of managing the effects of aircraft noise by ensuring only appropriate development takes place around the Airport. This will ensure that activity sensitive to aircraft noise is prohibited in certain locations.
12.4.5.2 Zone Standards	Amend Zone Standard Rule 12.4.5.2 (vii) as follows: 12.4.5.2 Zone Standards vii Airport Noise - New buildings or alterations or additions to existing buildings within the outer control boundary - Wanaka Airport	ASANs (within the newly defined OCB and NNB boundaries) are prohibited. Existing Rule 12.4.5.2(vii) is therefore redundant and should be deleted. Proposed Rule 12.4.5.2(vii) now provides appropriate guidelines for the development of buildings within the defined noise boundaries. This provides greater certainty to adjacent landowners as to their obligations in terms of meeting the required sound insulation and ventilation requirements.	The provision of this rule provides greater certainty to adjoining landowners and provides guidelines to protect their health and wellbeing.	This rule is considered to be the appropriate for achieving the objective.



	T		T	
	(a) Within the Outer Control Boundary (OCB) — The construction of, alteration, or addition to any building containing an activity sensitive to aircraft noise shall meet the acceptable construction requirements for sound insulation (Table 1) and mechanical ventilation (Table 2) set out in Appendix 14 of the District Plan. (b) Where construction alternatives to those listed in Tables 1 and 2 of Appendix 14 are proposed to be used, a certificate from a person suitably qualified in acoustics stating that the proposed construction will achieve a similar standard of acoustic insulation or ventilation to critical listening environments shall be provided to Council. (c) Where a ventilation system (or systems) is required by this rule noise from such a system shall not exceed the levels set out in Table 3 of Appendix 14. Wanaka Airport. On any site within the outer control boundary as indicated on the District Plan Maps, any building or part of a building to be used for Residential Activities, Visitor Accommodation Activities, Commercial Activities or Community Activities shall be insulated from aircraft noise so as to meet an indoor design sound level of 40dBA Ldn, except for non-critical listening environments where no special insulation is required.	These replacement rules are in accordance with recent best practice being applied at other provincial airports and reflect the rules proposed to be applied in the surrounding Rural General zone.		
Delete 12.5.2. x Assessment Matters	Windermere - the following assessment matters should be taken into account in addition to those listed for specific activities. (a) The design, constructions, orientation and location of buildings and whether an indoor design sound level of 40 dBA Ldn, except for noncritical listening environments can be	There is no need to control buildings or activities in relation to aircraft noise outside the Outer Control Boundary within the Rural Visitor zone at Windermere. This assessment matter is no longer necessary and should be deleted.	Removal of this assessment matter is considered efficient.	Deletion of this assessment matter is considered appropriate.
	achieved. (b) Whether noise sensitive activities are located with maximum separation from Wanaka Airport. (c) Whether the location of activities is consistent with providing buffer from Airport activities, taking into account the air noise boundary and outer control boundary. (d) Whether buildings, structures or activities are a hazard to aircraft.			



nent is considered
ent is considered
ent is considere
ent is considere
ent is considere
nent is considere
to this policy is
appropriate fo
objective.
bjootivo.
nent is considered
to thi
n Method i
appropriate fo
objective.
.,
nent is considered
22/10/40/10
22.13.4310
m c



Explanation and Principal Reasons for Adoption

The Queenstown and Wanaka Airports are important physical resources, important to the social and economic well being of the community. Queenstown Airport's main function is for domestic, and international, passenger movements and freight and tourist operations. The Queenstown Airport is an important factor in the rate of growth in the District. In comparison, Wanaka Airport's main function has been to is provideing recreational and tourist air services, including aviation museums, but increasingly it is providing for scheduled air services and may in the future provide a complementary alternative to Queenstown Airport.

The District's airports must be able to operate effectively and in a manner which provides for the District's well being. At the same time any adverse effects on the community, particularly the resident community, must be mitigated. The Council is of the view that the operation of Queenstown Airport should not preclude opportunities for further development of activities in close proximity, provided that appropriate controls are implemented.

