

PLAN CHANGE 25 KINGSTON VILLAGE

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FARM VIABILITY REPORT

Prepared for:

Queenstown Lakes District Council

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1. INTRODUCTION

Queenstown Lakes District Council are considering a plan change that would change the zoning of land owned by Kingston Village Limited, situated directly to the South of the Kingston township

2. PURPOSE OF REPORT

An area of 88 hectares owned by Kingston Village Limited is currently being considered for a plan change to enable residential development. The purpose of this report is to provide an analysis of the economic value of the 88 hectare block for different activities including the most efficient use of the land. This includes physical characteristics of the site and any constraints these physical characteristics impose on land use.

3. EXECUTIVE SUMMARY

The 88 hectare block is part of Glen Nevis Station which is 2,400 hectares.

The plan change site (the site) is made up of an 18 hectare public golf course, 65 hectares of farm land and five hectares of douglas fir and pinus radiata.

Of the 65 hectares of farmland, it is estimated only 90% of this is effective, ie, able to be farmed. The other 10% of the 65 hectares is not suitable for farming. The farmland has a carrying capacity of 10 stock units per effective hectare which equates to a carrying capacity of 600 stock units (sheep).

The sheep are farmed predominantly from a breeding perspective with approximately 70% of lambs sold to other farmers who finish them. Only 30% of lambs are finished on the property.

The site would gross around \$39,000 (\$65/stock unit) from its existing land use and provide a nett return to the owners of around \$6,500 (\$10.60/stock unit) after allowing for the manager's wages and depreciation on plant and machinery.

The impact on the overall Glen Nevis Station farming operation, if the property did not have the 88 hectares, would be minimal from a nett financial perspective. Glen Nevis Station does not rely on this 88 hectare block to provide a balance of lower country as it has developed lower country on the eastern side of State Highway 6.

Glen Nevis Station carries 6,200 stock units and without this site it would carry 5,600 stock units. The loss of this site would not detrimentally impact on the farms viability going forward and in fact has some positive management advantages - essentially the

management of Glen Nevis Station would become less complicated for the following reasons:

- Stock would no longer need to be moved on State Highway 6 between the plan change site and Glen Nevis Station, or through the Kingston township which occurs a number of times throughout the year.
- The existing labour force would be able to concentrate their efforts on more effectively operating the remainder of Glen Nevis Station.
- It would eliminate the need to manage the stocking rate of the plan change site block to match spring and autumn pasture growth rates when these are markedly different to the rest of the Glen Nevis Station developed area.
- It would reduce the use of farm machinery and vehicles on State Highway 6 and through the Kingston township.
- With the site being adjacent to the Kingston township there has always been ongoing issues with members of the public, stray dogs and vehicle disruptions adversely impacting on the daily management of the property.

In terms of options for future use there are a number of constraints for this site including impeded drainage due to the aspect of the property and the Maude soil type. The site has late spring growth due to the cold winds which come from Lake Wakatipu.

The low growing degree days in this area make it unsuitable for most forms of horticultural production.

Summary of Current Land Use

- From an economic perspective the loss of the 88 hectare block would have a minimal impact on the Glen Nevis Station farming operation and its ongoing viability, ie Glen Nevis Station would be able to continue as an economic farming unit.
- Concentrating the farming operation in one area would help to simplify the overall farm management for Glen Nevis Station.
- Because of the poor drainage in the area, sheep farming is the best use of this pastoral land in its current state.

Other Potential Land Use Options

- With substantial investment in drainage, cattle could be run on an intensive basis.
- Again with substantial investment in drainage, further infrastructure of silos, plant and machinery, cereal cropping would be possible on the site. There are however much more suitable sites for cereal cropping opportunities within Northern Southland.
- There are a range of horticultural crops that could be grown on the site however there is nothing uniquely special about the site from a horticultural perspective that would make it more ideal for investment in horticultural crops than any other land in this locality.
- Horticultural crops that could be grown would include nut trees, medicinal herbs, cut flowers and vegetables. (See Appendix III)
- The soils and climate on the site do have some limitations but with enough capital this could be overcome. We can identify crops that could be grown in this area.

- Significant investment would be needed to manage drainage issues especially in the southern half of the site if alternative uses for the site were to succeed. This should be followed by investment in shelterbelts to reduce the damaging affects of the cool air coming off the Lake.
- Further investment in frost protection would also be needed with many crops.

4. CONCLUSION

The site is suited to a number of agricultural and horticultural land uses however there is nothing uniquely special about this site from an agricultural or horticultural perspective that would make it more ideal for investment than any other land in this locality.

