

**Non notified Concession Officer's Report to Decision Maker**

To: Wakatipu Area Manager – Otago Conservancy

Application: Curvy Basin Chairlift, Trailworks and Snowmaking structures

Applicant: NZSki Limited – the Remarkables Ski Area

Permission Record Number: OT-34109-SKI

Files: PAC 13 06 42 03

Date: 21 September 2012

The purpose of this report is to provide a thorough analysis of the application within the context of the legislation, the statutory planning framework and actual and potential effects, so the Decision Maker can consider the application; and confirm that it should be notified; and make a decision in principle whether it should be granted or declined.

1.0 Summary of proposal**Information about the applicant:**

NZSki Ltd is an existing ski field owner/operator based in Queenstown.

Type of concession sought: An easement for a new chairlift, snow making structures, and for earthworks to develop ski trails.

Background

NZSki Ltd submitted an application in July of 2011 to develop new facilities at the Remarkables Ski Area. These included:

1. Installation of a new 1.3km long 6 seat detachable chairlift. Beginning in the lower of the two current main carparks at 1600m, this is to rise to a terminal structure located at 1900m, just below the ridgeline at the head of the Rastus Burn, underneath Peak 2035. This area is known locally as "Curvy Basin" and Peak 2035 as 'Centurian Peak'.
2. Earthworks to develop new trails from the top of the new lift to the base area.
3. Installation of associated snowmaking infrastructure

In September 2011 NZSki requested this application be put on hold pending submission of additional information regarding developments around the proposed new base station and lower trail area. In March 2012 this additional information was received and the processing of the application resumed.

These proposals follow on from significant works undertaken during the 2010-11 summer, undertaken within the current extent of the ski area facilities.

These were the redevelopment of the Castaway, Turquoise, Alta Blue, Catwalk and Shadow Basin trails and installation of snowmaking infrastructure to the Alta Blue and Waterfall trails. These works were approved under the provisions of the concession held by NZSki and via the creation of easements. Additional works, yet to commence, to widen the Catwalk trail further and to install snowmaking into Shadow Basin have been approved as per the processes above.

Of note also is that NZSki has separately applied for approval to redevelop and extend the existing base facilities; to increase their water take from Lake Alta; to build a second pumphouse; and to trench a water pipeline from the top of the Alta Chair to the Conservation Area boundary. These applications are dealt with separately.

The full analysis is undertaken in section 4 of this report.

2.0 Information available for consideration

Staff comments

The Wakatipu Area Office comments are attached on the file (Area report DOCDM-989306). A site inspection with ski area personnel and staff from the Conservancy and Area Offices occurred on 26 April 2012. The inspection included visits to all the areas where the proposed works may take place. This report incorporates comments from the area report on the effects of the proposals and makes recommendations on them.

Otago Conservation Board

The application was discussed at the board meeting on 20 July 2012. Board members expressed no concerns about the proposed new works, however, recommends the following conditions are imposed in relation to the Curvy Basin works.

- That revegetation and aftercare conditions are imposed, and follow up requirements specified and monitored.
- That the concessionaire is to offer a fairly priced single lift ticket to the top of the new lift, for the purpose of providing quick access into Wye Creek for cross country skiers.
- That no loud music be played at the top of the new lift.

Refer to recommended revegetation conditions in section 6 of the report. To strengthen the revegetation conditions a further condition is recommended that requires the applicant to nursery rear tussocks to intensify tussock revegetation, and to update the revegetation protocol to reflect all extra revegetation measures.

The other 2 conditions recommend by the board, are considered to be fair, and are also recommended.

Iwi consultation

The application does not trigger any consultation triggers with Ngai Tahu or the runanga for Otago Conservancy.

3.0 Acknowledgement of complete application (s17S)

The application was deemed complete on 22 July 2011.

4.0 Analysis of proposal (s17T, 17U, 17V, 17W, 17X, 17Y, 17 S (W))

Section 17T(2) requires the Minister to decline an application within 20 working days of it being deemed complete, if "...the application does not comply or is inconsistent with the provisions of this Act or any other relevant conservation management strategy or plan..."

Comment: The application is consistent with the conservation management strategies as outlined below.

4.1 Public notification s17T (4): All the proposed works will occur within the Rastus Burn Recreation Reserve, within the ski field area of operation. It is recommended that the application be processed via the non notified method.

4.2 Analysis - Statutory context (consistent/inconsistent) and assessment of effects:

Conservation General Policy – May 2005

The activity of ski field development is not inconsistent with the objectives and policies of the General Policies. These policies are subject to the more specific policies found in the CMS and management plans.

Otago Conservation Management Strategy – August 1998

The application is consistent with objectives and implementations points of the Otago Conservation Management Strategy, in particular the provisions for the Remarkables Special Place (10.26) and the functional objectives relating to Commercial Recreation and Tourism (28.1):

28.10 Commercial Recreation and Tourism

Management issue for the ski fields: *The three ski fields have undergone a resurgence in the last three years with development investments particularly for snow making and good snow conditions raising interest in skiing to new heights. With this has come the desire of the ski field owners to develop further facilities and further modify the areas to cater for current demand and projected increases. The department has a very important job considering the large scale development and modification plans of these companies and undertaking objective monitoring.*

Objective for commercial recreation: *To ensure that recreation and tourism concessions (including concessions for special events) bring benefits in terms of opportunities to enjoy natural and historic resources or recreational opportunity in natural settings, without causing undue adverse effects on those resources or settings or on the enjoyment of them by other people.*

10.26 Remarkables Special Place provisions

Management issues: *Skifield development, eg, snowmaking and its water supply and storage; sewage disposal to Rastusburn; slope grooming in areas of exposed rock; road maintenance and safety; car parking.*

Retention of natural tussock grassland, wetland and alpine ecosystem communities.

Objective for Remarkables: *To protect the very high landscape and ecological values of the area, and its historic value, and the remoteness of parts of it, while allowing appropriate parts of it to be used for a range of recreational opportunities including the existing commercial skifield.*

Implementation policies:

The lessor's (departments's) discretionary powers in the ski area lease will be exercised in terms of the objective, subject to provisions of section 17 of the Reserves Act to the extent that the lease is of parts of the recreation reserve.

Detailed analysis of effects – the analysis provided below outlines and discusses each component of the application.

4.3. Installation of a new chairlift ('Curvy Basin')

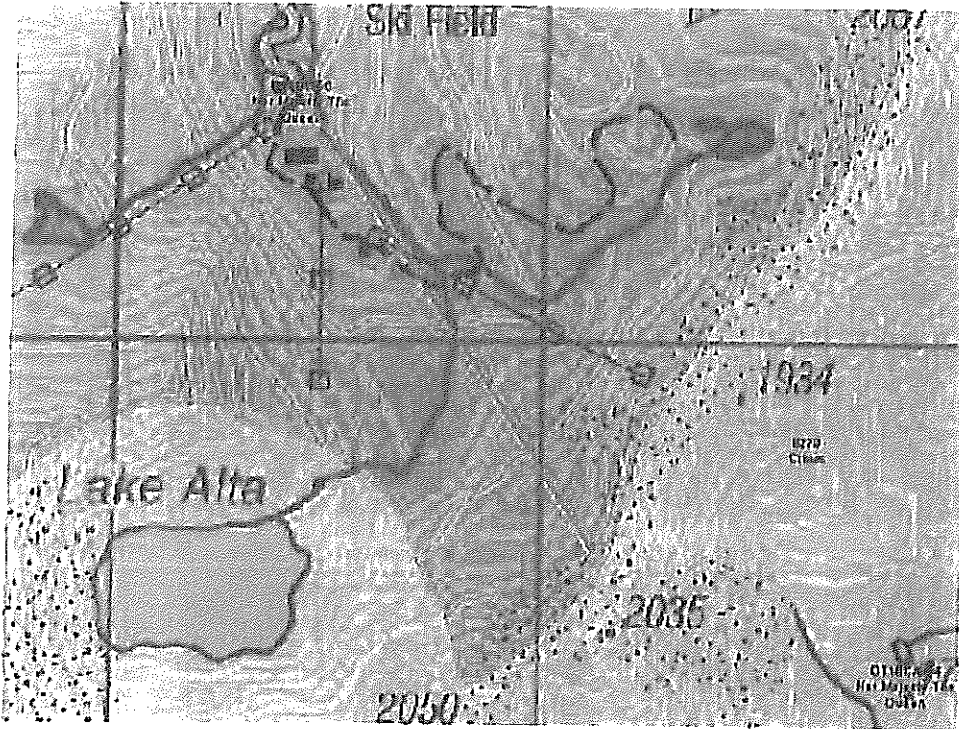
4.3.1. Overview

Exact specifications are subject to final detailed designs yet to be supplied

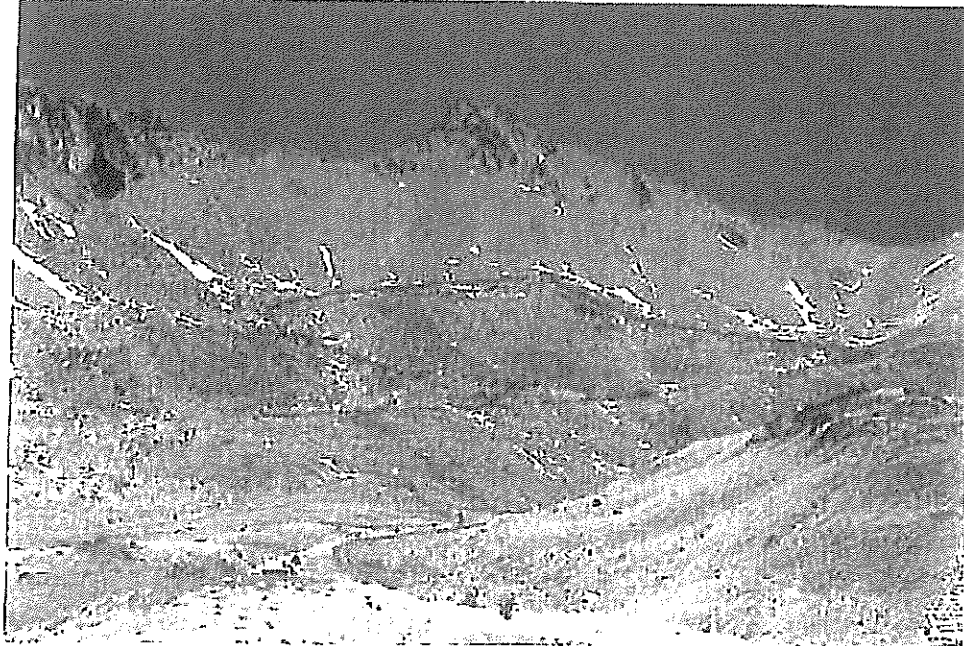
- Six seat detachable chairlift
- 1.3km long
- Beginning at 1600m in the current carpark area and rising to 1900m elevation, just below the ridgeline in the upper Rastus Burn ('Curvy Basin') under Peak 2035 ('Centurian Peak')
- Terminal buildings at either end, being approximately 13m x 8m and 5m high.
- 18 intermediate towers, being up to 17m high from the ground surface
- Each tower will require a 3m x 3m footing 0.7m high that has an additional 1.2m x 1.3m column above it for a further 1.5m in height. Most of this footing structure is buried once complete
- Communication and safety circuit cabling buried along its path
- Capacity to deliver a 3,400 passengers per hour once fully utilised

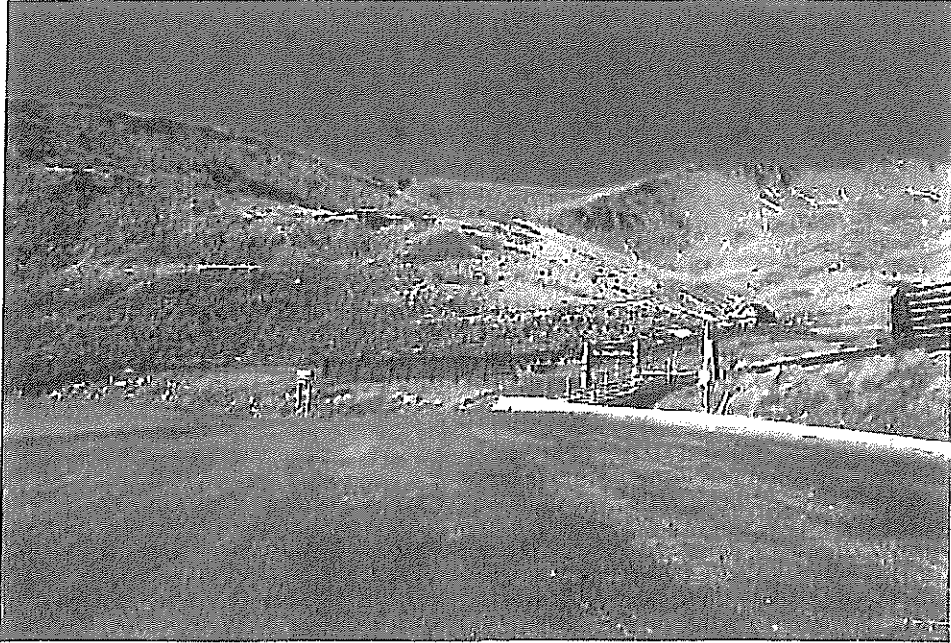
See Appendix 1 for schematics of proposed lift and below for indicative photos.