The Council supports a noise regime which provides the opportunity for growth in airport activity, but also sets in place controls to mitigate and reduce any noise impact on the residential and other noise sensitive activities. While aircraft are likely to become less noisy in the future, more aircraft movements are expected to occur. Projections and noise investigations have determined noise contours on which to implement controls. As a result of these, residential and other noise sensitive activities will not be allowed to occur within the Air Noise Boundary (65 Ldn contour) of any airport.

Within the Outer Control Boundary (55 Ldn contour) the provisions relating to Queenstown and Wanaka Airports are different due to differing situations. Within the Outer Control Boundary for Queenstown Airport where the land has not been zoned for noise sensitive activities under an operative plan and has no existing development for this purpose, such development will be prohibited. Within the Outer Control Boundary where there is existing noise sensitive development, any new noise sensitive development will be controlled, subject to acoustic insulation.

- a more accurate description of the activities and mitigation measures; and
- the changes in activity status proposed inside the Outer Control Boundary at Wanaka Airport.



In relation to Wanaka Airport, activities sensitive to aircraft noise within the Outer Control Boundary and Night-time Noise Boundary will be prohibited. will require a resource consent for a controlled activity. The Any alterations or additions to existing buildings consent will be subject to adequate acoustic treatment insulation. The treatment insulation requirements will be in accordance with the NZ Building Code Standards and the rules of this Plan. The Council is also of the view that rezoning land as a Residential Zone, or classifying new noise sensitive activities as permitted, controlled, discretionary or non-complying adjacent to an airport, gives a false impression that the land is suitable for noise sensitive activities.

The result of these controls will be to protect airports from future incompatible adjacent land uses, while recognising that current adjacent activities must be protected and provided for.

The controls are intended to either prohibit, or require acoustic <u>treatment</u> insulation (as appropriate), for the full range of <u>activities sensitive to</u> aircraft noise sensitive activities. Reference is made to "community activities" in each of the relevant rules is defined in the district plan. The rules are intended to be inclusive; and to cover all activities which fall within the broad definition of community activity, whether or not such activities are separately defined.



Create a New Appendix 14 - Acoustic Insulation and Ventilation Requirements | Proposed Appendix 14 provides appropriate | The provision of this Appendix provides Appendix 14 **Wanaka Airport** Table 1: Sound Insulation Requirements - Acceptable Constructions for **Critical Listening Environments** Building **Minimum Construction** Element **External Exterior** Brick or concrete block or concrete, Walls Lining: or 20mm timber or 6mm fibre cement Insulation: Not required for acoustical purposes Frame: One layer of 9mm gypsum or plasterboard (or an equivalent combination of exterior and interior wall mass) Windows/ 4mm glazing with effective compression Glazed **Doors** or for double glazing 6mm-6mm airgap-**Pitched** Cladding: 0.5mm profiled steel or masonry tiles Roof or 6mm corrugated fibre cement Insulation: 100mm thermal insulation blanket/batts 1 layer 9mm gypsum or plaster board Ceiling:

Cladding:

Sarking:

Ceiling:

Insulation:

Skillion

External

Door

Roof

Note: The specified constructions in this table are the minimum required to meet the acoustic standards. Alternatives with greater mass or larger thicknesses of insulation will be acceptable. Any additional construction requirements to meet other applicable standards not covered by this rule (eg fire, Building Code etc) would also need to be implemented.

cement

100mm

weather seals

None Required

blanket/batts

0.5mm profiled steel or 6mm fibre

thermal

1 layer 9mm gypsum or plasterboard

Solid core door (min 24kg/m²) with

insulation

Ventilation Requirements for Critical Listening Table 2: **Environments**

Room Type	Outdoor Air Ventilation Rate (Air Changes		
_	<u>per Hour)</u>		
	Low Setting *	High Setting *	
<u>Bedrooms</u>	<u>1 2 ac/hr</u>	Min. 5 ac/hr	
Other critical listening	<u>1-2 ac/hr</u>	Min. 15 ac/hr	
environments			

guidelines for the development of buildings within the defined noise boundaries. This provides greater certainty to adjacent landowners as to their obligations in terms of meeting the required sound insulation and ventilation requirements.

These replacement standards are in accordance with recent best practice being applied at other provincial airports.

greater certainty to adjoining landowners and provides guidelines to protect their health and wellbeing.

The inclusion of Appendix 14 is considered to be the appropriate for achieving the objectives and policies associated with Wanaka Airport.