Considerable investment would be required to change the existing land use to horticultural production including drainage, further wind and frost protection.

The site would gross around \$39,000 (\$65/stock unit) from the existing land use and provide a nett return to the owners of around \$6,500 (\$10.60/stock unit) after allowing for the manager's wages and depreciation on plant and machinery.

The loss of this site would not detrimentally impact on Glen Nevis Station's viability going forward and in fact would have some positive management advantages.

The most efficient use of the land from a horticultural and agricultural perspective is to continue as a sheep farming enterprise.

5. PLAN CHANGE SITE

The plan change site (the site) is approximately 88 hectares in size and lies to the immediate south of the existing township zone of Kingston and the railway track.

The site currently has three distinct areas:

Existing public golf course	18 ha
Plantation & shelter belts	5 ha
Pastoral farm land	65 ha

The golf course is leased to the Kingston Golf Club for an annual rental of \$1 per year. The golf course has trees throughout the course.

The 65 hectares of pastoral farmland (estimated to be 90% effective grazing land) is farmed in conjunction with Glen Nevis Station which is situated approximately 2km north of the 88 hectare site on the other side of State Highway 6.

The site is subdivided into 10 paddocks, not including the golf course. These paddocks are sown in permanent pasture and in most cases these pastures are at least 15 years of age and need renewing. Some of the older pastures have considerable weed infestations such as Californian thistles and rushes.

There are a number of areas of gorse generally confined to boundary areas and in close proximity to the railway line.

Some parts of the site have drainage issues with areas of ponding occurring making this land unsuitable for farming cattle. The poor soil drainage and cold winds from Lake Wakatipu result in a late spring and early winter, reducing pasture growth rates over these key farming periods. The spring growth rates are estimated to be 2 to 3 weeks later than that of the developed areas on Glen Nevis Station's main property.

Of the 65 hectares of pastoral farm land, 30 hectares is well managed with few weeds and rushes (refer photo two) while 35 hectares is very wet and contains large amounts of rushes (refer photo one).

The only building on the 65 hectares of pastoral land is a 5-bay hay shed. This shed is roofed only, with no enclosed walls. There is an older set of wooden sheep handling facilities (approximately 20 years old). Access to the 65 hectares of pastoral land is by two separate farm gateways and this includes crossing the railway line and is off State Highway 6. There is also a third access onto Oxford Street which is situated in the middle of the existing Kingston township (the township).

Approximately 12 to 15 years ago three shelter belts and small plantations were established – one consisting of Eucalyptus, one of Pinus Radiata and one of Douglas Fir, consisting of approximately 5 hectares in total.

Photo 1 – Wetter Area of Property



Photo 2 – Better Managed Area of Property



Current Land Use

The proposed development area (not including the Golf Course) is currently farmed in conjunction with Glen Nevis Station's main farming property.

The block presently has a carrying capacity of 10 stock units per effective hectare which equates to a total carrying capacity of 600 stock units. These stock units have predominantly been sheep as the soil moisture levels limit the suitability for grazing cattle.

The sheep are farmed predominantly from a breeding perspective with approximately 70% of lambs sold store rather than being finished to killable weights.

Surplus summer feed is made into balage which is then fed over the winter months.

From a labour perspective the block has minimal requirements as most tasks are carried out in conjunction with the main Glen Nevis property. It is estimated that the labour requirement for the development block to be no more than 20% of one full time labour unit.

6. ECONOMICS

For the purposes of establishing the economic return for the farming business associated to the plan change site, we have used data collected by the Ministry of Agriculture and Forestry in their Farm Monitoring Report for the year ended 30 June 2006. We have used the Southland/South Otago Hill Country Sheep and Beef model as this best represents Glen Nevis Station's present farming operation with similar stock units being farmed as well as similar levels of production. (See appendix I)

	Per stock unit	Total 88 ha block
Gross return	\$65.24	\$39,144
Farm working expenses	\$41.92	\$25,152
Management wage	\$8.06	\$4,836
	-----	-----
Farm Surplus	\$15.26	\$9,156
Minus depreciation of buildings & plant	\$4.62	\$2,772
	-----	-----
Economic farm surplus	\$10.64	\$6,384

Note 1: For 600 stock units this would equate to a net return of \$6,384

Note 2: There is no cost of capital included in these calculations, ie it is assumed that there is no debt costing for the land, stock and plant.