Location of proposed lift shown in red. Note : Blue overlay denotes Rastus Burn Recreation Reserve, green denotes Remarkables Conservation Area. Note also mapping inaccuracies of existing lift lines as shown.

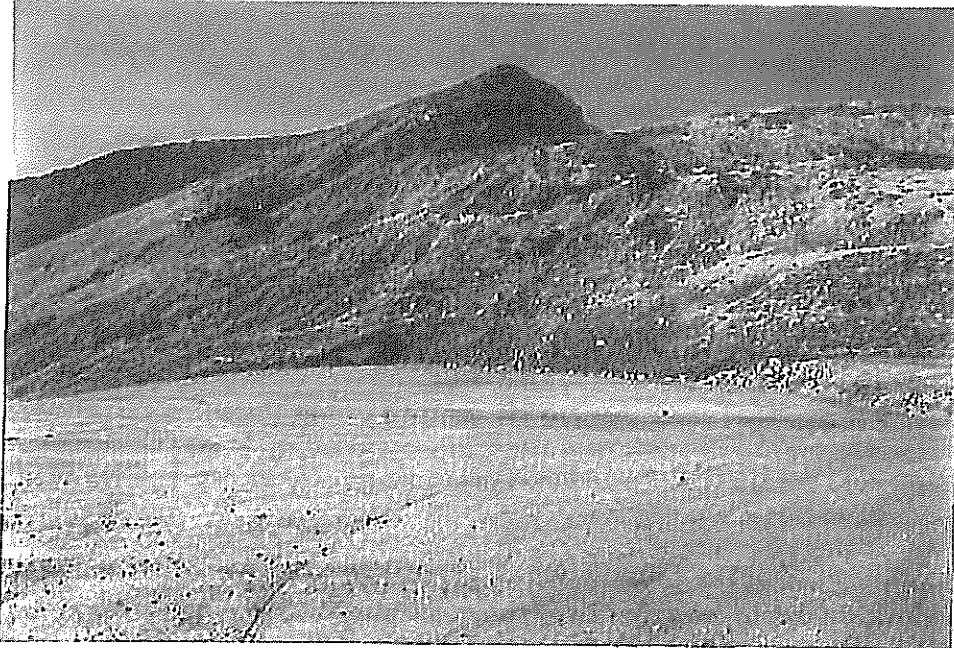


Indicative line of proposed chairlift in red and associated trails in blue

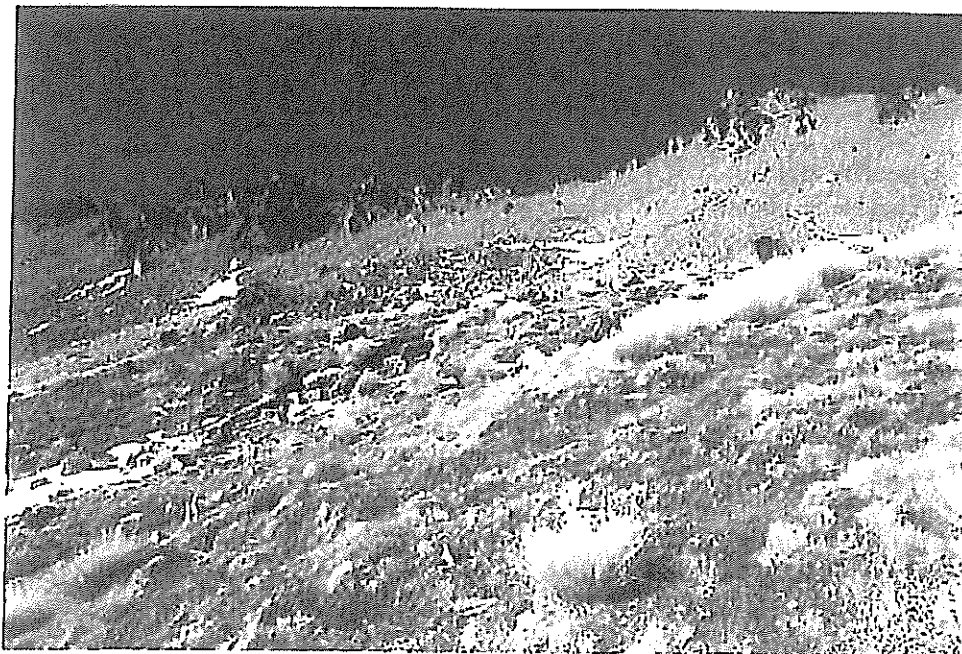




Site of lower lift terminal (not to scale)



Indicative photo of top terminal location (red) and retaining (blue). Not to scale



4.3.2 Construction Details

Top Terminal

This is required to be built as one of the first phases of the lift installation. The site chosen is on a small natural terrace where the upper loose rock slopes meet the tussocks.

The structure is proposed as being 13m x 8m and approximately 5m high. Colours are specified as being recessive as per existing structures. Detailed designs are yet to be supplied.

A flat area approximately 150 square metres is required to site this building. 350 square meters of cut and fill of loose rock is described as being required here to lower and flatten the site out.

Stabilisation of the loose rock slope above (indicated as being 28 degrees) by way of suitable retaining will also be required as per yet to be developed engineering specifications.

Delivery of materials and staff to the site will require a 9m wide access road to be built, branching off the existing access road to the top of the Alta Chair. This access road would cross the Rastus Burn stream and later be absorbed into the proposed associated trail works. In the long term only a smaller 3 m wide permanent vehicle access road will remain. The crossing will need to be initially suitable for the heavy wheeled and tracked machinery required for construction of the terminal – e.g. concrete trucks and lifting equipment.

Bottom Terminal

This is to be located in a corner of an existing carpark below the base building. The proposed structure is as above. The area of construction and access to it is already heavily modified.

Lift Towers

Each tower will require a 3m x 3m footing 0.7m high that has an additional 1.2m x 1.3m column above it for a further 1.5m in height. Most of this footing structure is buried once complete, with the towers secured to these footings. Towers are up to 17m high above the ground.

Tracked machinery will be required to access these 18 individual sites, branching off the proposed new trail(s). This disturbance will not be absorbed by further trail work and will need to be restored accordingly.

Communications and safety circuit cabling is required along the length of the lift, buried approximately 30cm below the ground surface. This will involve a small (5 tonne) tracked digger traversing the length of the lift to create a trench, lay the cabling and restore the surface.

Construction timeline

Not specified at the time of the application. NZSki have subsequently indicated they may wish to stagger construction over two years. In the first year NZSki would concentrate on the earthworks necessary to prepare the base area, to complete modifications to existing trails and construct the access way to the top terminal. The second year would involve the installation of the lift infrastructure and completion of the trail and snowmaking works.

4.3.3. Assessment of Effects

The applicant has provided the following as part of their application:

1. An Assessment of Effects
2. A Landscape Assessment Report
3. A Report on Ecological Values Within Curvy Basin

4. A Report on the Geotechnical Assessment of Effects

These are attached to this report as Appendix 2

Key points identified by the these reports and by departmental staff are summarised below.

Landscape

These consist partly of the visual effects resulting from locating a significant new structure high up in the Rastus Burn. Effects from disturbance to the existing vegetation and rock cover, which forms part of the landscape, are discussed later.

Existing ski area facilities are significant, with large areas being highly modified by trails, roads, lifts and buildings. However, these are currently limited to the lower half of the main Rastus Burn basin and are only visible from within the Rastus Burn Recreation Reserve.

The proposed lift will extend beyond the height and distance of current facilities, being approximately 150 vertical and 750 horizontal metres beyond the top of the Alta Chair.

As such, the lift line would be visible from locations in the local area that would previously had a more natural outlook, such as from the eastern and northern shores of Lake Alta (see photo below). However, users of this site already look out onto the ski area throughout their approach and out to the Sugar Bowl developments while on the eastern edge of the lake amphitheatre itself.

Importantly, the chair and upper terminal do not break the ridgeline of the upper Rastus Burn and as such have a background of tussock and rock. Finished colours are to be recessive. The chair and upper terminal will not be visible from within the Wye Creek or Doolan catchments.

The upper part of the proposed lift and top terminal may be visible from beyond the ski area, from properties along parts of Malaghans, Hunter, Slope Hill and Lower Shotover areas. This potential effect does not form a part of these considerations as it is considered through the District Plan and other RMA processes.

View from the top terminal site to Lake Alta.



Although it is accepted that the new lift will create a permanent and cumulative effect to the visual elements of the landscape in the Rastus Burn, these are considered minor in the context of

- (i) the existing ski area developments
- (ii) taking note that the lift does not break the ridgeline and
- (iii) the expectations provided for use and development of this land by way of the purpose for which this land is held (Recreation Reserve)

Existing Recreational Values

There is little recreational use of the terrain surrounding the proposed lift in the summer. However, much of the terrain above the Alta lift is used in winter by ski tourers/walkers. This includes the upper Curvy Basin and slopes surrounding Lake Alta. This area is also the most direct route to the Wye Creek basin, which is a popular cross country skiing area. Consequently, there may be an effect on the recreation values of this user group as terrain previously used exclusively by them will be available to a much larger number of lift accessed users.

It is important to note that a lift to the top of Curvy Basin has been proposed as far back as 1979, in the course of setting aside the 700 hectare area that became the Rastus Burn Recreation Reserve in 1980. The Rastus Burn Recreation Reserve was set aside with a view to allowing for a ski area to be built in this terrain.

It is recommended that any approval includes a condition requiring NZSki to offer a fairly priced single use lift ticket to the top of the Curvy Lift. This would mitigate the loss by current users of their experience above the current Alta lift by providing quicker access to alternative ski touring terrain (Wye Creek, Doolans).

Geotechnical Stability

The top terminal site requires modification to allow for the structure and retaining from the relatively steep loose rock slopes above.

The geotechnical report has not identified any evidence of large scale instability or deep seated landslide activity in the lift area. It does recommend obtaining pilot assessments of any deeply cut areas as well as ongoing assessment during construction by a suitably qualified geotechnical engineer.

Vegetation

Vegetative cover along the length of the proposed lift is well described in the application documents.

Four species are found in the upper Curvy Basin are recorded as being Naturally Uncommon but are also found throughout the Remarkables and Hector Mountains.

These are primarily found in association with wetland areas

None of the species within the Alta Basin part of the Rastus Burn are listed as threatened in the QLDC Partly Operative District Plan.

The Rastus Burn has a long history of modifying terrain and restoring the vegetation cover over the last 25 years.

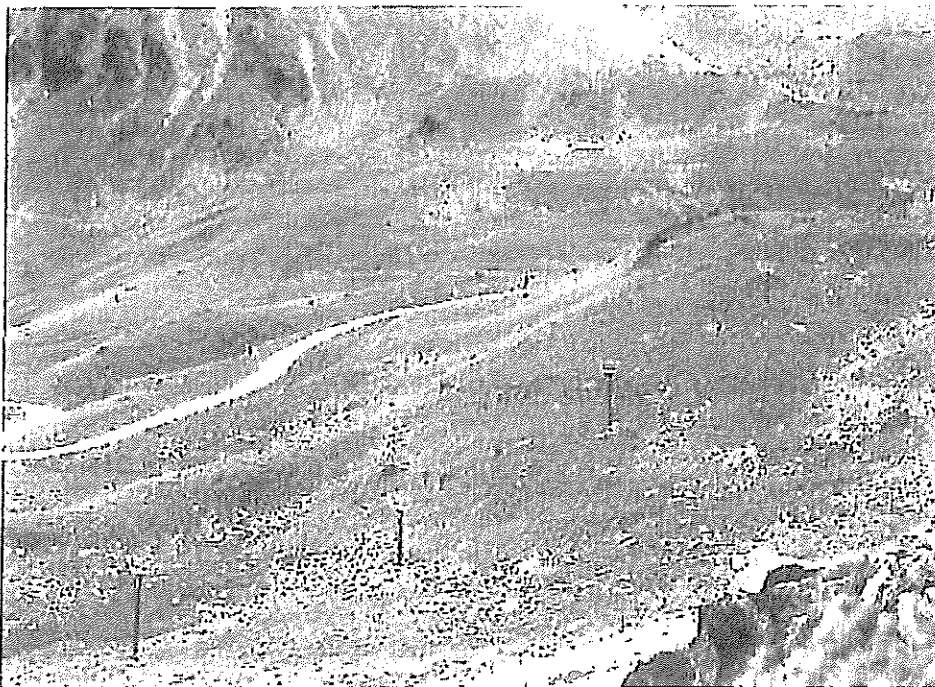
Current methods to strip, store and replant vegetation in the context of the ecological and amenity values associated with the ski area are, over time, seen as being appropriate for the locations in question and successful where good contractor supervision and external monitoring is applied.

