

CULTURAL IMPACT ASSESSMENT FOR

**A PROPOSED DEVELOPMENT
WITHIN THE GIBBSTON VALLEY**

BY

KAI TAHU KI OTAGO LTD

FOR

GIBBSTON VALLEY STATION LIMITED

March 2008

1.0 INTRODUCTION

Kai Tahu ki Otago Limited (KTKO Ltd) has been contracted by Gibbston Valley Station Limited to undertake a Cultural Impact Assessment (CIA) of a proposed development within the Gibbston Valley Station, located at the western end of the Gibbston Valley and adjacent to the Kawarau River and State Highway 6. It is understood that consent applications will be lodged in early March 2008.

KTKO Ltd is a consultancy based in Dunedin and is wholly owned by the four Papatipu Runanga of Otago. This CIA has been prepared on behalf of Kati Huirapa Runanga ki Puketeraki and Te Runanga o Otakou.

This report has been compiled for the following reasons:

- To inform Runanga members of the potential effects upon cultural values from the proposal;
- To identify potential concerns regarding the proposal and provide a basis from which the Papatipu Runanga of Otago and Gibbston Valley Station can further discuss ways to avoid, remedy or mitigate effects upon values of importance to the Runanga.

This report has been prepared as a result of the following process:

- 1) A site visit was undertaken on 28 January 2008.
- 2) A meeting between all consultants providing input to the application was attended on 29 January 2008.
- 3) A meeting with representatives of Kati Huirapa Runanga ki Puketeraki with apologies from Te Runanga o Otakou, was held on 12 February 2008. An explanation of the proposal was provided, and preliminary comments were made by the representatives.
- 4) The preliminary comments of Nga Runanga were sent to the applicant. These comments were reviewed by the relevant consultants, and responses provided in terms of how potential concerns could be resolved.

- 5) Draft consultant reports were reviewed.
- 6) A draft of the Cultural Impact Assessment was sent to both Kati Huirapa Runanga ki Puketeraki and Te Runanga o Otakou for review, and comments were incorporated prior to finalisation of the Cultural Impact Assessment.

2.0 THE SITE

Location

The subject site is 160 hectares in size, and forms part of the wider Gibbston Valley Station, which totals 400 hectares and is located towards the western end of the Gibbston Valley. It is located approximately 20km from Queenstown.

The figure below shows in blue, the outline of the boundaries of Gibbston Valley Station. The Gibbston Valley is defined by the Nevis Bluff in the east, the flanking slopes of Mount Rosa and the Coal Pit Saddle (1079 metres above sea level) to the south and the southern slopes of Pisa fault block mountain range on the northern side of the Kawarau River. The schist outcrops known as the "Judge and Jury" mark the exit from the Gibbston Valley to the west.

Gibbston Valley Station borders the Kawarau River for approximately 3.5km, and extends up to the Coal Pit Saddle Ridge. The subject site is located on the Valley floor, straddling State Highway 6 for approximately 5km, and bounded to the north by the Kawarau River. It is bounded to the east by Peregrine winery on the northern side of the State Highway and Resta Road on the southern side. To the west, the site is bounded by Gibbston Valley wines on the southern side of the State Highway, and to the north of the State Highway, the Kawarau bungee bridge and associated tourism facilities.

The site is predominantly a north facing, dry inland basin with schist outcrops, a cool, dry climate and moderately fertile alluvial soils.