Impact on Overall Glen Nevis Station Farming Operation

The current Glen Nevis property carries 6,200 stock units. If the plan change proceeds it is expected the carrying capacity will reduce by 600 stock units to 5,600. (The average sheep and beef farm in New Zealand is 4,450 stock units).

From a financial perspective it is assumed that this will reduce the property's economic farm surplus by approximately \$6,384 per annum.

However from a practical management perspective the operation will become less complicated for the following reasons.

- Stock would no longer need to be moved on State Highway 6 between the 88 hectare block and Glen Nevis Station (which is 2km north of this site), or through the township which occurs a number of times throughout the year.
- The existing labour force would be able to concentrate their efforts on more effectively operating the remainder of Glen Nevis Station.
- It will eliminate the need to manage the stocking rate of the 88 hectare area to match spring and autumn pasture growth rates when these are markedly different to the rest of Glen Nevis Station developed area.
- It will reduce the use of farm machinery and vehicles on SH6 and through the township.
- With the site being adjacent to the existing township there has always been ongoing issues with members of the public, stray dogs and vehicle disruptions adversely impacting on the daily management of the property.

Summary of Current Land Use

- From an economic perspective the loss of the 88 hectare block would have a minimal impact on the Glen Nevis farming operation and its ongoing viability, ie Glen Nevis Station would be able to continue as an economic farming unit.
- Concentrating the farming operation in one area would help to simplify the overall farm management for Glen Nevis Station.
- Because of the poor drainage in the area, sheep farming is the best use of this pastoral land.

Other Potential Land Use Options

- There are a range of horticultural crops that could be grown on the site however there is nothing uniquely special about the site from a horticultural perspective that would make it more ideal for investment in horticultural crops than any other surrounding area of land in this locality.
- Horticultural crops that can be grown would include nut trees, medicinal herbs, cut flowers and vegetables. (See Appendix III)
- The soils and climate on the site do have some limitations but with enough capital this could be overcome. We can identify crops that could be grown in this area.
- Significant investment would be needed to manage drainage issues especially in the southern half of the block if it were to be used for purposes other than sheep farming. This should be followed by investment in shelterbelts to reduce the damaging effects of the cool air coming off the Lake.
- Further investment in frost protection would also be needed with many crops.

Constraint (s) On Land Use From Soil Type

Agriculture

It was stated earlier in this report that some parts of the block appear to have drainage issues. The site contains areas of ponding and rushes which is especially noticeable in the southern half of the block. The general soil sheets attached (see appendix II) state that drainage should be relatively good in these soils, but this is not what we have seen nor been told about in our visits to the property.

The combined poor soil drainage and cold winds from Lake Wakatipu result in a late spring and early winter, reducing pasture growth rates over these key farming periods. The spring growth rates are estimated to be 2 to 3 weeks later than that of the developed areas on Glen Nevis Station's main property.

This drainage problem limits traditional farming systems to running sheep only. Any type of cattle based farming systems are unlikely to be any more profitable than the current land-use without substantial investment in drainage.

Cereal cropping on part of the site is an option and would improve financial returns however the drainage issue would need to be addressed for cereal cropping to be a viable alternative land use.

Horticulture

If the site was redeveloped into a more intensive horticultural land use then irrigation would most likely be needed to ensure growth during the drier parts of the year. Imperfect drainage is an issue for these soil types and could be an impediment to plant growth.

If issues of drainage could be addressed in a cost effective manner then there are some horticultural crops that could do well in this area. These are discussed further in Appendix IV. Significant capital investment would be required and the time-frame to cash-positive returns could be between 4 and 10 years depending on crop.

Constraint (s) on Land Use from Climate

Agriculture

In general the climate on this site will not have a huge impact on the activities that can be undertaken.

Horticulture

For this block of land there is a relatively short frost free period of around 220 days per year. This means extra capital expense would be required to reduce the chances of frost events damaging valuable crops, especially in the spring time. The types of systems that could be put in place include wind-machines and overhead sprinklers. Both of these options are very expensive.

Another factor to consider before embarking on a horticulture project would be the wind. Although data does not show this particular site as having a major problem, wind will affect plant growth to a significant degree.

We have heard from the current farm manager that cold winds coming off the Lake combined with wet cool soils delays grass growth by 2-3 weeks in the spring when compared to many of the other parts of the farm. If looking to invest in higher value farming systems, capital expenditure would have to be made in improving the shelter belts that run across the property.