This includes ensuring heavy machinery access and egress is limited to already disturbed areas where possible. Additional methods include dividing plants sourced from the wider Rastus Burn area, spreading seed collected locally in the autumn and experimenting with growing plants from seed off site.

Evidence from the 2010-11 summer construction works demonstrate the potential for revegetation measures to be successful. Other evidence of successful restoration work includes previous works to install the Alta and Shadow Basin lifts, where the effects of construction to the areas around the pylons are now not able to be easily discerned. It should be noted that follow up plantings in successive years is often required as a result of post transplanting die-back or a lack of tussock material at hand during the construction phase.

Of note also is the successful landscaping of some disturbed terrain using loose rock to mirror that found naturally. This technique has been employed on areas where sufficient tussocks have not been available. It creates new areas of scree like slopes to replace areas previously covered largely in tussocks. While not replacing like for like, it is seen as an appropriate method to mitigate the effects of terrain modification in areas where there is insufficient material available to transplant, and much other disturbance to amenity values is already found alongside (roading, lifelines, snowmaking).

Alta Chair lift showing successful tussock revegetation along length of lift line

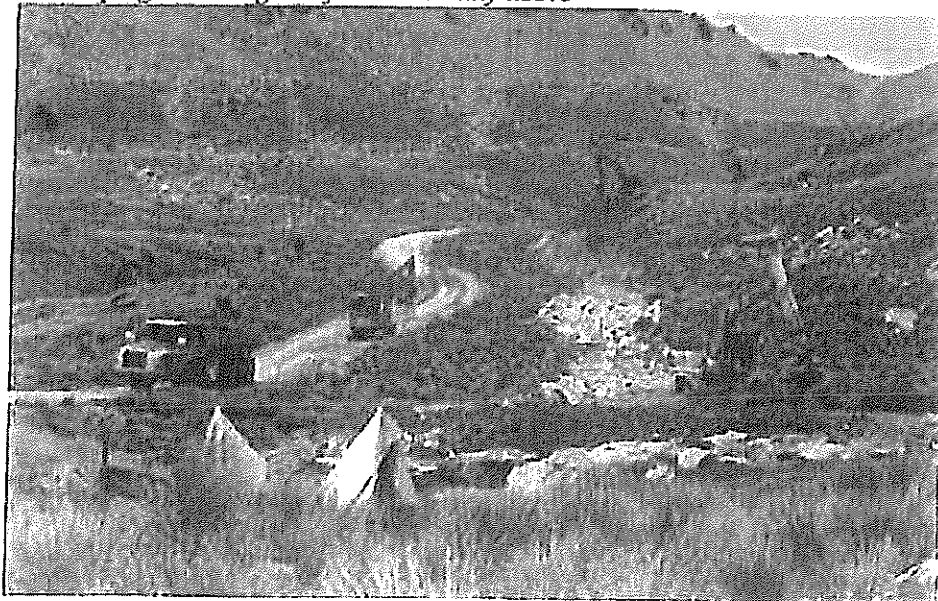


Example of current works; Turquoise Trail earthworks 2011

1. Before trail redevelopment



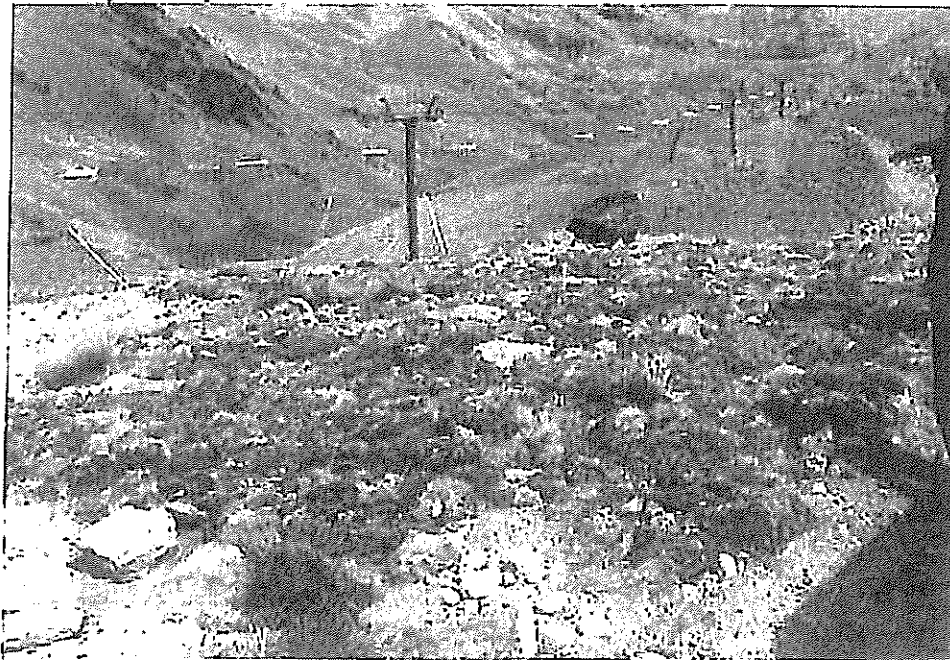
2. Nearing completion March 2011. Vehicles similar to those in the photo below are to be used. Note fill of hollow terrain uphill of digger, tussock re-vegetation works and loose rock landscaping mirroring that found naturally above



Hand stripping and storage of higher elevation cushion plant communities



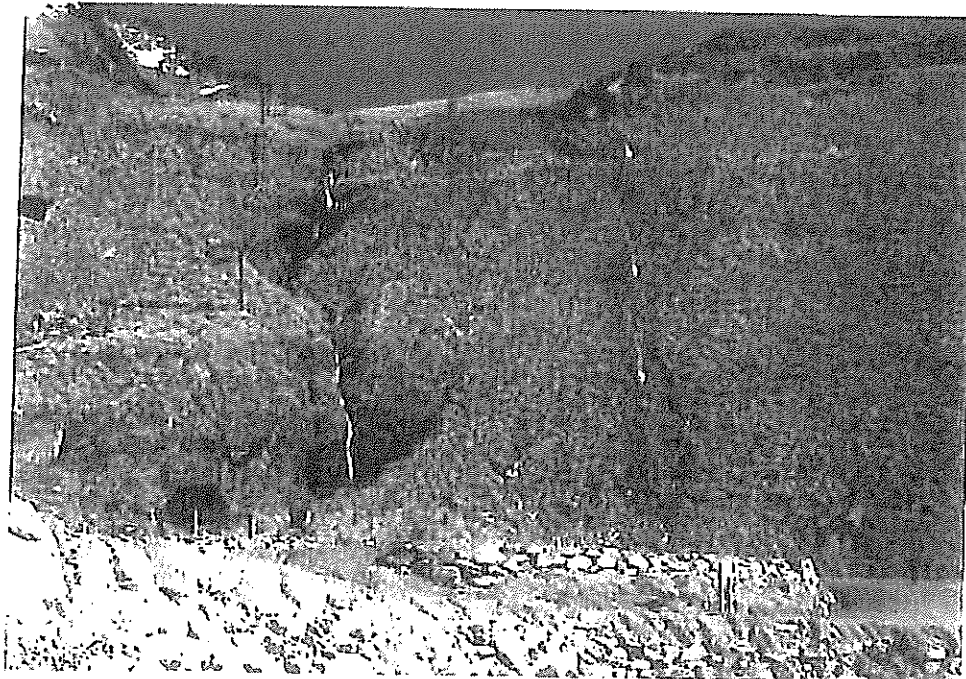
Example of replanting higher elevation cushion plant communities following earthworks to the Custaway trail, April 2011



Example of disturbance to surface by 5 tonne digger prior to trenching of the Waterfall Trail snowmaking line 2011.



Restoration immediately following construction May 2011 (note top third still to complete)



It needs to be noted that it is not usually possible to completely restore all disturbed terrain during the initial construction phase. Any new works on tussock slopes will require follow up over the next 2 -4 seasons to ensure the live tussock density cover is satisfactory. Cushion plant communities will require many more years of ongoing planting/seeding works as they do not transplant as well or recover as quickly. Evidence of the works at these higher elevations will remain obvious for much longer (possibly a decade or more) than the lower tussock slopes. Follow up work would be part of the existing annual revegetation programme at Remarkables as demonstrated by the Sugar Basin cushion plant restoration works (seed collection and sowing).

Additionally, the many small natural drainage channels draining the upper third of the run will be bisected by the works required to establish vehicle access and will be permanently altered. Suitable new channels and fill will be required to drain these areas and provide a source of water to the wetlands below (see next section). Quality supervision, independent monitoring and care by contractors will be required as the works unfold through this area.

To summarise, although there will be considerable temporary removal of vegetative cover, provided quality removal, storage and replanting work, contractor supervision and monitoring is conducted, the effects of this work to tussock vegetative cover after 2 -4 years will be minor. Effects to cushion plant communities will take considerably longer to be mitigated, possibly a decade or more.

Wetlands

A detailed assessment of wetlands in the Rastus Burn was conducted in 2011 by Wildland Consultants as a condition of other approved works. This identified their extent, type, composition and significance.

This study noted that while wetland types in the Remarkables Ski Area do not appear to be unique, they are significant because *"they are the largest in the immediate area, are in good condition, and are representative of wetlands in the wider Remarkables Ecological District"* and they are *'performing important hydrological functions and support uncommon plant species and uncommon indigenous invertebrates"*

Of note is that it is wetland areas that support the four Naturally Uncommon species found in the upper Curvy Basin. It is also noted that these are also found throughout the Remarkables and Hector Mountains.

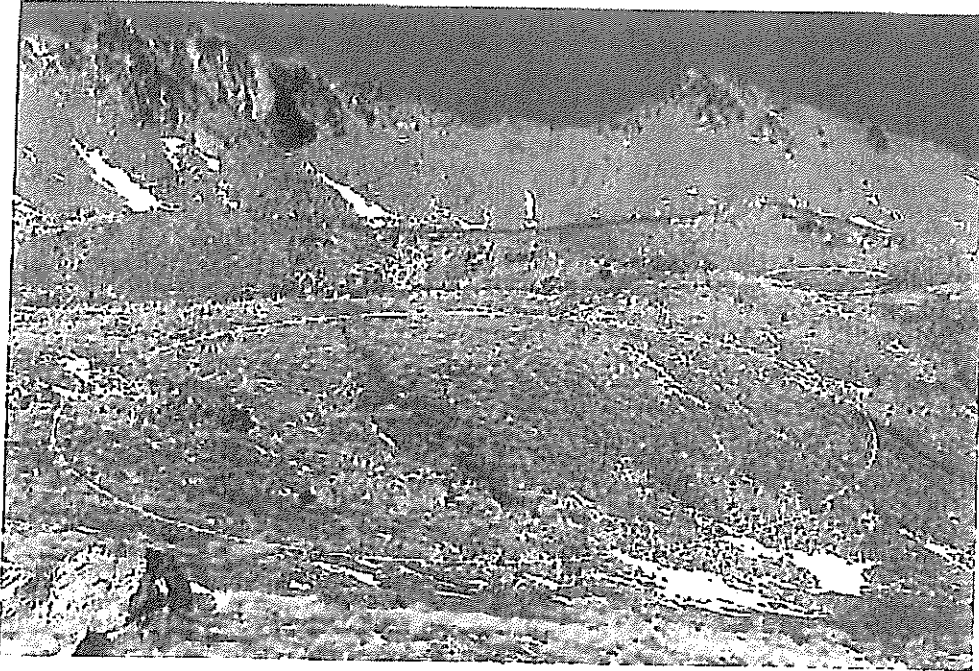
The line of the lift and some access ways to the lift line during construction would likely cross wetland areas, particularly one large seepage area that feed a much larger wetland area below.

Positioning of tower footings in this area will require consideration in the final developed designs and construction phase to avoid the main seepages down this slope.

A new vehicle access route across the Rastus Burn stream will be built to allow access to the top station during construction (9m wide) and long term access (3m wide).

This is to branch off the existing Alta road and will cross the stream as indicated in the photo below. The crossing will require suitable hardening/bridging to allow for this temporary and permanent access without interrupting or altering the extent or quality of the flow.

Red denotes indicative lift line, blue denotes associated trails and yellow ellipses denote areas of associated wetland



The design for this is not specified. However, other smaller watercourses elsewhere in the Rastus Burn have been successfully bridged for the purposes of construction without damaging the water quality or flow by installing a temporary steel sledge bridge and coarse rock as in the photo below taken during the Shadow Basin/Waterfall works 2011. The bridge is removed and the crossing restored once construction works are complete. Given the width and breadth of the proposed Rastus Burn crossing, suitably detailed plans will need to be approved by the Department prior to these works beginning to avoid the risks associated with flooding in behind this crossing and silt below it.