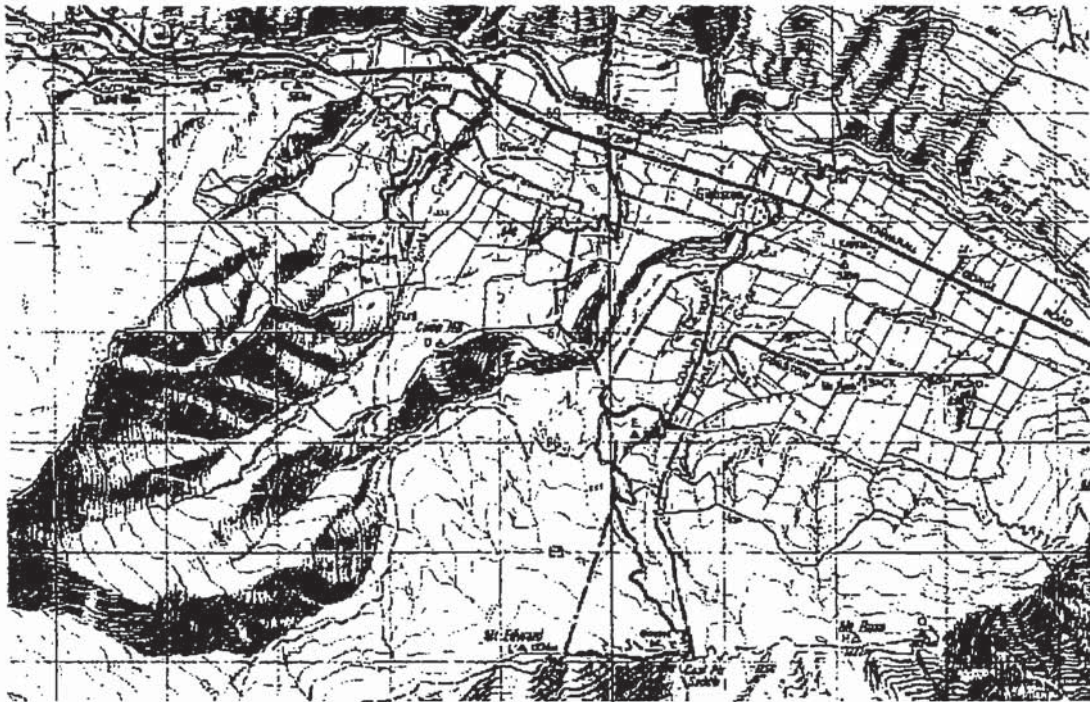


Figure 1: Boundaries of Gibbston Valley Station.

Past and present land uses and activities

The majority of the site is currently used for farming purposes, with vineyard activities including vineyard and winery buildings located in the eastern part of the site, adjacent to and south of State Highway 6 and on both sides of Resta Road.

Prior to European settlement, Lake Wakatipu was part of several inland Maori routes, with access to the Lake along the Kawarau, Mararora, Maraura/Von and Mararora/Greenstone Rivers. Travel along the Lake itself was likely to have been on mohiki (rafts). There were two traditional Ngati mamoe settlements located between the Frankton Arm and the confluence of the Shotover and the Kawarau Rivers.

Pre European activity in the Gibbston area dates back to the moa hunting era of Maori history. Several artefacts were found in the Nevis area and it is believed that percloniite rock was extracted from the ridge areas, which was valued as a cutting implement.

The original trail through the Gibbston Valley ran along the northern bank of the Kawarau River. In 1866 the Nevis crossing and Morven Ferries were opened, and the road was then moved to run across the Gibbston Valley Floor.

No pre-European sites were found on the site or its immediate area. The site contains a number of archaeological sites associated with gold mining and farming activities.

European settlers introduced sheep and cattle farming to the area, with the Kawarau Station being one of the largest runholds in this region comprising 81,000ha. Gold prospecting and mining began shortly after settlement sometime around 1862. Old tailings and sluicings can be found in many locations near the Kawarau River, with the evidence of such activities provided within the site.

The site has been the subject of human activity for at least the last one hundred and fifty years. The northern Kawarau river terrace includes archaeological sites dating back to early gold prospecting and mining activities, and the entire property has been managed as a pastoral farm and the two homesteads located along the toe of the southern toe slope are reminders of the farming heritage. The eastern vineyard and winery are very recent additions to the landscape.

Past and present ecological values

The Ecological Assessment identifies that the ecological values associated with the site need to be understood in the wider context of historic vegetative cover and land use and the wider environment. The following provides a summary of the relevant information provided within the Ecological Assessment¹.

The report finds that prior to human occupation natural fires and frost would have inhibited the establishment of continuous forest cover. However, evidence of forest remnants have been found indicating that the gullies, rock outcrops and river margins

¹ Ecological Assessment. January 2008, Natural Solutions for Nature Limited.

would have been vegetated by woodlands containing species including Kowhai, manuka, Hall's totara, matagouri, and Coprosma.

Fire would have increased with Maori settlement and the land vegetated by indigenous grassland increased. As such, at the time of European settlement the lower valley floor of the Kawarau Gorge would have been vegetated by short tussock grassland.

Further deforestation and modification would then have occurred as a result of European settlement, through more frequent fires, the introduction of browsing animals and predators. The introduction of exotic plants and drainage of wetland areas resulted in further loss of diversity through competition and habitat destruction.

The Ecological Assessment finds that existing vegetation on the Gibbston Valley Station comprises pasture grasses, with pockets of native and gorse shrublands, and willows and poplars near wet areas. The report finds that the indigenous vegetation of the subject site makes a significant contribution to the ecosystems of the Kawarau Valley as it supports remnants of the historic mosaic of kowhai woodland- matagouri shrubland from the River margin onto the hill slopes to the south.

A number of wet areas or seepages are present on southern side of the state highway. Several stock trampled flushes and water races are present on the basin floor near the Kawarau river boundary. Man made ponds are also present and receive water either via pumped supply or channelised surface flows from seepages.

Toms Creek provides a good flow through the property to the Kawarau River. Its course over the valley flats has been contained by willows. The report finds that it is unlikely that freshwater fish populations are present in the streams passing through the site.

The shrub and grassland communities on the property support the indigenous birds silver eye *Zosterops lateralis* and grey warbler *Gerygone igata* in addition to introduced finches. The Karearea (endemic falcon) was observed over head from the lower to mid and upper

reaches. Kahu (harrier) were also seen over the lower to mid elevation portions of the property. Gibbston Valley residents report hearing and seeing bellbirds *Anthornis melanura* particularly in summer where ever flax has been planted.

Good populations of two lizard species were found, neither of which is threatened. These are found in the rocky outcrops within the site.