Appendix I

MAF Farm Monitoring Report – Southland/South Otago Hill Country

This model represents 750 farms in the moderately rolling clay downlands to steeper hill properties in South Otago and Southland. The farms are spread throughout the Clutha (44 percent), Southland and Gore (56 percent) districts. The properties tend to be larger sheep and beef units (over 3500 stock units) with a reliable summer rainfall. Winters can be wet and cool. The farms have mostly cultivated pastures, with the balance in improved, but steeper hill and tussock blocks. Pastures have been regularly and well-fertilised.

The typical production system is breeding ewes, some hoggets lambing, and the majority of lambs finished, but some store lambs can be sold each year. There is a herd of breeding cows with the best calves finished. There may also be some trading of cattle.

The average property size is 6,000 stock units and 710 hectares in size.

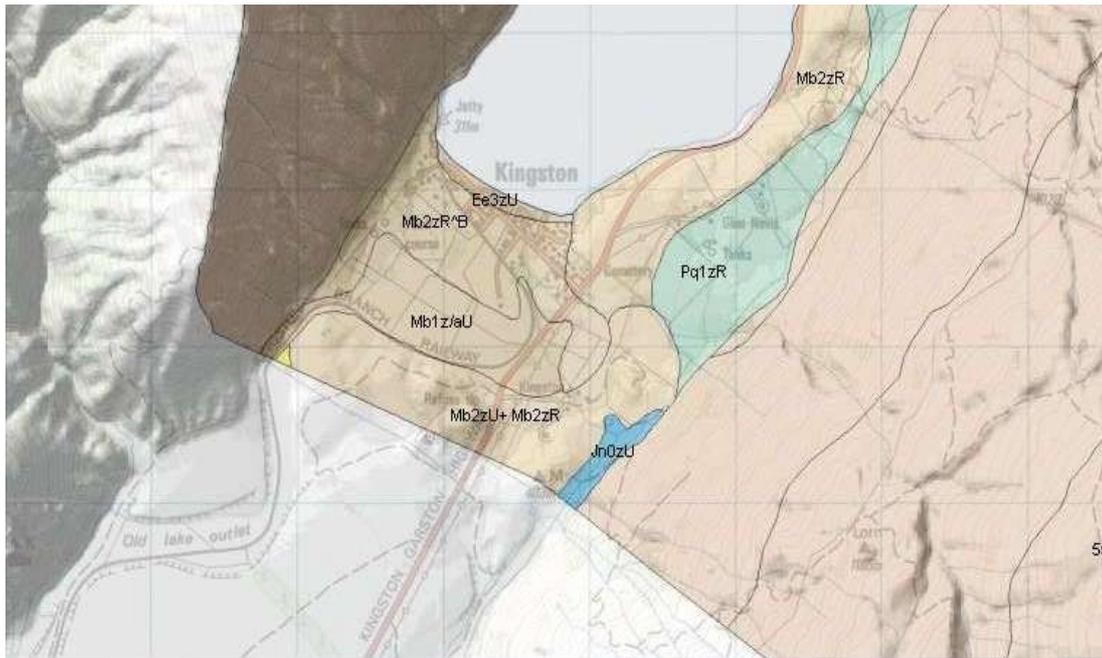
2005/06	Whole farm (\$)	Per ha (\$)	Per su (\$)
Revenue			
Sheep	276 075	389	53.04
Wool	68 865	97	13.23
Cattle	53 053	75	64.00
Grazing income	0	0	0.00
Other farm income	5 153	7	0.85
Less			
Sheep purchases	7 512	11	1.44
Cattle purchases	5 966	8	7.20
Gross farm revenue	389 668	549	64.57
Cash farm expenditure	252 986	356	41.92
Interest	43 007	61	7.13
Rent and/or leases	0	0	0.00
Cash farm surplus	93 675	132	15.52
Stock value adjustment	4 035	6	0.67
Minus depreciation	27 889	39	4.62
Net trading profit	69 821	98	11.57
Taxation	15 799	22	2.62
Net trading profit after tax	54 022	76	8.95
Allocation of funds			
Add back depreciation	27 889	39	4.62
Reverse stock value adjustment	- 4 035	- 6	- 0.67
Drawings	47 010	66	7.79
Principal repayments	15 000	21	2.49
Development	6 390	9	1.06
Capital purchases	24 569	35	4.07
Disposable surplus/deficit	- 15 094	- 21	- 2.50
Other cash sources			
New borrowing	0	0	0.00
Off-farm income	3 165	4	0.52
Other cash income	0	0	0.00
Net cash change	- 11 929	- 17	- 1.98

Appendix II

Soils

This site contains Maude soils which come from a family more commonly known as Pallic Orthic Brown Soils

There are two slight variations of these Maude soils as shown in the map below. This variation runs directly across the block, dividing it neatly in half.