An additional water course crossing that does not always flow, but that drains subsurface water from the wetland above (just to the east of the stream) will likely need to be established in the same way.

Indicative new access site across the Rastus Burn to establish a vehicle route to proposed top station. Note new stream crossing to be established and also crossing of drainage to the east (denoted by red arrows)



Temporary bridging of watercourse for construction, removed at completion of construction works.



Fauna.

Kea, falcon, black billed gulls and pipits are known to frequent this area but are unlikely to be affected by these works.

Lizards, the including the gecko and skink are known to be present as are many species of invertebrates (186 recorded in a 1992 survey).

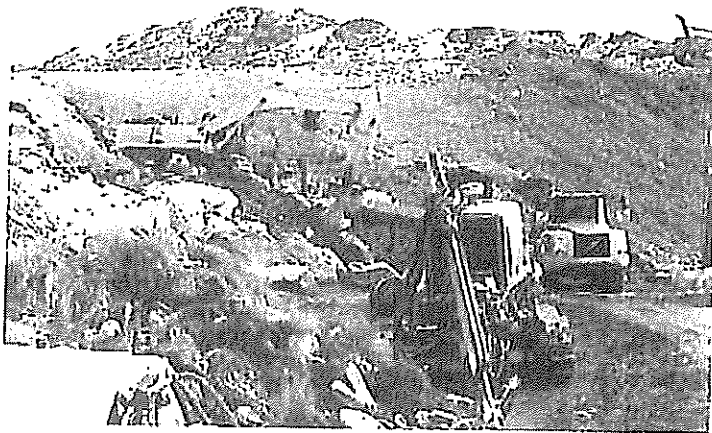
As there will be only temporary removal of habitat, and the area of this is small relative to the overall area of the Rastus Burn, Remarkables and Hector Ranges, the effect on this particular development is considered minor

Recreation and amenity values during the construction phase

Lake Alta is popular destination in the summer with walkers and as a through route for climbers and for trampers utilizing other areas, including the Single Cone, Double Cone and the Wye Creek Basin.

The scale and nature of works, involving heavy machinery, noise and generally unsightly construction while underway is likely to have an effect on these users experience. However, this is a temporary effect only and can be mitigated by appropriate signage in the base area to inform the public as to the nature of the work, safety signage where required and maintenance of the publics ability to pass freely through the area.

Example of machinery involved in construction works (Upper Catwalk re-development 2011)



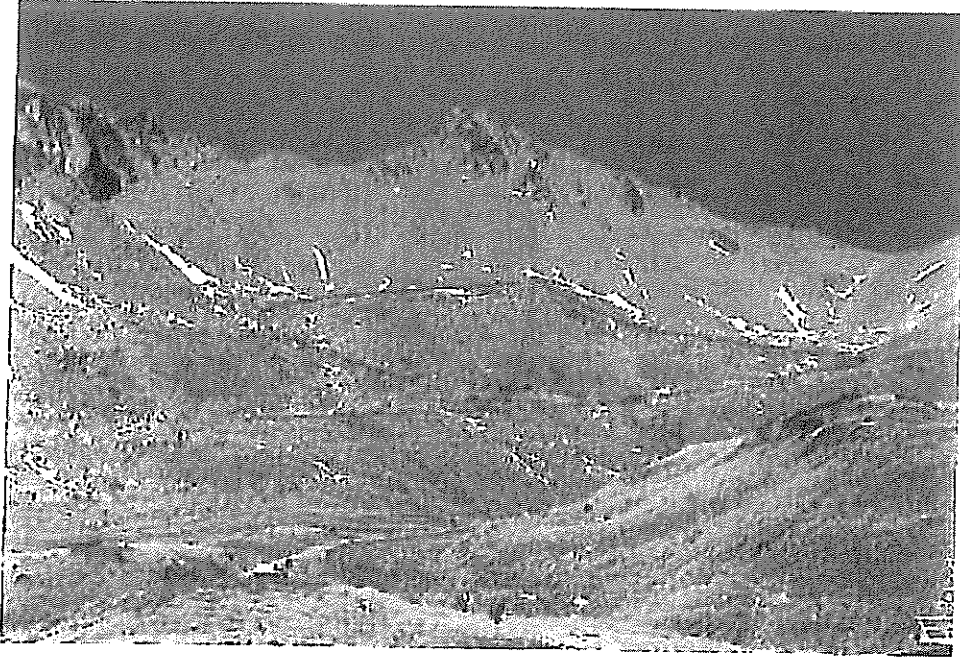
4.4. Earthworks to develop ski trails

4.4.1 Overview

- Development of two new trails descending the upper basin of the Rastus Burn, (known locally as 'Curvy Basin') beginning just below Peak 2035 (known locally as 'Centurian Peak') and descending to the base carpark area.
- Redevelopment of existing ski trails, from where these intersect the new trails down to the new base terminal.
- Overall the trail works will be 1700m long, designed for intermediate users.
- Smooth gradient between 10-14 degrees, taking out natural undulations, by way of cut and fill resulting in batters up to 22m high and fill up to 10m deep
- Finished trail widths between 13m and 40m
- Total disturbed widths, including batters of between 22m and 84m
- Built in part initially as a 9m wide access route to support lift construction. A 3m wide metalled 4WD track will remain along the length of the finished trails.
- Widening of the existing ford crossing of the Rastus Burn just below and left of the Sugar Basin chairlift from 4m to 10m.
- An estimated 25,500 square metres disturbance to vegetation
- An estimated 187,000 cut and an equal amount of fill
- Temporary removal and replanting of vegetation
- Machinery required includes 20 tonne diggers, 6 wheeled transport trucks and a tracked rock drill.
- Built in part initially as a 9m wide access route to support lift construction
- A 3m wide vehicle access track to the top of the lift will remain once all construction is complete
- Associated snowmaking pipes, pits and lance emplacements (considered separately)

See additional indicative photos below

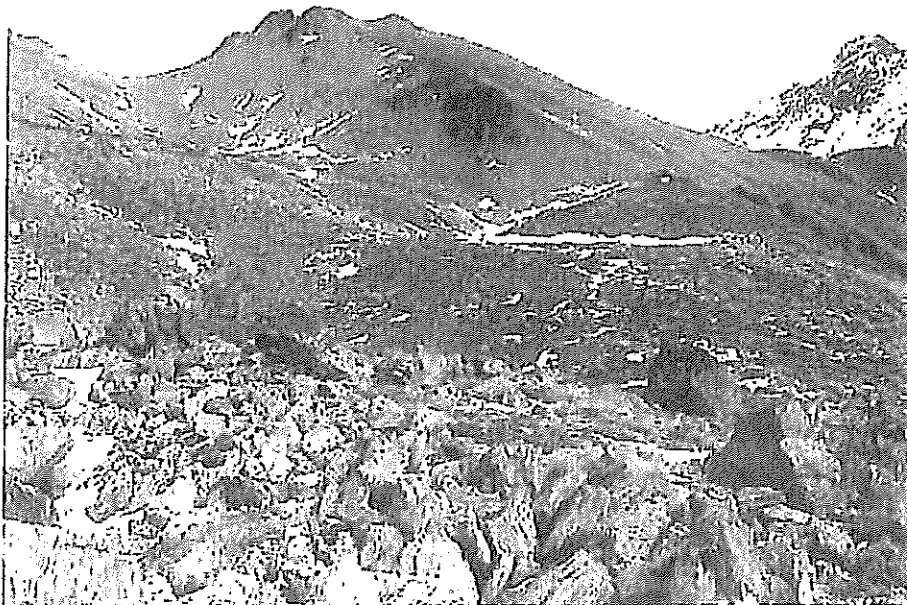
Indicative line of chairlift in red and associated trailworks in blue



Upper and mid-sections. Note road/ford area near bottom right of photo to be widened by a further 6m



Detail of upper section, skiers left



Upper sections skiers left and right



Skiers right trail from near top terminal site



Indicative mid and lower sections, after the two upper sections of trails have joined



Ford to be widened from 4 to 10m, using rock as per present version. Water to percolate through wall as currently.



4.4.2 Construction Details

Construction will involve several 20 tonne diggers, 6 wheeled dump trucks, and rock blasting equipment.

As per lift construction, work will initially involve creating a 9m wide access way from the top of the Alta Chair road across the Rastus Burn stream, and on up to the top lift terminal site. This will initially provide access during construction for diggers, concrete trucks and other heavy machinery conducting the lift works. Following completion of lift and trail works, this road will be restored to provide 3m wide long term vehicle access.

Work is to proceed using cut and fill to form the trail, leaving a finished trail that is a smooth 10-14 degree, 13-40m wide trail.

Total width of disturbance (including maximum horizontal extents of upper and lower batters) is between 22 and 84m.

Work includes widening of the current ford across the Rastus Burn just below the Sugar Basin chair from 4 to 10m. This will involve engineered designs yet to be submitted.

Many natural drainage channels will be crossed and altered, particularly in the upper section of the trail above the main wetland areas.

Revegetation is proposed as proceeding in the manner adopted in recent years, being to strip, store alongside, and replant as construction unfolds, using additional rock landscaping to assist. Follow up revegetation works in subsequent seasons will be required using split plants sourced from elsewhere in the reserve to patch up areas, as well as spreading of seed in the upper elevations where cushion plant communities dominate.

4.4.3 Assessment of Effects

Effects are as per lift construction with the following additions:

Landscape

Where possible, lines for the trails have been chosen to use natural features (gullies and terraces) that minimize both the amount of construction required and, as a result, their visual impact from below. However, it will still be possible to identify the lines of the trail against the otherwise unmodified surrounding landscapes.

The upper parts of the proposed trails may at times be visible from beyond the ski area, from properties along parts of Malaghans, Hunter, Slope Hill and Lower Shotover areas.

This potential effect does not form a part of these considerations as it is considered through the District Plan and other RMA processes.

Although it is accepted that these new trails will create a permanent and cumulative effect to the visual elements of the landscape in the Rastus Burn, these are considered minor in the context of

- (iv) the existing ski area developments and
- (v) the expectations provided for use and development of this land by way of the purpose for which this land is held (Recreation Reserve)

Watercourses and Wetlands

The proposed trail crosses multiple small watercourses and drainage channels as it descends from the top of the proposed lift across the upper slopes and down the hill. Some of these are unavoidable and will require remedial drainage in the form of coarse rocks, drainage channelling, geocloth or piping to maintain their underground flow as the trail goes over the top. In addition, surface water and silt runoff during construction and long term will need to be adequately controlled to protect the wetlands below.

Some watercourses, such as in the photo below, can be avoided with appropriate care and alignment as the trail work progresses.



In one very small section in the upper third of the trail, the proposed line bisects a small seepage wetland that helps to feed the larger flat area of wetland below.

It is proposed to build up this area by 10m to allow for the even grade of trail to pass through this area. While subterranean drainage of the wetland is able to be maintained to the wetlands below by using appropriate coarse fill, the surface of the wetland itself is likely to be permanently damaged as the finished width required (given the horizontal extent of batters required to raise to this height) will mean a significant part of it will be covered over with fill.

Red denotes indicative extent of trail and batters



It is likely that this is Wetland 26 as identified in the Wildlands Ltd report 'Assessment of Wetlands' 2011. This is classed as being a Seepage-Shallow Water wetland of a "Mossfield" type.

As previously mentioned with respect to the lift works, this study notes that while wetland types in the Remarkables Ski Area do not appear to be unique, they are significant because *"they are the largest in the immediate area, are in good condition, and are representative of wetlands in the wider Remarkables Ecological District"* and they are *'performing important hydrological functions and support uncommon plant species and uncommon indigenous invertebrates'*

Of note is that it is wetland areas that support the four Naturally Uncommon species found in the upper Curvy Basin. However, it is also noted that these are also found throughout the Remarkables and Hector Mountains.

Also noted in the report is that while earthmoving activities can potentially destroy or modify wetlands through changing flow patterns, water levels or through sedimentation, many of the existing modifications already made (such as where roading has bisected wetlands) do not appear to be having a major adverse effect.

The line of the trail avoids any other obvious wetlands by being aligned along the length of a small terrace above multiple seepages in the slope below that feed the large flat wetland area below (see photo below).



Detailed designs will need to be submitted for consideration/approval regarding the proposal to widen the ford near the bottom of the Sugar Bowl lift.

In summary, there will be multiple crossings and filling of current surface and sub-surface drainages and one small wetland area will be covered over. In the context of the number and distribution of wetlands in the Remarkables the area to be covered is very small and is not mentioned as supporting species not found elsewhere.

Provided that there are experienced contractors, quality supervision and monitoring as the work progresses it is possible to mitigate the effects of trail construction with respect to protecting the wetlands and drainages elsewhere.