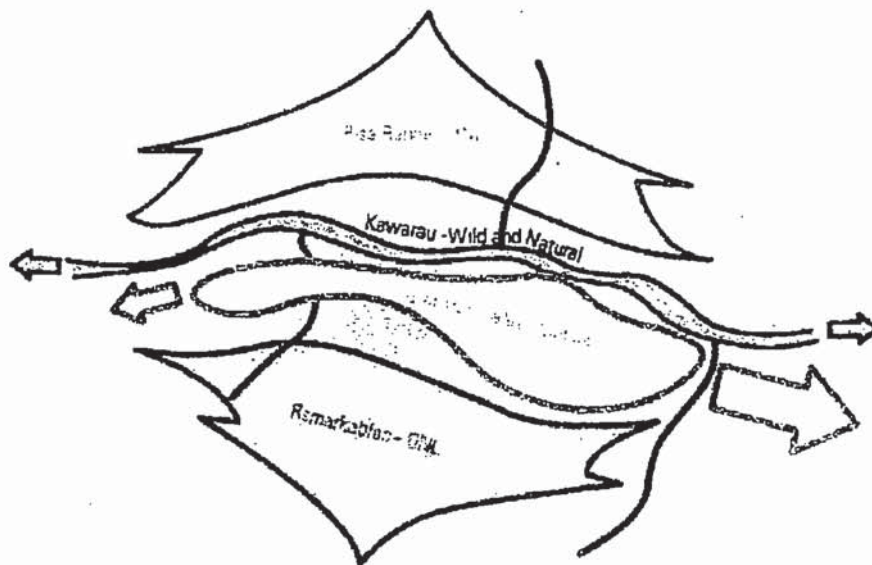
The Gibbston Valley basin floor and terraces are heavily infested by rabbits and hares. The basin floor is currently grazed by domestic goats, cattle and sheep while the higher elevation tussock grasslands are more extensively grazed predominantly by sheep.

The Ecological Assessment finds that the indigenous vegetation of the GVS is a locally valuable ecological asset and recommends that a conservation management plan is implemented for the site.

Landscape Characteristics

The Landscape Report² prepared for the application provides the diagram below illustrating the broader landscape context of the valley.

² Landscape Report (Morgan and Pollard, February 2008)



Landscape Context

Figure 2: Landscape context.

The Landscape Report identifies that the site and its surrounds shows a strong and historically founded human modification. It finds that the landscape categorisation as Visual Amenity Landscape is correct. As illustrated in Figure 2 above, the mountain ranges to the north and south are recognised as outstanding natural landscapes. The site is contained within a modified landscape characterised by viticulture and remnant farming activities.

Because the site extends along both sides of State Highway 6 for a considerable distance a significant portion of the property will be visible from the State Highway. The site is identified as a significant component of the western end of the Gibbston valley and in many respects it establishes the gateway into the central valley and the intensely developed horticultural zone.

The report finds that the contrast between the orderly viticultural areas and the wild, mountainous backdrop is special and breathtaking in parts, and concludes that it is now an established fact that this area has become a grape growing zone of national and international reputation and importance. The development of the land surrounding the site reflects this.

3.0 THE PROPOSAL

The following identifies the main components of the proposal.

Activities and land use

Gibbston Valley Station proposes a multi-faceted development of about 160 hectares (400 acres) of the valley floor. The development comprises the establishment of the following activities and uses:

- 115 residential units
- -Staff accommodation. This will include 10 units and 40 dormitory style facilities.
- Club house for golf including changing rooms for 40 people, bathrooms and showers, a lounge and bar with seating for 100 and restaurant with seating for 40.
- Golf pro shop and retail sale.
- Cellar door for Gibbston Valley vineyards, a central café and a farmers market
- Café with seating for 30
- Artisan's stalls.
- Retail and artisans facilities.
- Restaurant and conference facility. This will cater for groups of 120 in the restaurant seated.
- Front of house building with concierge check in, administration and lounge for guests while they are waiting.
- Information centre for Gibbston Valley Station.
- Indoor heated swimming pool 25m by 6m including gym and change rooms.

- Future artisan and retail space with first floor accommodation potential for those leasing the space below (four units above that have two bedrooms with two en-suites in each unit).
- Spa comprising treatment rooms, change rooms, toilets, a lounge and administration. These facilities will be located in several separate buildings.
- An 18 hole golf course
- Equestrian activity.

The development will also incorporate

- vineyards (25ha),
- orchards (5ha),
- walking trails, providing enhanced access to and along the Kowarau River,
- a conservation management plan that will protect and enhance the indigenous vegetation and habitats of indigenous wildlife of the site, providing approximately 71.9 hectares of re-vegetation.

The location of activities and buildings has been derived through landscape analysis; whereby activities are located where they can best be absorbed into the landscape. The proposal acknowledges the potential visibility of development on the southern side of the state highway, and proposes the use of orchard and vineyard planting to help mitigate the effects of such visibility.

Conservation management and re-vegetation

A conservation management plan is proposed for the site. This makes a number of recommendations in terms of revegetation, pest management, and management of water courses.

In summary, this proposes the following:

- Retire the lower portions of the property from grazing;
- Control rabbits

- Supplement and extend the indigenous vegetation with restorative planting;
- Enhance the quality and quantity of habitat for lizards and invertebrate populations;
- Explore the potential for carbon sequestration through enhancement and ongoing management of the site's indigenous vegetation to offset emissions associated with operational aspects of the Gibbston Valley Station development.