The first is known as Mb2zR[^]B

- Mb = Maude soil
- 2 = 20-45cm deep (this is shallow in soil terminology)
- z = silt loam soil
- R = rolling country with slopes between 8-15°
- [^]B = Bouldery phase, meaning lot of underlying rocks etc

The second is known as Mb1z/aU

- Mb = Maude soil
- 1 = 40-90cm deep
- z/a = silt loam on sand
- U = undulating with slopes between 4 - 7°

Traditionally these types of soils have well structured top-soil, are of moderate to low fertility and tend to have variable drainage.

Maude moderately deep silt loam on sand, undulating (Mb1z/aU)

Overview

Landform	Moraine
Slopes	undulating, 4-7°
Parent material	Soils with stones
Soil classification	Pallic Orthic Brown Soils; Soils with stones; silt over loam; moderate
Rock class of stones/rocks	From schist rock
Rock class of fine earth	From schist rock
Parent material origin	alluvium
Topsoil textural class	silt loam on sand
Profile texture group	loamy
Topsoil clay range	5 - 20%
Old names for the same soil (see extended legend for soil survey codes)	Maude (KING, UCL)
Other related Maude soils mapped on growOTAGO maps	Mb1z/aR, Mb2zH, Mb2zR, Mb2zR^B, Mb2zU

Key physical properties

Potential rooting depth	100 (cm)
Rooting barrier	No significant barrier within 1 m
Topsoil stoniness	Stoneless
Depth to stony layer class	Moderately deep
Drainage class	Well drained
Aeration in root zone	Unlimited
Permeability profile	moderate
Depth to slowly permeable horizon	No slowly permeable horizon
Permeability of slowest horizon	Moderate (4 - 72 mm/h)
Profile total available water (0-1000mm)	High (163mm)
Profile readily available water (0-1000mm)	High (100mm)
Total available water (0-300mm)	Moderate (61mm)
Readily available water (0-300mm)	Moderate (52mm)
Fine earth dry bulk density, topsoil	1.09 g/cm ³
Fine earth dry bulk density, subsoil	1.42 g/cm ³
Depth to hard rock	No hard rock within 1 m
Depth to soft rock	No soft rock within 1 m
Structural vulnerability	Moderate

Key chemical properties

Topsoil organic matter	5.2 - 11.2%
Topsoil organic carbon	3 - 6.5%
Topsoil P retention	Moderate (30-50%)
Likelihood of salinity	Non-saline

Maude shallow silt loam, rolling, bouldery phase (Mb2zR^B)

Overview

Landform	Moraine
Slopes	rolling, 8-15°
Parent material	Rounded stony soils
Soil classification	Pallic Orthic Brown Soils; Rounded stony soils; silt; moderate
Rock class of stones/rocks	From schist rock
Rock class of fine earth	From schist rock
Parent material origin	alluvium
Topsoil textural class	silt loam
Profile texture group	loamy
Topsoil clay range	5 - 20%
Old names for the same soil (see extended legend for soil survey codes)	Maude (KING)
Other related Maude soils mapped on growOTAGO maps	Mb1z/aR, Mb1z/aU, Mb2zH, Mb2zR, Mb2zU

Key physical properties

Potential rooting depth	100 (cm)
Rooting barrier	No significant barrier within 1 m
Topsoil stoniness	Stoneless
Depth to stony layer class	Shallow
Drainage class	Well drained
Aeration in root zone	Unlimited
Permeability profile	moderate
Depth to slowly permeable horizon	No slowly permeable horizon
Permeability of slowest horizon	Moderate (4 - 72 mm/h)
Profile total available water (0-1000mm)	High (152mm)
Profile readily available water (0-1000mm)	Moderate to high (95mm)
Total available water (0-300mm)	Moderate (59mm)
Readily available water (0-300mm)	Moderate (51mm)
Fine earth dry bulk density, topsoil	1.09 g/cm ³
Fine earth dry bulk density, subsoil	1.42 g/cm ³
Depth to hard rock	No hard rock within 1 m
Depth to soft rock	No soft rock within 1 m
Structural vulnerability	Moderate

Key chemical properties

Topsoil organic matter	5.2 - 11.2%
Topsoil organic carbon	3 - 6.5%
Topsoil P retention	Moderate (30-50%)
Likelihood of salinity	Non-saline