4.5. Installation of Snowmaking Infrastructure

4.5.1 Overview

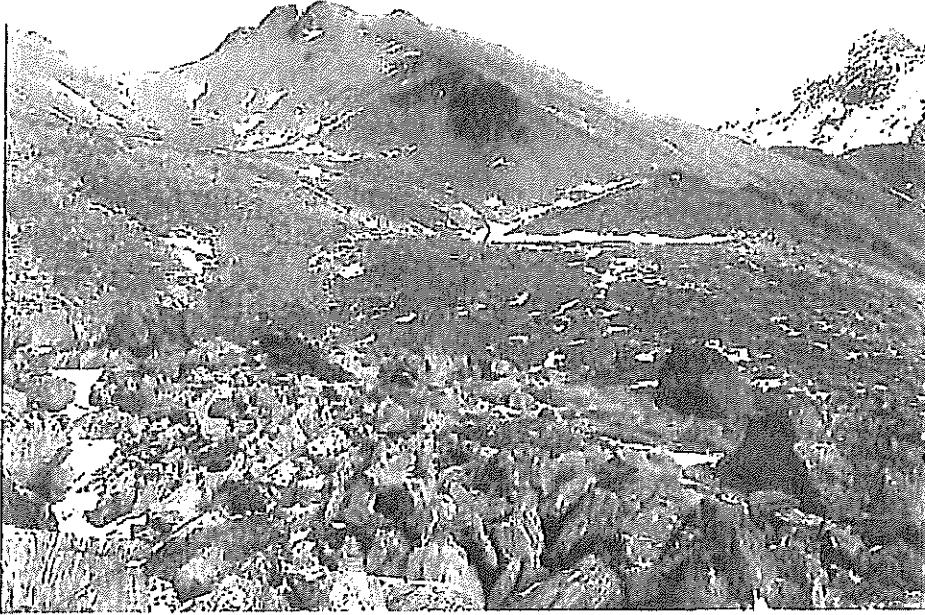
- Up to 20 pits and lances placed 60m apart along northern edge of the upper 900m of the proposed eastern (skiers left) trail
- Pits are 1.5m high pre-cast concrete boxes containing switching gear and are partly/fully buried
- Lance type snowmaking guns 9m tall on top of pits, with associated lighting
- Trenches are up to 1.5m deep and 1m wide; containing water and air pipes, communication and electrical cabling
- Connecting to existing infrastructure at top of the Alta chair
- Trenching across the Rastus Burn and across underground wetland drainage flows near top of the Alta chair is required
- Use of diggers, explosives and a tracked rock blasting compressor
- Another 4 existing hydrants in lower part of run to be replaced with pits
- 12 week construction period, Temporary removal and replanting of vegetation

See attached Appendix 1 for schematics. See additional indicative photos below

Indicative line of chairlift in red and associated trailworks in blue, snowmaking line in purple



Upper and mid-sections.



Detail of connection to existing infrastructure at top of Alta lift area. Note required trenching across Rastus Burn and area of wetland drainage as indicated by arrows



4.5.2 Construction Details

Work is to proceed alongside the proposed lift and trail work to avoid duplicating vegetation stripping and replanting work. Construction will involve diggers, explosives and rock blasting equipment.

As required for the lift and trail works, a new vehicle access route across the Rastus Burn stream will be built to allow access during construction (9m wide) as well as for long term access (reduced to 3m wide on completion).

Vehicle access is to branch off the existing Alta road and will cross the stream as per lift and trail works. An additional water course crossing that does not always flow, but that drains both surface and subsurface water from the wetland above (just to the east of the stream) will need to be established in the same way.

Trenching across these watercourses is also required. The Rastus Burn will need to be temporarily diverted while this happens.

Revegetation is to proceed in the manner adopted in recent years, being to strip, store alongside, and replant as construction unfolds, using additional rock landscaping to assist.

Follow up revegetation works in subsequent seasons will be required using split plants sourced from elsewhere in the reserve to patch up areas as well as spreading of seed in the upper elevations where cushion plant communities dominate.

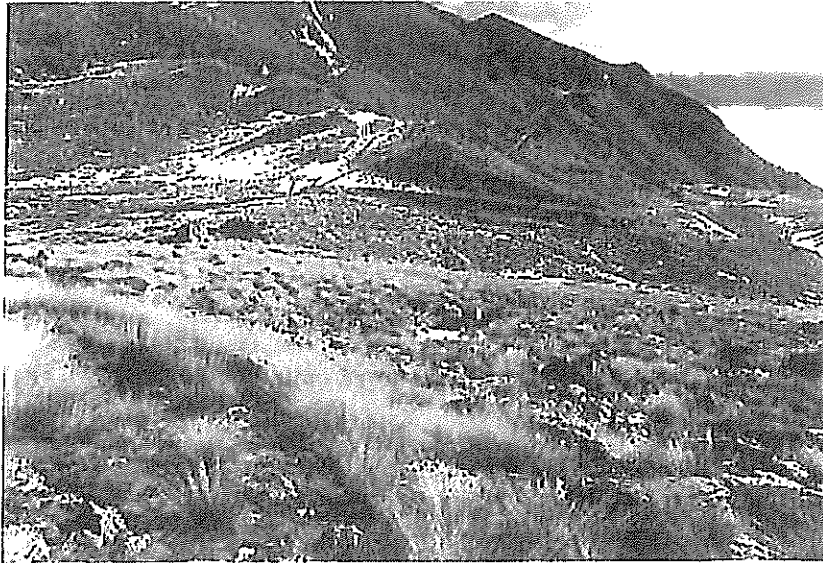
4.5.3 Assessment of Effects

Landscape, vegetation, fauna and geotechnical effects are as for lift/trail works and are not repeated.

Effects on Watercourses and Wetlands

Effects on watercourses and wetlands are as per lift and trail construction, with the additional comments below.

Additional effects for the snowmaking line result from the need to trench across the Rastus Burn and across a small area of wetland drainage just to the east of this crossing as marked by the red arrows below.



Trenching across the Rastus Burn will require temporary diversion of the flow while this work is conducted. Work of this type has been conducted elsewhere in the Rastus Burn, but requires good organisation of contractors and NZSki staff to avoid silt and debris flow.

However, this diversion and trenching is greater in width and breadth than others conducted in the past. Consequently, the designs to be submitted/approved for the crossing of the Rastus Burn at this point will need to include details regarding the trenching works as well.

Additionally, diversion/trenching work must be conducted in the presence of both NZSki staff and the DOC monitor.

It is difficult to predict the effects of trenching up and across the small side area of wetland drainage beyond the stream crossing. The Rastus Burn Recreation Reserve is a sub surface web of drainage patterns and it is impossible to predict with any certainty what will happen when this is disturbed. Creating a trench can provide an alternate route for water flow. Alternatively however, the porous nature of the substrate can also lend itself to maintaining good drainage across the line of the trench.

Of note is that despite disturbance to wetlands in prior historical developments (such as the main access road above the base facilities bisecting a wetland) as long as drainage is built into these developments there does not appear to be a significant adverse effect on wetlands below.

Of note also is that the work in the Alta Blue trench of 2011 involved the installation of a 'cut-out' concrete slab to aid in the direction of water towards wetlands below, rather than along the length of the trench itself.

It is considered that trenching through this section is likely not to eventuate in any significant effects, but it is something that will require suitable design, supervision and monitoring as work progresses to minimise any that could occur.

Effects to recreational users/amenity values due to snowmaking lighting

Lighting is a part of snowmaking operations. Although not specified, it is likely that the Curvy Basin snowmaking would have this feature. The effects within the boundaries of conservation

lands are likely to be minor as it occurs only for a short time of the year, at a time when there are very few other users around, and it is an expected activity when so close to ski area operations in the winter.

It may be possible to observe this lighting from sites in the Wakatipu Basin, from properties along the Malaghans, Hunter, Slope Hill, Lower Shotover areas. However, the effects beyond the boundaries are not considered here as this is considered by the District Plan and RMA process.

4.6 Purpose for which the land is held s17U(3):

Ski field development is considered to be not contrary to the purposes for which the land is held. Provided the recommended conditions are complied with, any adverse effects on the Land are expected to be no more than minor.

5.0 Relevant information about the applicant

Convictions on any charge related to the activity applied for or on any conservation related issue: Not applicable.

Past compliance with concession conditions: The applicant has complied with concession conditions in the past.

The applicant has concessions for 3 ski fields on public conservation land (the others being Coronet Peak and Mt Hutt). Over the past few years, a good re-vegetation and monitoring protocol has been implemented to ensure earthworks such as those described in this application to proceed with few problems

Credit check result: Not applicable.

6.0 Proposed operating conditions

Term

No term was requested in the application. Considering the permanent nature of the structures and proposed works it is recommended that a 20 year term is imposed.

Concession fees: To be established upon reaching final decisions on the associated concession applications to increase the rate of water abstraction from Lake Alta and to reconstruct the lower car park and upper road re-alignment.

Special conditions: These conditions are recommended in addition to the conditions outlined in the existing lease:

1. Design plans for key facilities

Final design plans are to be approved by the Grantor prior to any works commencing. This includes detailed specifications for both lift terminals and their surrounds; the sites of the lift towers, the line of snowmaking piping, vehicle crossings and snowmaking lines across the Rastus Burn; the widening of the ford near the Sugar Basin lift and a final cut and fill survey of all earthworks.

2. Construction plans for sensitive sites
Construction plans for sensitive sites are to be approved by the Grantor prior to any works commencing. These sites are the length of the Rastus Burn, the top lift terminal, the ford near Sugar Bowl lift and whenever snowmaking pipelines and new trails bisect natural drainage channels (surface or subsurface). The concessionaire must consult with the independent monitor prior to presenting plans to the Grantor for approval.
3. Other consents, approvals and assessments
This concession approval will not supersede any other lawfully required consents, approvals and assessments from other agencies. This includes (but is not limited to) geotechnical, engineering, district and regional resource consents, and building consents. Copies of these approvals are to be provided to the Grantor prior to works commencing.
4. Contractor selection
Only contractors with a demonstrated ability in alpine earthworks and restoration are to be used.
5. Vehicle access
 - a. All machinery is to enter and exit work sites from the proposed trail or from existing roads, whichever is closer. Except for access to new lift tower sites, machinery is not to disturb terrain not part of this proposal, for example, by short-cutting across undisturbed terrain due to its proximity to the road.
 - b. Vehicle crossings over surface and subsurface waterways are to be undertaken as per clause 1) and 2) above.
6. Fuel
Vehicle fuelling and storage is to take place only in designated areas established by the concessionaire's staff in consultation with DOC staff.
7. Avoidance of Wetlands
 - a. Wetlands are to be avoided where possible. Where areas of surface or sub-surface drainage are unable to be avoided, suitable provision for maintaining their flow and quality is to be installed eg. coarse rock, geocloth, piping, silt traps.
 - b. If construction debris falls into non target wetland areas this must be reported to the Grantor and immediately remediated.
8. Control of surface runoff and silt
 - a. Suitable drainage, cut-outs and silt traps are to be installed to control new surface flows into lower areas of vegetation, wetlands and watercourses.
9. Public Access and Safety
 - a. The public is to be able to pass freely and safely through the area, particularly the walking track to Lake Alta, whenever possible.
 - b. When this access is required to be temporarily restricted, it is to have prior agreement of the Grantor, is to be publicly advertised by the concessionaire at their expense, and suitable alternative access is to be provided.
 - c. Signage advising the public as to the nature of the work is to be installed at the expense of the concessionaire.
10. Removal and storage of vegetation

- a. Vegetation is to be stripped and stored locally as construction progresses. It must be stripped with enough surrounding soil and humus to allow for successful storage and replanting survival.
- b. Stripping may be by machine or by hand, whichever will provide the best chance for success given the nature of the vegetation.
- c. Watering of this material may be required, at the direction of the Grantor or its nominated Monitor, to ensure its survival while stored.

11. Re-vegetation

- a. Vegetation is to be replanted as soon as possible following completion of works at individual sites ie. individual tower sites, trenches, access ways and batters. Re-vegetation planning must include follow up maintenance of re-vegetated areas prior to the end of the growing season.
- b. Where there is sufficient plant material and humus to allow survival, stripped material can be split. To supplement re-vegetation works split material may also be sourced from other areas in the Rastus Burn Recreation Reserve.
- c. Plant spacing is to be at a density as specified by the independent monitor on site.
- d. Geo-textile cloth is to be laid over any areas where there has been insufficient replanting by May 1st. This is to be removed in the following spring and revegetation works continued.
- e. To intensify re-vegetation of tussocks, nursery reared plants must be used where there is insufficient existing vegetation available for transplanting. The rearing and planting of any plants to be brought on site must be to the satisfaction of the Grantor.
- f. The seed of appropriate species should be broadcast to promote vegetation growth in the rock walls and between transplanted/planted tussocks.
- g. Completion of re-vegetation works will be at the discretion of the Grantor.

12. Re-vegetation Protocol

- a. The existing re-vegetation protocol must be updated to ensure it reflects both the extra requirements of this new project and the ongoing requirements of any concurrent re-vegetation actions.
- b. The protocol must set standards for re-vegetation actions, timeframes for achievement of goals and processes for remedying problems as they arise.
- c. The reviewed protocol must be approved by the Grantor prior to this project commencing.