Wastewater management

It is understood that a waste treatment plant will be provided for the village area and visitor accommodation activities on the southern side of the state highway. Treated wastewater will be used to irrigate the proposed orchard, which would be located between the village and the state highway.

It is understood that dwellings on the northern side of the state highway will connect to small wastewater treatment facilities. Treated wastewater will be disposed of into grey shrubland areas and areas on the golf course (excluding fairways).

The treatment systems will be selected for the ability to consistently produce a high quality effluent with high nitrogen removal, low sludge production and low power consumption.

Water supply

The maximum demand for the potable water supply which includes domestic irrigation is 4.3 litres/sec and the maximum demand for golf course and vineyard irrigation is 9.5 litres/sec. The total maximum water demand being 13.8 litres/sec. This equates to a total of 370439 litres per day for all buildings and activities, with an additional demand of 1190 cubic metres per day for the vineyard, orchard and golf course.

It is proposed that the demand on the potable water supply, which provides both drinking water and domestic irrigation, will be managed by the following water conservation measures:

- Water meters on every building or other point of supply with an increasing charge for an average use exceeding say 2000 litres/day per dwelling. Water meters are also a valuable tool for detecting leakage or accidental water loss.
- Roof water storage tanks at each building or group of buildings for supplementary irrigation water.
- To plant with appropriate species suitable to the local climate and in keeping with the existing indigenous vegetation.
- Water conservation devices such as dual flush toilets, water efficient showers, dual pressure taps for hand basins, water efficient clothes and dish washers, etc be used throughout all buildings.
- Education of property owners on water conservation, recommended plant schedules with appropriate species, including grasses, suitable to the local climate and in keeping with the existing indigenous vegetation.

It is understood that two options are currently being investigated for a water supply source:

- 1) A water take from Tom's Creek. Tom's Creek runs through the centre of Gibbston Valley Station. There is an existing permit in place for water take from this source, however, it is over-allocated. It is unclear as to how much water would be taken from this source for the development.
- 2) A water take from the Kawarau River. There are two difficulties in using water from this source – the river is in a deep rocky gorge limiting access to the river level and the river carries fine abrasive silt when in flood which can result in excessive pump impeller wear. The preferred location for a water take is just upstream from the Gibbston Valley winery. Water will be pumped from the river intake to an irrigation pond located within the golf course. This pond will provide storage for periods when the river is in flood and is excessively dirty and will act as a stilling basin.

It is understood that other uses for water are proposed including the creation of man-made ponds, and the construction of a swimming pool. The nature and location of these activities are not understood.

Stormwater management

The proposal provides a limited number of roads. It is understood that these will provide narrow carriageways, and will be rural in character, avoiding the use of kerb and channel. Given this proposed design it is suggested that stormwater run-off will be limited.

Grass swales are proposed for stormwater collection along roads and carparks which allows recharging of the water table and the filtering of sediments and contaminants from the road and carpark runoff. Excess stormwater will be directed to the existing natural watercourses and highway culverts. Stormwater from house roofs and driveways will be collected to soakholes adjacent to each building. Again this allows for recharge of the water table.

Golf Course

The proposed course will be located on the northern side of the state highway. The proposal includes restorative planting, with a low level of reliance on fertilizers, herbicides and irrigation (with the exception of the green and perhaps tee areas). Natural features such as the schist outcrops, historic tailings and indigenous vegetation will be relied on to provide a natural character for the golf course.

Walkway

Gibbston Valley Station Limited has volunteered (subject to the outcome of their resource consent application) to incorporate the dual use (pedestrian and mountain biking) Gibbston River Trail (GRT) into their overall development plan. The GRT is an initiative of the Gibbston Valley Community Association (GVCA).

There is also potential to provide additional loops and linkages which would allow the public to avoid interaction with golf and also to cross the state highway via an underpass

to gain access to the proposed service and retail areas as well as a network of trails on the escarpment and terrace edge to the south of the highway.

Future management of facilities and infrastructure

The Infrastructure Report³ identifies that all of the infrastructure, buildings, landscape, vineyard and golf course will remain as non public assets and will be privately maintained and operated. The report states that:

'Most of these assets will be transferred to an asset management company (AMC) set up specifically to undertake this task. While the ownership and funding of the AMC has yet to be decided the responsibilities are reasonably clear. Essentially the AMC has the same responsibilities and duties as a municipality. The maintenance and operation functions will be undertaken by a combination of on-site staff, particularly in management, consent monitoring, vineyard, landscape and golf course works and by contract, particularly roading, water supply and wastewater operations, water testing, etc'

4.0 STATUTORY AND PLANNING FRAMEWORK

Resource Management Act 1991 (Amended As Of 2005)

Part 2 of the Resource Management Act (the Act) sets out its purpose and principles. The following identifies the clauses of relevance to the consideration of this proposal.

Section 5 sets out the purpose of the Act as follows:

5. Purpose

- (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.*

³ Infrastructure Report. Construction Management Services. February 2008.