Appendix III

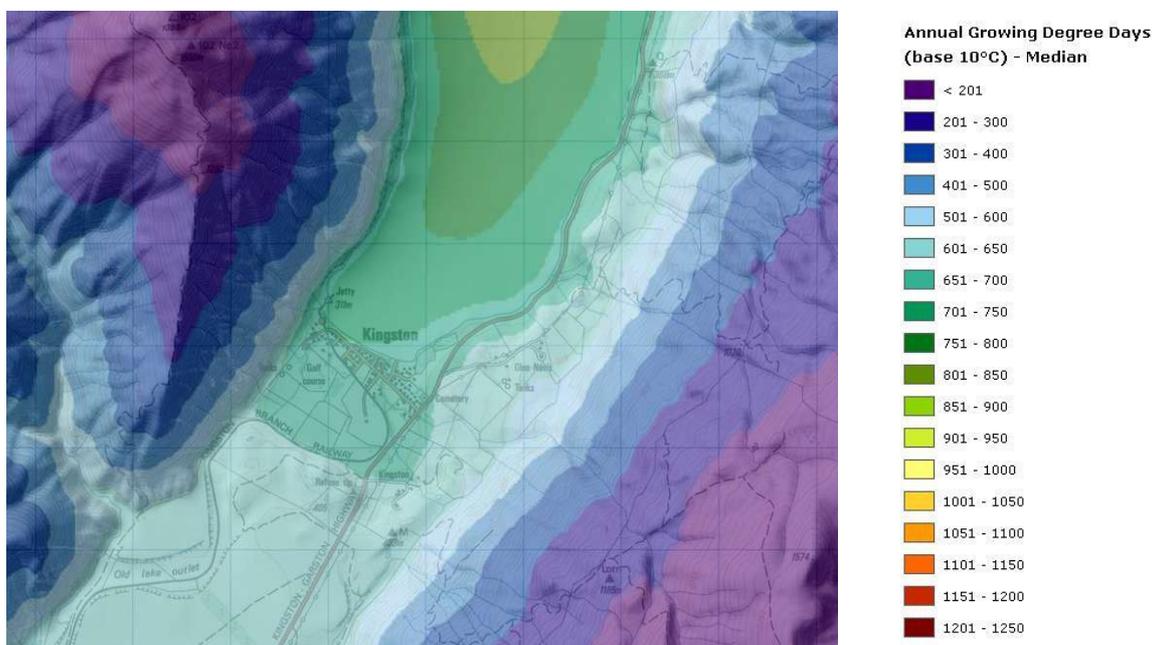
Climate

A large number of climate parameters have been measured and modeled for the site, but only a few have any real impact on what can be grown.

Growing Degree Days or GDDs

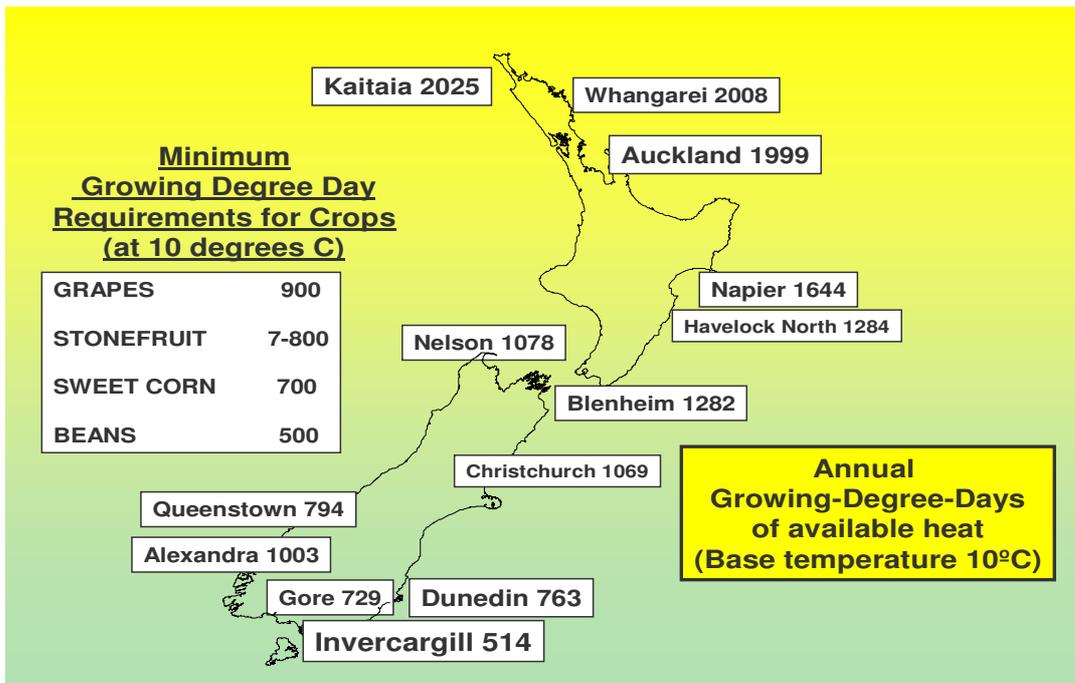
Growing-Degree-Days (GDD) are a measure of the accumulated amount of heat (in degrees Celsius) above a base temperature received by a point in the landscape over a specified time period.