13. Construction timeframes

- a. Prior to works commencing the concessionaire must submit an overall project plan to the Grantor and the independent monitor. This plan should provide a timeline of the key construction stages, the works to be completed in each stage, the equipment to be used for each stage and anticipated monitoring requirements.
- b. A briefing must be provided by the independent monitor to contractors and the concessionaire prior to each key construction stage.
- c. All works are to be completed by May 1st each year.
- d. Should the concessionaire desire construction be staged over two or more years the project plan is to account for remediation measures for unfinished works that may become redundant due to changing circumstances.

14. Monitoring

- a. Monitoring of silt control, disturbance of wetlands, revegetation and all works at sensitive sites is to occur by an independent monitor (agreed to by the Grantor and the concessionaire) at a frequency of an average of one site visit per week for the duration of

works. All costs are to be at the expense of the concessionaire. Reports are to be provided to both parties.

- b. Any approved works to install a vehicle crossing over and for trenching of pipes across the Rastus Burn are to be conducted in the presence of both the concessionaire and the Grantor.
- c. Monitoring of other works may be conducted by Grantor as required by the Grantor. All costs are to be at the expense of the concessionaire.
- d. Geotechnical monitoring of works is to be conducted as per the Tonkin and Taylor Geotechnical Assessment of Effects as submitted as part of the application for this work. All costs are to be at the expense of the concessionaire.
- e. All works will be included in the annual monitoring conducted by the Grantor in conjunction with ongoing independent monitoring.

15. Remediation of works

Any remediation highlighted by monitoring will be carried out as specified by the Grantor at the cost to the concessionaire.

16. Suspension of works

The Grantor, at its sole discretion, may require all works to be suspended until suitable remediation is provided.

17. Satisfactory Completion of works

Final completion of revegetation and any other remedial works will be at the discretion of the Grantor.

18. Single Pass Lift Ticket

NZSki is to offer a fairly priced single use lift ticket to the top of the Curvy Lift.

7.0 Applicant's comments on draft Officer's Report

In their comments NZSKI have provided further details on how they will enhance revegetation after the development works. The Department considers that these extra measures will greatly assist the successful revegetation of any disturbed areas. The steps described in NZSKI's response should become part of the updated revegetation protocol that must be approved prior to the project commencing, as specified in condition 12.

The Department accepts NZSKI's correction to the number of snowmaking pits to be installed (20 instead of 18) - this small increase will not increase any of the adverse effects considered in the report.


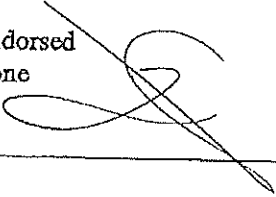
8.0 Summary and Conclusions

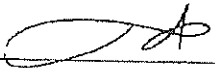
The application is consistent with the relevant legislation, and the purposes for which the land is held. The special conditions are designed to avoid, remedy or mitigate any adverse effects on the environment.

9.0 Recommendations to decision maker

Pursuant to the delegation dated 31 May 2011 it is recommended that Greg Lind, Wakatipu Area Manager:

1. Deem this application to be complete in terms of s17S of the Conservation Act 1987;
2. Approve the granting of an easement for the new Curvy Basin chairlift, snowmaking structures and trail works.

Name: Richard Clarke Permissions Officer (Concessions) Date: 20/9/12	
Recommendation endorsed Name: Dave Johnstone Permissions Manger Date: 20-9-12	

Recommendation:
1 <u>Approved/Declined</u>
2 <u>Approved/Declined</u>
3 <u>Approved/Declined</u>
4 <u>Approved/Declined</u>
Signed: 
Greg Lind Wakatipu Area Manager 20/9/12
Date:



Concession Document (Easement)

Concession Number: 49957-SKI

THIS CONCESSION is made this 25th day of October 2016

PARTIES:

Minister of Conservation (the Grantor)

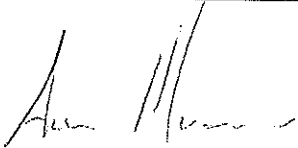
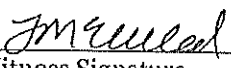
NZSki Limited (the Concessionaire)

BACKGROUND

- A. The Department of Conservation ("Department") Te Papa Atawhai is responsible for managing and promoting conservation of the natural and historic heritage of New Zealand on behalf of, and for the benefit of, present and future New Zealanders.
- B. The Department is under the control of the Grantor.
- C. The carrying out of these functions may result in the Grantor granting concessions to carry out activities on public conservation land.
- D. The Grantor administers the public conservation land described in Schedule 1 as the Easement Land.
- E. The Conservation legislation applying to the Easement Land authorises the Grantor to grant a concession over the Land.
- F. The Concessionaire wishes to carry out the Concession Activity on the Easement Land subject to the terms and conditions of this Concession.
- G. The Concessionaire acknowledges that the Easement land may be the subject of Treaty of Waitangi claims.
- H. The parties wish to record the terms and conditions of this Concession and its Schedules.
- I. Concession Number OT-34110-SKI with the holder as NZSki Limited will be surrendered in accordance with clauses 31 and 32 in Schedule 3 and replaced with this Concession.

OPERATIVE PARTS

- J. In exercise of the Grantor's powers under the Conservation legislation the Grantor **GRANTS** to the Concessionaire an **EASEMENT** to carry out the Concession Activity on the Easement Land subject to the terms and conditions contained in this Concession and its Schedules.

	
SIGNED on behalf of the Minister of Conservation by Allan Munn, Director, Operations acting under delegated authority	SIGNED on behalf of NZSki Limited by Paul Anderson, Chief Executive Officer, having authority to enter into contracts
in the presence of:	in the presence of:
 Witness Signature	Witness Signature
Witness Name: <u>Joanne McClelland</u>	Witness Name: _____
Witness Occupation: <u>Personal Assistant</u>	Witness Occupation: _____
Witness Address: <u>151 Yarrow St, Invercargill</u>	Witness Address: _____
A copy of the Instrument of Delegation may be inspected at the Director-General's office at 18-22 Manners Street, Wellington.	

SCHEDULE 1

<p>1.</p>	<p>Easement Land (Servient land - the land where the easement activity occurs) (Schedule 4)</p>	<p>As marked on the attached plan in Schedule 4 being: Physical Description/Common Name: Remarkables Conservation Area (F41214) Land Status: Stewardship area held under Section 25 of the Conservation Act 1987 Area: Approximately 0.1890 hectares Legal Description: Section 10 Block V Coneburn Survey District Map Reference: NaPALIS ID: 2804970</p> <p>Physical Description/Common Name: Rastus Burn Recreation Reserve (F41055) Land Status: Recreation Reserve held under Section 17 of the Reserves Act 1977 Area: Approximately 0.2874 hectares Legal Description: Part Section 1 Block X Kawarau Survey District Map Reference: NaPALIS ID: 2804656</p>
<p>2.</p>	<p>Land (Dominant land - the land that benefits from the easement) (If none then select "in gross") (Schedule 4)</p>	<p>Is the easement in gross? Yes</p>
<p>3.</p>	<p>Concession Activity (clause 2)</p>	<p>(a) a right to convey water: (b) a right to convey electricity: (c) a right to convey telecommunications and computer media:</p> <p>for the purpose of the installation, operation, maintenance and repair of utilities and services to pump and convey water from Lake Alta associated with the Remarkables Ski Area, Queenstown, involving the following elements:</p> <p><u>Temporary structures</u></p> <ul style="list-style-type: none"> • The installation and operation of 2 pumps, water measuring instrumentation (a transducer and bubbler) in Lake Alta; • The installation and operation of a control box located approximately 5 metres from the lakeshore at the Lake Alta outlet; and <p><u>Permanent structures</u></p> <ul style="list-style-type: none"> • An under the ground water pipeline linking from the pump shed at the Alta Lift end to the Lake Alta

		<p>outlet being approximately 520 metres long x 9 metres wide) as shown coloured yellow (310 metres x 9 metres) and coloured orange (210 metres x 9 metres) on the attached map in Schedule 4;</p> <ul style="list-style-type: none"> ◦ A conduit pipe on the bed of Lake Alta (to house the transducer and bubbler mentioned above); ◦ A pump shed and pump equipment on the Rastus Burn Recreation Reserve (approximately 14 metres long x 6 metres wide); ◦ Feeder pipes from the control box to the two underwater pumps which draw water from Lake Alta; ◦ Utilities and services such as electrical, telecommunication, and computer media to traverse the same line as the water pipe.
4.	Term (clause 3)	26 years, 7 months commencing on 1 October 2016
5.	Final Expiry Date (clause 3)	30 April 2043
6.	Concession Fee (clause 4)	<p>Annual Activity Fee Not required. For this concession there will be no fees charged in addition to the rent that is required in accordance with the Deed of Lease dated 30 August 1993, or such successor or replacement of that lease as may exist from time to time.</p> <p>Annual Management Fee: Not Required</p> <p>Annual Environmental Monitoring Fee Not required</p>
7.	Concession Fee Payment Date (clause 4)	Not applicable
8.	Penalty Interest Rate (clause 4)	Double the current Official Cash Rate (OCR). <u>See Reserve Bank of New Zealand website</u>
9.	Insurance (To be obtained by Concessionaire) (clause 10)	<p>Types and amounts:</p> <p>Public Liability Insurance for:</p> <p>(a) General indemnity for an amount no less than \$1,000,000.00; and</p> <p>(b) Forest and Rural Fires Act extension for an amount no less than \$250,000.00; and</p> <p>Subject to review on each Concession Fee Review Date.</p>

10.	Addresses for Notices (clause 19)	The Grantor's address is: Physical Address: Department of Conservation Conservation House 77 Lower Stuart Street Dunedin 9016 Postal Address: PO Box 5244 Moray Place Dunedin 9058 Phone: (03) 477 0677 Fax: (03) 477 8626 Email: permissionsdunedin@doc.govt.nz
		The Concessionaire's address in New Zealand is: Queenstown Snow Centre Ground Level The Station Building Corner Camp and Shotover Sts Queenstown 9348 New Zealand Phone: (03) 442 4620 Fax: (03) 442 4619 Email:
11.	Registration of Easement	Is the easement to be registered with LINZ? No When the Concessionaire wishes the Easement to be registered then the Concessionaire must at its expense prepare an Easement Instrument, arrange for any necessary survey and register the document. The Grantor, if satisfied the Easement Instrument implements this easement must sign the document.
12.	Special Conditions (clause 23)	See Schedule 3
13.	Processing Fee (clause 4)	\$5,610.00 + GST

Note: The clause references are to the Grantor's Standard Terms and Conditions set out in Schedule 2.

SCHEDULE 2

STANDARD TERMS AND CONDITIONS

1. Interpretation

- 1.1 The Concessionaire is responsible for the acts and omissions of its employees, contractors, agents, clients and invitees (excluding other members of the public accessing the Easement Land). The Concessionaire is liable under this Concession for any breach of the terms of the Concession by its employees, contractors, agents, clients and invitees (excluding other members of the public accessing the Easement Land), as if the breach had been committed by the Concessionaire.
- 1.2 Where this Concession requires the Grantor to exercise a discretion or give any approval or provides for any other actions by the Grantor, then the Grantor must act reasonably and within a reasonable time. When a consent is required under this Concession such consent must not be unreasonably withheld.

2. What is being authorised?

- 2.1 The Concessionaire is only allowed to use the Easement Land for the Concession Activity.
- 2.2 The Concessionaire must not commence the Concession Activity until the Concessionaire has signed the Concession Document and returned one copy of this Document to the Grantor, as if it were a notice to be given under this Concession.

3. How long is the Concession for - the Term?

- 3.1 This Concession commences on the date specified in Item 4 of Schedule 1 and ends on the Final Expiry Date specified in Item 5 of Schedule 1.

4. What are the fees and when are they to be paid?

- 4.1 The Concessionaire must pay the Processing Fee (Item 14 of Schedule 1) to the Grantor in the manner directed by the Grantor. Except where the Grantor's written consent has been given, the Concessionaire cannot commence the Concession Activity until the Processing Fee has been paid.
- 4.2 The Concessionaire must pay to the Grantor in the manner directed by the Grantor the Concession Fee plus GST on the Concession Fee Payment Date specified in Items 6, and 7 of Schedule 1.
- 4.3 If the Concessionaire fails to make payment within 14 days of the Concession Fee Payment Date then the Concessionaire is to pay interest on the unpaid Concession Fee from the Concession Fee Payment Date until the date of payment at the Penalty Interest Rate specified in Item 8 of Schedule 1.