Section 6 sets out the matters of national importance. Clause (a), (c), (d), (e) and (g) are of relevance and read:

6. Matters of national importance

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 recognise and provide for the following matters of national importance:

- (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:*
- (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.*
- (g) *The protection of recognised customary activities.*

Section 7 identifies other matters that particular regard is to be given:

7. Other matters

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 have particular regard to --

- (a) *kaitiakitanga:*
- (aa) *the ethic of stewardship:*

Section 8 states that the principles of the Treaty of Waitangi need to be taken into account.

Relevantly Section 8 reads:

8. Treaty of Waitangi

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).

Within the context of the Act a further principle, that of consultation, has been found to arise under the principles of the Treaty of Waitangi. The Environment Court has noted that active protection of Maori interests requires positive action, which will at times oblige both the consenting authority and the applicant to consult, and also to initiate, facilitate, and monitor the consultation process as part of the duty to take into account the principles of active protection and partnership. Consultation must be undertaken in a spirit of goodwill and open mindedness, and over a reasonable span of time, and to a degree sufficient for the local authority to be informed of the matters at issue.

Otago Regional Policy Statement

The Regional Policy Statement provides an overview of resource management issues within the Otago Region and sets out objectives and policies for managing natural resources. Chapter 4- Manawhenua Perspective contains matters of resource management significance to Kai Tahu. The following objectives are considered relevant:

4.4 Kai Tahu's water resource objective

Kai Tahu's objective with respect to the management of Otago's water resource is to ensure consistency with the values of Kai Tahu whanui and to be involved in that management through:

- (a) *Participation in the planning, implementation and monitoring of the objectives, policies and methods adopted by resource managers; and*
- (b) *Participation in the use, development, and protection of water resources.*

The responsibility for exercising kaitiakitanga in the Otago region is that of Kai Tahu whanui. Mana and kaitiakitanga are interlinked, those with mana over a region are also kaitiaki to the water resources within that region. Kaitiakitanga is the practical expression of rangatiratanga (authority), it involves the exercise of customary authority over the way a resource is used, managed and protected. To achieve implementation of kaitiakitanga in the present day, consistent with cultural needs, requires a commitment from those exercising statutory authority to the use of consultation, participation and decision making processes that directly involve Kai Tahu ki Otago.

Kai Tahu will measure the effectiveness of its opportunities to exercise kaitiakitanga against environmental outcomes. The outcomes sought by Kai Tahu are the continued health and well being of the water resources of the region and cultural usage of these resources.

The policies derived from the issues and objectives of the Manawhenua chapter can be found in each of the relevant chapters of the Regional Policy Statement. The following are considered to be of particular relevance to the consideration of this proposal:

The following policy provisions relating to the land resource are considered relevant:

- 5.5.1 *To recognise and provide for the relationship Kai Tahu have with Otago's land resources through:*
 - (a) *establishing processes that allow the existence of heritage sites, waahi tapu and waahi taoka to be taken into account when considering the subdivision, use and development of Otago's land resources; and*
 - (b) *Protecting, where practicable, archaeological sites from disturbance; and*
 - (c) *Notifying the appropriate runanga of the disturbance of any archaeological site and avoiding, remedying or mitigating any effect of further disturbance until consultation with the kaitiaki runanga has occurred.*
- 5.5.5 *To minimise adverse effects of land use activities on the quality and quantity of Otago's water resource through promoting and encouraging the:*
 - (a) *Creation, retention and where practicable enhancement of riparian margins;*

- (b) Maintaining and where practicable enhancing, vegetation cover, upland bogs and wetlands to safeguard land and water values; and
 - (c) Avoiding, remedying or mitigating the degradation of groundwater and surface water resources caused by the introduction of contaminants in the form of chemicals, nutrients and sediments resulting from land use activities.
- 5.5.7 To promote the provision of public access opportunities to natural and physical land features throughout the Otago region except where restriction is necessary:
- (i) To protect areas of significant indigenous vegetation and/or significant habitats of indigenous fauna; or
 - (ii) To protect Maori cultural values;
 - (...)

The following policy provisions relating to the water resource are considered relevant:

- 6.5.1 To recognise and provide for the relationship Kai Tahu have with the water resource in Otago through:
- (a) Working toward eliminating human waste and other pollutants from entering all water bodies; and
 - (b) Consulting with Kai Tahu over any application that would result in the mixing of waters from different water bodies and the setting of water flows and levels.
- 6.5.2 To allocate water in areas of Otago where there is or potentially will be insufficient water supplies through:
- (a) Considering the need to protect instream amenity and habitat values; and
 - (b) Considering the need of primary and secondary industry; and
 - (c) Considering Kai Tahu cultural and spiritual values; and
 - (d) Considering the extent to which adverse effects can be avoided, remedied or mitigated.
- 6.5.3 To promote efficient consumptive water use through:
- (a) Promoting water use practices which minimise losses of water before, during and after application;
 - (b) Promoting water use practices which require less water; and
 - (c) Promoting incentives for water users to use less water.
- 6.5.4 To investigate and, where appropriate, set minimum flow levels and flow regimes for Otago water bodies and maximum and minimum lake levels to protect any of the following:
- (a) The needs of Otago's communities;
 - (b) Kai Tahu cultural and spiritual values;
 - (c) Lake margin stability;
 - (d) The natural character of the water body;
 - (e) Habitats of indigenous fauna and flora;
 - (f) Amenity values;
 - (g) Intrinsic values of ecosystems;
 - (h) Salmon or trout habitat;
 - (i) Outstanding natural features or landscapes.
- 6.5.5 To promote a reduction in the adverse effects of contaminant discharges into Otago's water bodies through:
- (a) Adopting the existing water quality of Otago's water bodies as a minimum acceptable standard; and
 - (b) Investigating and where appropriate, enhancing water quality so that as a minimum standard it is suitable for contact recreation and aquatic life where:
 - (i) There is a high public interest in, or use of, the water; or
 - (ii) There is a particular Kai Tahu interest in the water; or
 - (iii) There is a particular value to be maintained or enhanced; or
 - (iv) There is a direct discharge containing human sewage or wastes from commercial or industrial activities; and
 - (c) Requiring that all discharges into Otago's water bodies maintain the standard for receiving waters after reasonable mixing; and