	* Each system must b	oe able to be individu	ally switched on and off			
	and when on, be controlled across the range of ventilation rates					
	by the occupant with a minimum of 3 stages.					
	Each system provid	<u>ling the low settin</u>	g flow rates is to be			
	provided with a heating	ng system which, at	any time required by the			
	occupant, is able to	provide the incomi	ng air with an 18 degC			
	<u> </u>		w setting. Each heating			
	system is to have a m					
			ce then the high setting			
	ventilation requireme	nt for that space is n	ot required.			
	Table 3:		Ventilation System No			
	Room Type		red at a distance of 1m-			
		·	the Diffuser			
	_		eq dB))			
		Low Setting	High Setting			
	Bedrooms	<u>30</u>	<u>35</u>			
	Other critical	<u>35</u>	<u>40</u>			
	listening					
\(\frac{1}{2} \rightarrow \frac{1}{2} \rightarrow \fra	environments	Oo to undata Outo	Control and Air Naise	As a result of the interduction of the result of	Amandanat to the Diamina Mana is	A second second to the colour in a second
Volume 3 –	Amend District Plan Map 18a to update Outer Control and Air Noise					
District Plan	Boundaries and to include Night Noise Boundary.		boundaries for Wanaka Airport the District Plan Maps	_		
Maps				need to be updated to reflect the extent of the Outer	pianning of the airport.	appropriate.
				Control, Air Noise and Night-Time noise Boundaries.		



7. RISK OF ACTING OR NOT ACTING

- 7.1 Section 32 of the Act also requires an evaluation to take into account the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules or other methods.
- 7.2 The risk of not acting in this case is the stifling of growth at Wanaka Airport as a result of the existing Plan provisions not protecting the Airport as a key physical resource or providing for its future growth. This would result in potentially significant economic losses and loss of future tourism and business opportunities for the community.
- 7.3 A further risk of not acting is that the land within and around the periphery of the Airport is not adequately protected for future airport use. The current provisions do not adequately discourage potentially incompatible activities from establishing within the Airport surrounds. Significant adverse effects on community and the airport could arise with this.
- 7.4 The risk of acting is limited to the growth of Wanaka Airport not meeting the projections. In this event the restrictions imposed by the land use controls would be unnecessary. However, the likelihood of the Airport not experiencing any growth is very low.
- 7.5 Overall, the risk of not acting would be of far greater consequence than the risk of acting.

8. CONCLUSION

- 8.1 In summary QLDC seeks a Plan Change for the following:
 - To update the ANB and OCB in the District Plan
 - To introduce a new noise boundary into the District Plan for Wanaka Airport
 NNR
 - To introduce new and to amend existing objectives, policies, rules and other methods into the District Plan to manage land use activity around the Airport, and to avoid or mitigate any actual or potential adverse noise effects
- 8.2 The Plan Change will enable Wanaka Airport to grow in line with growth projections to 2036. This will result in a substantial benefit to the regional economy.
- 8.3 The provisions to manage land use around the airport relate to activity sensitive to aircraft noise. The provisions direct such activity away from inappropriate locations. This will ensure operations at the Airport are not constrained now or in the future and will also manage the effects of aircraft noise on the health and well-being of the community.



- 8.4 An alteration to the Aerodrome Designation (and its associated conditions) submitted in conjunction with this Plan Change will further manage the effects of aircraft noise on the health and well-being of the community.
- 8.5 In conclusion, Wanaka Airport is a significant physical resource for the District and has economic benefits for the Otago Region. This Plan Change is necessary to protect the continued and future efficient operation of the Airport.



APPENDIX A

Existing Wanaka Airport Noise Boundaries



APPENDIX B

Proposed Wanaka Airport Noise Boundaries



APPENDIX C

Wanaka Airport Certificates of Title



APPENDIX D

Additional Certificates of Title



APPENDIX E

Master Plan – Peak Projects



APPENDIX F

Addendum to Master Plan - Air Biz



APPENDIX G

Marshall Day – Wanaka Airport Noise Boundaries



APPENDIX H

Proposed Plan Provisions



APPENDIX I

Proposed Noise Boundaries as they extend over the District Plan Zones