5. Are there any other charges?

- 5.1 The Concessionaire must pay all levies rates and other charges, including utility charges payable in respect of the Easement Land or for the services

provided to the Easement Land which relate to the Concessionaire's use of the Easement Land or the carrying on of the Concession Activity. Where the Grantor has paid such levies, rates or other charges the Concessionaire must on receipt of an invoice from the Grantor pay such sum to the Grantor within 14 days of receiving the invoice. If payment is not made within the 14 days then the Concessionaire is to pay interest on the unpaid sum from the date payment was due until the date of payment at the Penalty Interest Rate specified in Item 8 of Schedule 1.

6. When can the Concession be assigned?

- 6.1 If in Item 2 of Schedule 1 the easement is expressed as being in gross the Concessionaire must not transfer, sub licence, assign, mortgage or otherwise dispose of the Concessionaire's interest under this Concession or any part of it (which includes the Concessionaire entering into a contract or any other arrangement whatsoever whereby the Concession Activity would be carried out by a person (called the assignee) other than the Concessionaire) without the prior written consent of the Grantor.
- 6.2 The Grantor may in the Grantor's discretion decline any application for consent under clause 6.1.
- 6.3 Sections 17P, 17S, 17T, 17U, 17W, 17X, 17ZB and 17ZC of the Conservation Act 1987 apply to applications for consent under this clause unless the Grantor, in the Grantor's discretion, decides otherwise.
- 6.4 If the Grantor gives consent under this clause then the Concessionaire remains liable to observe and perform the terms and conditions of this Concession throughout the Term and is to procure from the Assignee a covenant to be bound by the terms and conditions of this Concession.
- 6.5 The Concessionaire must pay the costs reasonably incurred by the Grantor incidental to any application for consent, whether or not such consent is granted.
- 6.6 If the Concessionaire is not a publicly listed company any change in the shareholding of the Concessionaire altering the effective control of the Concessionaire is to be deemed to be an assignment and requires the consent of the Grantor.

7. What are the obligations to protect the environment?

- 7.1 The Concessionaire must not cut down or damage any vegetation; or damage any natural feature or historic resource on the Easement Land; or light any fire on the Easement Land without the prior consent of the Grantor.
- 7.2 The Concessionaire must at its cost keep the easement facility (as defined in Schedule 5) now or hereafter upon the Easement Land, in good order, condition and repair and must keep the Easement Land in a clean and tidy condition and must not store hazardous materials on the Easement Land nor store other materials on the Easement Land where they may obstruct the public or create a nuisance.

- 8. When can structures be erected?**
- 8.1 The Concessionaire must not erect, nor place any structures on, under or over the Easement Land without the prior consent of the Grantor.
- 9. What if the Concessionaire wishes to surrender the Concession?**
- 9.1 If the Concessionaire wishes to surrender this Concession during the currency of the Term, then the Grantor may accept that surrender on such conditions as the Grantor considers appropriate.
- 10. What are the liabilities and who insures?**
- 10.1 The Concessionaire agrees to use the Easement Land at the Concessionaire's own risk and releases to the full extent permitted by law the Grantor and the Grantor's employees and agents from all claims and demands of any kind and from all liability which may arise in respect of any accident, damage or injury occurring to any person or property in or about the Easement Land.
- 10.2 The Concessionaire must indemnify the Grantor against all claims, actions, losses and expenses of any nature which the Grantor may suffer or incur or for which the Grantor may become liable arising from the Concessionaire's performance of the Concession Activity.
- 10.3 This indemnity is to continue after the expiry or termination of this Concession in respect of any acts or omissions occurring or arising before its expiry or termination.
- 10.4 The Concessionaire has no responsibility or liability for costs, loss, or damage of whatsoever nature arising from any act or omission or lack of performance or any negligent or fraudulent act or omission by the Grantor, or any contractor or supplier to the Grantor, or any employee or agent of the Grantor.
- 10.5 Despite anything else in clause 10 the Concessionaire is not liable for any indirect or consequential damage or loss howsoever caused.
- 10.6 The Grantor is not liable and does not accept any responsibility for damage to or interference with the Easement Land, the Concession Activity, or to any structures, equipment or facilities on the Easement Land or any other indirect or consequential damage or loss due to any natural disaster, vandalism, sabotage, fire, or exposure to the elements except where, subject to clause 10.7, such damage or interference is caused by any wilful act or omission of the Grantor, the Grantor's employees, agents or contractors.
- 10.7 Where the Grantor is found to be liable in accordance with clause 10.6, the total extent of the Grantor's liability is limited to \$1,000,000 in respect of the Concessionaire's structures, equipment and facilities.
- 10.8 Despite anything else in clause 10 the Grantor is not liable for any indirect or consequential damage or loss howsoever caused.
- 10.9 Without prejudice to or in any way limiting its liability under this clause 10 the Concessionaire at the Concessionaire's expense must take out and keep current policies for insurance and for the amounts not less than the sums specified in Item 9 of Schedule 1 with a substantial and reputable insurer.

10.10 After every three year period of the Term the Grantor may, on giving 10 working day's notice to the Concessionaire, alter the amounts of insurance required under clause 10.9 On receiving such notice the Concessionaire must within 10 working days take out and keep current policies for insurance and for the amounts not less than the sums specified in that notice.

10.11 The Concessionaire must provide to the Grantor within 5 working days of the Grantor so requesting:

- (a) details of any insurance policies required to be obtained under this Concession, including any renewal policies if such renewal occurs during the Term; and/ or;
- (b) a copy of the current certificate of such policies.

11. What about Health and Safety?

11.1 The Concessionaire must exercise the rights granted by this Concession in a safe and reliable manner and must comply with the Health and Safety at Work Act 2015 and its regulations and all other provisions or requirements of any competent authority relating to the exercise of this Concession. The Concessionaire must comply with any safety directions of the Grantor.

12. What are the compliance obligations of the Concessionaire?

12.1 The Concessionaire must comply where relevant:

- (a) with the provisions of any conservation management strategy or conservation management plan under the Conservation Act 1987 or Part IIA of the Reserves Act 1977, or any general policy statement made under the Conservation Act 1987, Reserves Act 1977, National Parks Act 1980, or Wildlife Act 1953, or management plan under section 45 of the National Parks Act 1980, whichever is appropriate to the Easement Land, together with any amendment or review of any policy, strategy or plan whether approved before, on, or after the date on which this Concession takes effect; and
- (b) with the Conservation Act 1987, the Reserves Act 1977, the National Parks Act 1980, Wildlife Act 1953 and any other statute, ordinance, regulation, bylaw, or other enactment (collectively the "Legislation") affecting or relating to the Easement Land or affecting or relating to the Concession Activity, including any regulations made under the Conservation Act 1987 and Wildlife Act 1953 or bylaws made under the Reserves Act 1977 or the National Parks Act 1980; and
- (c) with all notices and requisitions of any competent authority affecting or relating to the Easement Land or affecting or relating to the conduct of the Concession Activity; and
- (d) with all Department signs and notices placed on or affecting the Easement Land.

12.2 The Concessionaire must comply with this Concession.

12.3 A breach or contravention by the Concessionaire of a relevant conservation management strategy, conservation management plan, management plan or any statement of general policy referred to in clause 12.1.(a) is deemed to be a

breach of this Concession.

- 12.4 A breach or contravention by the Concessionaire of any Legislation affecting or relating to the Easement Land or affecting or relating to the Concession Activity is deemed to be a breach of this Concession.

13. When can the Concession be terminated?

- 13.1 If the Concessionaire breaches any of the conditions of this Concession the Grantor may terminate this Concession at any time in respect of the whole or any part of the Easement Land. Before so terminating the Grantor must give the Concessionaire either:

- (a) one calendar month's notice in writing; or
- (b) such other time period which in the sole opinion of the Grantor appears reasonable and necessary;

of the Grantor's intention so to terminate this Concession. If this Concession is terminated then the Grantor, at the Grantor's sole discretion, may adjust the Concession Fee payable or refund any Concession Fee paid in advance.

- 13.2 The Grantor may choose to remedy at any time any default by the Concessionaire under this Concession. Where that occurs, the Concessionaire must pay forthwith on demand all reasonable costs incurred by the Grantor in remedying such default. Before electing to so remedy in accordance with this clause the Grantor must, if practicable, first give the Concessionaire notice of the default and a reasonable opportunity to remedy the default.

14. What happens on termination or expiry of the Concession?

- 14.1 On expiry or termination of this Concession, either as to all or part of the Easement Land, the Concessionaire is not entitled to compensation for any structures or other improvements placed or carried out by the Concessionaire on the Easement Land.

- 14.2 The Concessionaire may, with the Grantor's written consent, remove any specified structures and other improvements on the Easement Land. Removal under this clause must occur within the time specified by the Grantor and the Concessionaire is to make good any damage and leave the Easement Land and other public conservation land affected by the removal in a clean and tidy condition.

- 14.3 The Concessionaire must, if the Grantor gives written notice, remove any specified structures and other improvements on the Easement Land. Removal under this clause must occur within the time specified by the Grantor and the Concessionaire is to make good any damage and leave the Easement Land and other public conservation land affected by the removal in a clean and tidy condition and replant the Easement Land with indigenous vegetation of a similar abundance and diversity as at the commencement of the Term. If before the expiry of the Term the Concessionaire makes an application for a further concession in respect of the same Concession Activity on the Easement Land then the Grantor can not require such removal and reinstatement until such time as that concession application has been determined. If a new concession is granted then removal and reinstatement can not be required until the expiry or termination of the new

concession.

15. When is the Grantor's consent required?

15.1 Where the Grantor's consent or approval is expressly required under this Concession then the Concessionaire must seek that approval or consent for each separate time it is required even though the Grantor may have given approval or consent for a like purpose on a prior occasion. Any such consent or approval may be made on such conditions as the Grantor considers appropriate.

16. Are there limitations on public access and closure?

16.1 The Concessionaire acknowledges that the Easement Land is open to the public for access and that the Grantor may close public access during periods of high fire hazard or for reasons of public safety or emergency.

17. What about other concessions?

17.1 Nothing expressed or implied in this Concession is to be construed as preventing the Grantor from granting other concessions, whether similar or not, to other persons provided that the Grantor must not grant another concession that would derogate in any material way from the Concessionaire's ability to carry out the Concession Activity.

18. How will disputes be resolved?

18.1 If a dispute arises between the parties in connection with this Concession the parties must, without prejudice to any other rights or entitlements they may have, attempt to resolve the dispute by agreement using informal dispute resolution techniques such as negotiation, mediation, independent expert appraisal or any other alternative dispute resolution technique. The rules governing any such technique adopted are to be agreed between the parties.

18.2 If the dispute cannot be resolved by agreement within 14 days of written notice by one party to the other (or such further period as the parties may agree to in writing) either party may refer the dispute to the Disputes Tribunal, where relevant, or to arbitration, which arbitration is to be carried out in accordance with the provisions of the Arbitration Act 1996.

18.3 If the parties do not agree on an arbitrator within 10 working days of a party giving written notice of the requirement to appoint an arbitrator the President of the New Zealand Law Society is to appoint the arbitrator. In either case the arbitrator must not be a person who has participated in an informal dispute resolution procedure in respect of the dispute.

18.4 The arbitrator must include in the arbitration award reasons for the determination.

18.5 Despite the existence of a dispute, each party must continue to perform its obligations under this Concession.

19. How are notices sent and when are they received?

19.1 Any notice to be given under this Concession is to be in writing and made by

personal delivery, fax, by pre paid post or email to the receiving party at the address, fax number or email address specified in Item 10 of Schedule 1. Any such notice is to be deemed to have been received:

- (a) in the case of personal delivery, on the date of delivery;
- (b) in the case of fax, on the date of dispatch;
- (c) in the case of post, on the 3rd working day after posting;
- (d) in the case of email, on the date receipt of the email is acknowledged by the addressee by return email or otherwise in writing.

19.2 If either party's details specified in Item 10 of Schedule 1 change then the party whose details change must within 5 working days of such change provide the other party with the changed details.

20. What about the payment of costs?

20.1 The Concessionaire must pay the Grantor's legal costs and expenses of and incidental to preparing and signing this Concession or any extension or variation of it.

20.2 The Concessionaire must pay in full immediately and on demand all costs and fees (including solicitor's costs and fees of debt collecting agencies engaged by the Grantor) arising out of and associated with steps taken by the Grantor to enforce or attempt to enforce the Grantor's rights and powers under this Concession including the right to recover outstanding money owed to the Grantor.

21. What about the powers implied by statute?

21.1 The rights and powers implied in the relevant easements by the 5th Schedule to the Property Law Act 2007 and the Fourth Schedule to the Land Transfer Regulations 2002 (as set out in Schedule 5 of this easement) apply to this easement EXCEPT to the extent set out in Schedule 3 of this easement.

22. What about Co-Siting?

22.1 In this clause "Co-Site" means the use of the Concessionaire's structures or facilities on the Easement Land by a third party for an activity; and "Co-Sitee" and "Co-Siting" have corresponding meanings.