- (d) Promoting discharges to land where practicable and where there are no significant adverse effects on groundwater or surface water resources, or soil; and
 - (e) Preparing contingency responses for accidental pollution spillage; and
 - (f) Investigating and addressing the effects of diffuse source discharges on water quality;
- While considering financial and technical constraints.

It is noted that Policy 6.5.6 relates to the maintenance of Otago's remaining significant wetlands. While wetland areas have been found on the site, the Ecological Assessment does not identify them as significant.

- 6.5.7 To maintain and where practicable enhance existing well vegetated riparian margins and, where necessary, to promote the creation of further such margins:
- (a) To provide for the preservation of the natural character of wetlands, rivers, lakes and their margins; and
 - (b) To maintain and enhance water quality; and
 - (c) To maintain and enhance ecological, amenity, intrinsic and habitat values;
- While considering the need to reduce threats posed by flooding and erosion.

- 6.5.10 To maintain and enhance public access to and along the margins of Otago's water bodies through:
- (a) Encouraging the retention and setting aside of esplanade strips and reserves and access strips to and along the margins of water bodies which will provide access; and
 - (b) Identifying and providing for other opportunities to improve access;
- Except where restriction is necessary (...)

The following policy relating to biota is considered relevant:

- 10.5.1 To recognise and provide for the relationship Kai Tahu have with mahika kai in Otago through:
- (a) Working towards eliminating the disposal of human wastes and pollution into or onto mahika kai; and
 - (b) Facilitating the maintenance and enhancement of access to places of traditional gathering of mahika kai; and
 - (c) Recognising the need to maintain and enhance mahika kai.

Queenstown Lakes Partially Operative District Plan

Part 4.3 of the Queenstown Lakes District Plan is entitled 'Takata Whenua' and includes the following relevant provisions:

Objective 1 - Kaitiakitanga (Guardianship)

Recognition and provision for the role of Kai Tahu as customary Kaitiaki in the District.

Policies:

- 1.1 To ensure the kaitiaki role of iwi, via the appropriate Runanga, is achieved through on-going consultation on policy development relating to the natural and physical resources of the District.
- 1.2 To incorporate communication protocols for ensuring appropriate kaitiaki runanga are consulted on all relevant cultural matters in the District in accordance with Section 93 of the Act.
- 1.3 To recognise the "Kai Tahu Ki Otago: Natural Resource Management Plan" as a resource which can form the basis for consultation between Kai Tahu Runanga and Council (Section 74 of the Act).

Objective(s) 4 - Mahika Kai

1. *The retention of the high quality of the mountain waters, and the retention and improvement of the water quality of the tributaries and water bodies of the District through appropriate land management and use.*
2. *The limitation of the spread of weeds, such as wilding trees.*

Policies:

- 4.1 *To recognise, by Council policy and decision-making, the importance of mahika kai to the culture and relationship Kai Tahu share with the indigenous resources traditionally gathered in the District.*
- 4.3 *To encourage the protection of indigenous ecosystems, by assisting in the provision of information to the community, recreationalists, land managers and local landholder groups concerning the location of significant areas of indigenous vegetation and habitat and the appropriateness of land management practices.*
- 4.4 *To encourage land uses and management practices which ensure the vegetation cover is maintained in order to assist in sustaining the life supporting capacity of the soil.*
- 4.5 *To encourage control of noxious plants.*
- 4.8 *To maintain and enhance public access to the District's public forests and lakes and rivers and wetlands, having regard to their traditional importance as mahika kai.*

Objective 5 - Wai (Water)

The management of the land resource and associated waste discharges in such a way as to protect the quality and quantity of water in the District to a standard consistent with the human consumption of fish, swimming and protects the mauri (life force) of the lakes and rivers.

Policies:

- 5.1 *To recognise the importance of the concept of mauri (life force) as it applies to lakes and rivers.*
- 5.2 *In the development and upgrading of public sewage treatment and disposal systems and in the development of new and extended settlements.*
- 5.3 *To adopt performance standards or require resource consents for land use activities, including mining, in order to minimise the adverse effects on the quality of the District's water resources and associated habitat.*
- 5.4 *To encourage, where appropriate, the creation and enhancement of wetlands.*

Objective 6 - Repo Raupo (Wetlands)

The maintenance and enhancement of existing wetlands and their re-establishment, where practicable.