To calculate GDDs for a site on a particular day, you first calculate the daily mean temperature by averaging the maximum (highest) and minimum (lowest) temperatures for the day. Then you subtract a selected base temperature (threshold temperature at which plants begin to grow) from the mean temperature to get the number of GDDs for the 24-hour period.



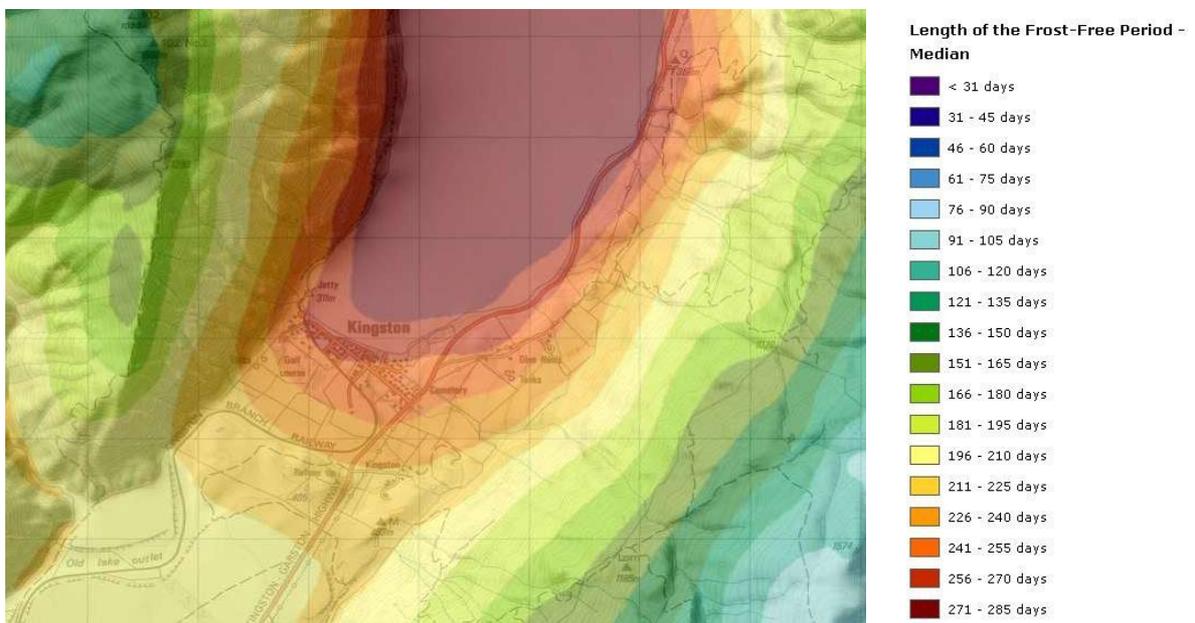
GDD figures for the site over a whole year are between 650 and 700. This is a relatively low figure and means many of the commonly grown crops in Central Otago such as cherries, grapes and olives will not ripen in this area in a normal year. However, a number of other crops would do well with this number of GDDs. These are discussed further in Appendix V.

For further information we have added the map below. This shows the variation in GDD figures across the whole of New Zealand and what this means to some of the common crops that could be grown.



Length of Frost free Period

The frost free period runs from the last frost of the year in the spring through to the first frost of the next year in the autumn. A frost free day is one day where the minimum air temperature measured 1.3m above the ground does not fall below 0°C.



For this block of land there is a relatively short frost free period of around 220 days. For this site and the potential crops that will grow here the most vulnerable time would be the spring.