Policies:

- 6.1 *To recognise the important part wetlands play in maintaining the health of lakes and rivers and habitat for plant and fish life.*
- 6.2 *To encourage the re-establishment of wetlands where practicable*

Objective 7 - Ingoa Rarangī (Place Names)

The continued and enhanced use of traditional Kai Tahu place names as an educational resource to explain the cultural and historical relationship of Kai Tahu to the environment.

Policies:

- 7.1 *When the use of the Maori language is being considered for streets or places, to consult and involve Kai Tahu in the process.*
- 7.2 *To broaden the interpretation of "heritage" values to include traditional Maori place names.*

7.3 To give consideration to the recognition of traditional place names.

Objective(s) 9 - Protection of Water Resources

- 1 The collection, treatment, storage and disposal of wastes in a way that minimises the adverse effects on the natural resources of the District.
- 2 Minimising the quantities of waste requiring disposal within the District.
- 3 To continue to implement programmes to reduce the discharge of untreated or partially treated waste to lakes and rivers.
- 4 To avoid, remedy or mitigate the adverse effects of eutrophication.

Policies:

- 9.1 To consult with the appropriate Kai Tahu Runanga when developing waste management strategies for the District.
- 9.2 To ensure all waste is treated to a high standard
- 9.3 To recognise and promote land use regimes that do not contribute to the eutrophication of the District's lakes and rivers.

The site is contained within the Gibbston Character Zone. This is a sub-zone of the Rural General Zone and recognises the special character of Gibbston, and the activities occurring within.

5.0 VALUES OF IMPORTANCE TO KAI TAHU

'Ki Uta ki Tai', Mountains to the Sea' is used by Kai Tahu as an overall approach to natural resource management. Ki uta ki tai encompasses the wider creation traditions and kaitiaki status of the tangata whenua. The application of Ki Uta ki Tai requires coordinated and holistic management of the interrelated elements of a catchment, from the air to the water, land and the coast. The integration between planning and decision making is essential and includes ongoing consultation and parties working together.

The values of significance to Kati Huirapa Runanga and Te Runanga o Otakou are identified in the following discussion. Relevant objectives and policies of the Kai Tahu ki Otago Natural Resource Management Plan (NRMP) are also included. The NRMP was developed by the four Kai Tahu Runanga of Otago to provide:

- the principal planning document for Kai Tahu ki Otago;

- Information, direction and a framework to achieve a greater understanding of the natural resource values, concerns and issues of Kai Tahu ki Otago;
- A basis from which Kai Tahu ki Otago participation in the management of the natural, physical and historic resources of Otago is further developed.

Wai Maori

The waterways of Otago, carrying the precious waters from the mountains to the sea, are a significant feature of the Otago Region.

Water plays a significant role in Kai Tahu's spiritual beliefs and cultural traditions, the condition of the water being seen as a reflection of the health of Papatuanuku. The degradation of this resource is a significant issue for Kai Tahu ki Otago.

General Wai Maori objectives contained in the NRMP read:

- *The spiritual and cultural significance of water to Kai Tahu ki Otago is recognised in all water management.*
- *The waters of the Otago Catchment are healthy and support Kai Tahu ki Otago customs.*
- *There is no discharge of human waste directly to water.*
- *Contaminants being discharged directly or indirectly to water are reduced.*

General policies that are of most relevance include:

Discharges:

8. *To require land disposal for human effluent and contaminants.*
10. *To encourage all stormwater to be treated before being discharged.*
13. *To require monitoring of all discharges be undertaken on a regular basis and all information, including an independent analysis of monitoring results, be made available to Kai Tahu ki Otago.*
18. *To require groundwater monitoring of all discharges to land.*

Water extractions:

22. *To require that resource consent applicants seek only the amount of water actually required for the purpose specified in the application.*
23. *To require that all water takes are metered and reported on, and information be made available to Kai Tahu ki Otago.*

Irrigation:

26. *To encourage those that extract water for irrigation to use the most efficient method of application. (..)*

Willow Removals:

46. *To require before and after photos of the site that show the work carried out.*
47. *To require willow debris to be stockpiled out of flood plains.*
48. *To require that any bed disturbance is limited to the extent necessary to remove the vegetation and that all reasonable steps are taken to minimise the release of sediment to water.*
49. *To require that trees are removed only on a selective basis and not from both sides of the river at once.*

50. *To require the consent holder to carry out ongoing maintenance by managing re-growth so that future disturbance of the beds and banks is minimised.*
51. *Require replanting of locally sourced indigenous plants.*

Land use and management:

54. *To promote land use that suits the type of land and climatic conditions.*
55. *To encourage the exclusion of stock from waterways.*
56. *To oppose the draining of wetlands. All wetlands are to be protected.*
57. *To require a programme to monitor the effect of stock and agricultural activity on groundwater to be established.*
58. *To promote integrated riparian management throughout entire catchments.*

The following policies relate specifically to the Clutha- Mata-au catchment, in which the Gibbston Valley Station is located and are considered relevant:

5. *To discourage activities that increase the silt loading in waterways or reaches of waterways.*
9. *To encourage the adoption of sound environmental practices, adopted where land use intensification occurs.*
10. *To promote sustainable land use in the Clutha Mata-au Catchment.*
11. *To encourage all consents relating to subdivision and lifestyle blocks be applied for at the same time including land use consents, water consents, discharge consents.*

Mahika Kai

The unique culture and lifestyle included coastal settlements and seasonal migrations inland to collect food and resources. The seasonal inland migrations were determined by whakapapa as to who could exercise those rights. This practice is referred to as 'mahika kai' and became a corner stone of Kai Tahu culture.

The term 'mahika kai' means places where food is produced or can be procured. It encompasses the ability to access the resource, the site where gathering occurs, the act of gathering and using resources, and ensuring the good health of the resource for future generations.

While the site is not on a known inland route, and no archaeological sites have been found to date relating to the gathering or utilising of mahika kai, it is still important to consider the principles of mahika kai and biodiversity.

It is noted that when identifying which policies are relevant, the findings of the Ecological Assessment have been considered. In particular, the statement that it is

unlikely that any native fish species would be found within Tom's Creek. The following policies are considered relevant:

7. *To require that all assessments of effects on the environment include an assessment of the impact on mahika kai.*
12. *To protect and enhance existing wetlands, support the reinstatement of wetlands and promote assistance for landowners for fencing off wetlands.*

The NRMP contains the following Mahika kai and biodiversity policies for the Clutha/Mata-au catchment:

1. *To require native fish ingress and egress past all dams and structures.*
2. *To support programmes and initiatives that enhance mahika kai.*
6. *To encourage environmental and educational efforts to halt the spread of lagarosiphon and other pest species.*
7. *To require coordinated pest management controls.*

Cultural landscapes

The value attached to land is evident from the fact that every part of the landscape was known and named. The following identifies the relevant objectives for cultural landscapes, as identified within the NRMP:

5.6.3 Cultural Landscape Objectives

- i. *the relationship that Kai Tahu ki Otago have with land is recognised in all resource management activities and decisions.*
- ii. *The protection of significant cultural landscapes from inappropriate use and development.*

6.0 KAI TAHU ASSOCIATION WITH THE AREA

While there are no known settlement sites within the subject site itself, it is known that there a trail on the northern bank of the Kawarau River was used by the Maori to access Lake Wakatipu. The Kawarau River is an important water resource. The site forms part of a wider cultural landscape which encompasses the mountain ranges, valley floors through to the Kawarau River incised through the centre of the Valley.

7.0 THE EFFECTS OF THE PROPOSAL ON CULTURAL VALUES

Cultural landscape – visual effect

The site is located within a Visual Amenity Landscape. The proposal has been well planned and designed to reduce potential visual effects, particularly from the state highway. Mitigation measures include placement of buildings, control on building form, and planting. These mitigation measures are supported and will likely be effective in reducing the overall effect on the cultural landscape.

Mahika kai

Associated with recognising mahika kai is the need to ensure public access to lakes and rivers is maintained. The proposed public access along the northern edge of the site is supported.

The conservation management plan proposed for the site is supported, and if implemented will provide significant benefits in terms of increasing indigenous species and habitat.

Management of pest species

If the proposed plantings associated with the proposal are to be successful, a regime for the management of pest species, particularly rabbits, will be applied. This is supported. The removal of willow trees within Tom's Creek and their replacement with indigenous species is supported. The relevant policies of the NRMP should be referred to when undertaking such activities.

Wai Maori

Water quality may be affected as a result of abstraction and non-point discharges given the increased fertiliser likely as a result of the establishment and maintenance of a golf course, residential allotments, orchards and vineyards. There is a potential for increased siltation and nutrient run-off.

The disposal of wastewater to land is supported. However, this is subject to understanding the location of disposal areas. It needs to be ensured that these are located a significant distance away from water bodies.

Given the nature of the proposal the stormwater management regime appears appropriate.

The restoration of wetland areas and planting of riparian areas is supported.

Water supply

Given Tom Creeks sensitivity to over-allocation it is Kai Tahu's preference that water is abstracted principally from the Kawarau River.

The implementation of water conservation techniques is supported. It is noted that in addition to water conservation techniques being adopted within the residential dwellings, conservation of water for irrigation purposes should also be actively pursued. This both reduces the water demand, and the potential for increased discharges.

Accidental Discovery Protocol

While no archaeological sites dating to pre- European times were found on the site, it is recommended that the accidental discovery protocol is in place in case of any findings during site excavation and construction.

8. CONCLUSION

The proposal for a significant and multi-use development on the Gibbston Valley Station has potential effects on the cultural values associated with the wider Gibbston Valley, which was used as an inland route to Lake Wakatipu.

A change in land use from pastoral activity to residential, visitor accommodation, horticultural, viticultural and golf course activities by its nature will have significant effects on the environment. In particular, water demand will increase significantly, and

there is potential for increased discharges to water and adverse effects on the quality of the landscape.

The positive elements of the proposal are supported and include the implementation of a conservation management plan (including lizard habitat rehabilitation, wetland restoration, pest management and riparian management), water conservation measures, walkway linkages and integrated landscape management. These elements of the proposal are supported, and if implemented will reduce the impact of the development.