Appendix IV

Other Potential Land-use Options For This Block

Nut trees

On this site we would expect hazelnuts to grow very well. The key requirement for success with this crop is shelter from the wind and access to adequate irrigation water. The need for wind protection cannot be overstated. A lack of shelter will lead to stunted trees and no crop. The main cropping variety is Whiteheart and they need pollinator trees to ensure they produce fruit.

Nut trees tend to be considered as a long-term crop, with harvest not starting for 4 years and the trees not reaching maturity for 6-7 years (even more for some varieties). This means any forward budgeting can be very hypothetical. On the positive side, all market signals (domestic and export) are showing a strong demand as more people recognize the health benefits that fresh nuts provide. The returns per hectare are lower for nuts when compared to other crops but the inputs both in cash and labor are correspondingly lower. In summary, nut trees suit a low maintenance system provided immediate cash returns are not necessary.

Medicinal Herbs

Medicinal herbs would be able to be grown on the site and were very popular with cropping farmers a few years ago. There were in excess of 40 hectares of Echinacea in Southland, Otago and Canterbury. Unfortunately the economics of these crops is poor. The problem is that many medicinal herbs produce a product that can be stored as a dried root, a seed, or they can be made into a finished product and then sit on a shelf for a time before being sold. This makes New Zealand a less desirable place to grow these crops when compared to somewhere else with a lower cost structure i.e. Chile or China. These crops can still be successfully grown but it is vitally important to secure a supply contract before any paddock is ploughed and seeds planted.

Cut Flowers

Cut flower crops are another option for the site providing labour is available. Capital costs tend to be high and it can also take 3-4 years before returns are made. On a more positive note flower exporters take care of selling the crop, meaning the grower can concentrate on growing.

One good option would be Paeonies. A number of small Paeony blocks can be found in inland Otago, so we know the crop will grow on this site. One impediment to many people getting into Paeonies is the capital costs. A fully planted block will contain upwards of 5000 tubers per hectare at a cost of between \$10 and \$40 per tuber. Depending on variety harvest would be approximately 10 flowers per plant (tuber) when mature. Prices range from \$1.00 to \$4.00 per stem.

Vegetables

The advent of the Farmers Market in Queenstown and the move back to eating locally grown food means this may be an option for the site however competition in this market is high.

Direct sales to restaurants servicing the tourist market may be another option along with wholesale outlets such as the Mediterranean Market.

Concentrating on novel and slightly less mainstream crops such as leeks, spring onions and artichokes is most likely the best option. More exotic Asian style vegetables can be grown but some quite entrepreneurial work needs to be done to develop markets. Regular supply rather than whole paddocks being ready at once would be the key to success if pursuing this option.

There has been a lot of interest in Central Otago recently in novel crops such as Olives and Saffron. It is assumed that there is not a sustainable future for either of these crops in this region.

Berryfruit

Berry fruit are another option. They are high in vitamin C and antioxidants and are making something of a renaissance as we move back to plants that are healthy. A range of berry fruit such as gooseberries, strawberries, raspberries, blackcurrants and blueberries would do well on this property and at market.

Returns depend on the final use of the fruit. Frozen blocks of fruit for processing reach \$1.80 - \$3.00/kg. Individual Quick Frozen (IQF) berries reach \$3.00-\$4.50 while fresh fruit can make anywhere from \$4.00-\$20.00/kg.

Appendix V

Consultant Qualifications

Qualifications – George Collier

George Collier is a director of Ibbotson Cooney Limited, Chartered Accountants and Business Advisors, providing accounting and business advice to farmers and farm related businesses in Otago and Southland.

George graduated from Lincoln University in 1992 with a Bachelor of Agriculture Commerce and a Post-Graduate Diploma in Agriculture Science and is a qualified Chartered Accountant and a Registered Farm Management consultant.

For the past 15 years George has worked with extensive high country farmers and intensive Southland type farmers in sheep, beef and deer farming.

Qualifications – Craig Howard

Craig Howard is a Director of the New Zealand Ginseng Company and provides Management skills in a range of projects in both Southland and Otago

Craig graduated from Lincoln University in 1991 with a Science Degree. He was initially employed for 7 years as a technician with HortResearch, working at Lincoln and then at the Clyde Research Station. For the past nine years he has worked with Crops for Southland in Invercargill, more recently in a contracting role. During this time he has been exposed to a wide range of alternative land-use options for the Southern areas of New Zealand

Three Years ago Craig moved back to Central Otago and now runs a small flower growing business with his wife Nikki, keeping busy the rest of the time servicing his clients throughout the region.