22.2 The Concessionaire must not allow Co-Siting on the Easement Land without the prior written consent of the Grantor.

22.3 The Grantor's consent must not be unreasonably withheld but is at the Grantor's sole discretion and subject to such reasonable terms and conditions as the Grantor thinks fit including a requirement that the Co-Sitee be liable for direct payment to the Grantor of a concession fee and any environmental premium assessed in respect of the Co-Sitee's activity on the Easement Land.

22.4 In addition, the Grantor must withhold consent if:

- (a) the Co-Siting would result in a substantial change to the Concession Activity on the Easement Land; or

- (b) the Grantor considers the change to be detrimental to the environment of the Easement Land.
- 22.5 Subject to clause 22.4 the Concessionaire must, if required by the Grantor, allow Co- Siting on the Easement Land.
- 22.6 Where the Concessionaire maintains that Co-Siting by a third party on the Easement Land would:
 - (a) detrimentally interfere physically or technically with the use by the Concessionaire of the Easement Land; or
 - (b) materially prejudice any resource consents obtained by the Concessionaire or cause more onerous conditions to be imposed on it by the relevant authority; or
 - (c) obstruct or impair the Concessionaire's ability effectively to operate from the Easement Land; or
 - (d) interfere with or prevent future forecast works of the Concessionaire, the Grantor, must, as a pre-condition to consideration of an application to grant a concession to a third party, require that third party to obtain, at its own cost, a report prepared by an independent consultant acceptable to the Grantor confirming or rejecting the presence of the matters specified in this clause 22.6. The Grantor must not grant a concession to a third party where the report confirms that the proposed concession would give rise to one or more of the matters specified in this clause 22.6.
- 22.7 If the independent consultant report rejects the Concessionaire's concerns, the Concessionaire may dispute this in accordance with the procedure set out in clause 18 of Schedule 2.
- 22.8 Where the Concessionaire is required under clause 22.5 to allow Co-Siting on the Easement Land, the Concessionaire is, subject to clause 22.10 entitled to enter into commercial agreements with third parties for them to conduct an activity on the Easement Land and to receive a reasonable fee from them for any agreed activity they intend to carry out on the Easement Land. If a dispute arises between the Concessionaire and a third party such dispute must be determined by the Grantor having regard to, but not limited to, the following matters:
 - (a) any written comments or submissions of the Concessionaire and third party;
 - (b) market value for the concession activity proposed by the third party having regard to the matters specified in Section 17Y(2) of the Conservation Act 1987;
 - (c) any other matters the Grantor considers relevant.
- 22.9 If the Concessionaire does not accept the Grantor's determination, the Concessionaire may dispute this in accordance with the procedure set out in clause 18 of Schedule 2.
- 22.10 For the avoidance of doubt, a Co-Sitee permitted on the Easement Land must enter into a separate concession with the Grantor in terms of which the Co-Sitee may be required to pay to the Grantor a concession fee and environmental premium assessed in respect of the Co-Sitee's activity on the

Easement Land. This separate concession must not contain provisions that conflict with the Concessionaire's rights and obligations in relation to the Easement Land.

- 22.11 The Grantor must not authorise the third party to commence work on the Easement Land until all relevant resource consents are issued, an agreement is executed between the Concessionaire and third party, and any conditions imposed by the Concessionaire have been met.

23. Are there any Special Conditions?

- 23.1 Special conditions are specified in Schedule 3.

24. The Law

- 24.1 This Concession is to be governed by, and interpreted in accordance with the laws of New Zealand.

SCHEDULE 3

SPECIAL CONDITIONS

1. The Right and Powers implied in easements under the 4th Schedule of the Land Transfer Regulations 2002 as set out in Schedule 5 of this Concession are varied as follows, the rights and powers in:
 - (a) Regulation 1 is amended by replacing the word, "grantee" with "Concessionaire"
 - (b) Regulation 6(3)(a) is amended by adding at the end the words, "after first obtaining the prior consent of the Grantor as required in clauses 7 and 8 of Schedule 2 of this easement."
 - (c) Regulation 10(1) (b) is amended by adding at the end the words, "after first obtaining the prior consent of the Grantor as required in clauses 7 and 8 of Schedule 2 of this easement."
 - (d) Regulation 11(2) is deleted and sub clause (4) is amended by deleting the reference to sub clause (2).
 - (e) Regulations 13 and 14 are deleted.

ESTABLISHMENT OF THE UNDER THE GROUND WATER PIPELINE FROM LAKE ALTA OUTLET TO THE BOUNDARY OF THE RASTUS BURN RECREATION RESERVE

Prior to establishment of the Easement Facility

2. That, prior to establishment of the Easement Facility, the Concessionaire, at its cost, must enlist the services of:
 - (a) An ecologist/botanist approved by the Grantor to identify all individual *Aciphylla lecomteii* within the excavator access route and trench corridor as shown on the schematic plan in Schedule 4; and
 - (b) An ecologist/ornithologist approved by the Grantor to survey and identify any nesting pipit or kea within the excavator access route and trench corridor as shown on the schematic plan in Schedule 4; and
 - (c) A herpetologist approved by the Grantor to carry out a herpetofauna/lizard survey within the excavator access route and trench corridor as shown on the schematic plan in Schedule 4.
3. Establishment of the Easement Facility described in clause 3 of this Schedule must not proceed until the Grantor:
 - (a) Has received a copy of the reports in clauses 2(a)-(c) in this Schedule and is satisfied that any recommendations have been implemented; and
 - (b) Confirmed a timeline for the commencement and completion of the Easement Facility establishment works, and
 - (c) Has given written approval to the Concessionaire to commence establishment of the Easement Facility.

Establishment of the Easement Facility

4. That, during establishment of the Easement Facility, the Concessionaire must:
- (a) Ensure that the excavator access route and trench corridor are in accordance with the schematic plan in Schedule 4. Any deviation to these routes must have prior written approval from the Grantor; and
 - (b) Ensure that trench construction is consistent with the MWH New Zealand Limited letter/report dated 30 March 2016 headed "Remarkables Ski Area, Undergrounding of Snow Making Pipe Adjacent to Lake Alta – D. Chin.
 - (c) Where it is not possible to avoid *Aciphylla lecomteii* individually the Concessionaire, at its cost, must remove and prepare for replanting once work is completed; and
 - (d) When transiting above any wetland, any runoff is to be contained to reduce risk of sedimentation.

Accidental Discovery Protocol (ADP)

5. The Concessionaire must take all reasonable care to avoid any archaeological values on the Land which includes (but is not limited to) historic sites and protected New Zealand objects on the Land. In the event that archaeological sites or other features with heritage values are found during any approved earth disturbance work on the Land:
- (a) Work must cease immediately until further notice and advice must be sought from the Grantor;
 - (b) If it is an archaeological site as defined by the Heritage New Zealand Pouhere Taonga Act 2014 then Heritage New Zealand must be contacted and their advice also sought;
 - (c) If it is an archaeological site relating to Māori activity then the Papatipu Rūnanga must be contacted and their advice sought;
 - (d) If it is an artefact as defined by the Protected Objects Act then the Ministry for Culture and Heritage must be notified within 28 days;
 - (e) If it is human remains the NZ Police should also be notified;
 - (f) In the event of cessation of approved work because of discovery of potential historical artefact or archaeological site the Concessionaire must not recommence work until permitted to do so by the Grantor.
6. The Concessionaire must advise the Grantor when all work to establish the Easement Facility has been completed.

Post establishment of the Easement Facility

7. That, after establishment of the Easement Facility, the Concessionaire must, at its cost:
- (a) Establish photo monitoring points in consultation with the Grantor in order to track the progress of reinstated vegetation in clause 4(c) of this Schedule; and
 - (b) Ensure all areas of disturbed rock-fields are reinstated to reflect their natural appearance prior to construction, to the Grantor's satisfaction; and
 - (c) Enlist the services of an ecologist/botanist to prepare a report on all individual *Aciphylla lecomteii* one year after establishment of the Easement Facility to determine survival rates and further mitigation measures (if needed). The report must be provided to the Grantor.

Additional costs requirements

8. The Concessionaire is to be responsible for:
 - (a) the reasonable cost of and incidental to the Grantor's on site visits or monitoring prior to, during and after construction as required to confirm the Concessionaire's compliance with the conditions contained herein; and
 - (b) the reasonable costs of the Grantor's Quality Conservation Management (QCM) standards/safety inspections of the improvements to the Easement Land Area.

Didymo

9. The Concessionaire must comply and ensure its clients comply with the Ministry for Primary Industry (MPI)'s "Check, Clean, Dry" cleaning methods to prevent the spread of didymo (*Didymosphenia geminata*) and other freshwater pests when moving between waterways. "Check, Clean, Dry" cleaning methods can be found at - <http://www.biosecurity.govt.nz/cleaning>. The Concessionaire must regularly check this website and update their precautions accordingly.

Other consents, approvals and assessments

10. This concession approval will not supersede any other lawfully required consents, approvals and assessments from other agencies. This includes (but is not limited to) geotechnical, engineering, district and regional resource consents, and building consents. Copies of these approvals are to be provided to the Grantor prior to works commencing.

Monitoring

11. The Concessionaire must undertake the following monitoring:
 - (a) Monitoring of silt control, disturbance of wetlands, re-vegetation and all works at sensitive sites is to occur by an independent monitor (agreed to by the Grantor and the Concessionaire). Monitoring should be conducted regularly, to the satisfaction of the Grantor. All costs are to be at the expense of the Concessionaire. Reports are to be provided to both parties.
 - (b) Monitoring of other works may be conducted by Departmental staff as required by the Department. All costs are to be at the expense of the concessionaire.
 - (c) All works will be included in the annual monitoring conducted by the Grantor in conjunction with ongoing independent monitoring.

Contractor selection

12. The Concessionaire must ensure that only contractors with a demonstrated ability in alpine earthworks and restoration are to be used.

Fuel

13. Vehicle fueling and storage is to take place only in designated areas established by the Concessionaire's staff in consultation with Department of Conservation staff.

Wetlands

14. The Concessionaire must comply with the following conditions:
- (a) Wetlands are to be avoided where possible. Where areas of surface or sub-surface drainage are unable to be avoided, suitable provision for maintaining their flow and quality is to be installed eg. coarse rock, geocloth, piping, silt traps.
 - (b) If construction debris falls into non target wetland areas this must be reported to the Grantor and immediately remediated.

Control of surface runoff and silt

15. Suitable drainage, cut-outs and silt traps are to be installed to control new surface flows into lower areas of vegetation, wetlands and watercourses.

Public access and safety

16. The Concessionaire must comply with the following conditions:
- (a) The public is to be able to pass freely and safely through the area, particularly the walking track to Lake Alta, whenever possible.
 - (b) When this access is required to be temporarily restricted, it is to have prior agreement of the Department, is to be publicly advertised by the Concessionaire at their expense, and suitable alternative access is to be provided.
 - (c) Signage advising the public as to the nature of the work is to be installed at the expense of the concessionaire.

Removal and storage of vegetation

17. The Concessionaire must comply with the following conditions:
- (a) Vegetation is to be stripped and stored locally as construction progresses. It must be stripped with enough surrounding soil and humus to allow for successful storage and replanting survival.
 - (b) Stripping may be by machine or by hand, whichever will provide the best chance for success given the nature of the vegetation.
 - (c) Watering of this material may be required, at the direction of the Grantor or its nominated Monitor, to ensure its survival while stored.

Re-vegetation

18. The Concessionaire must comply with the following conditions:
- (a) Vegetation is to be replanted as soon as possible following completion of works. Re-vegetation planning must include provision for follow-up maintenance prior to the end of the growing season.

- (b) Where there is sufficient plant material and humus to allow survival, stripped material can be split. To supplement re-vegetation works split material may also be sourced from other areas in the Rastus Burn Recreation Reserve.
- (c) Plant spacing is to be at a density as specified by the independent monitor on site.
- (d) To intensify re-vegetation of tussocks, nursery reared plants must be used where there is insufficient existing vegetation available for transplanting. The rearing and planting of any plants to be brought on site must be to the satisfaction of the Grantor.
- (e) The seed of appropriate species should be broadcast to promote vegetation growth in the rock walls and between transplanted/planted tussocks.
- (f) Where there has been insufficient replanting by May 1st, any exposed topsoil must be managed to avoid erosion losses until replanting can be restarted in the following spring.
- (g) Completion of re-vegetation works will be at the discretion of the Grantor.

Re-vegetation protocol

19. The re-vegetation protocol must be complied with:
- (a) The existing re-vegetation protocol must be updated to ensure it reflects both the extra requirements of this new project and the ongoing requirements of any concurrent re-vegetation actions.
 - (b) The protocol must set standards for re-vegetation actions, timeframes for achievement of goals and processes for remedying problems as they arise.
 - (c) The reviewed protocol must be approved by the Grantor prior to this project commencing.

Construction timeframes

20. The following construction timeframes must be complied with:
- (a) Prior to the commencement of each stage of development, the concessionaire must submit a plan of works to the Grantor and the independent monitor. This information is to include a timeline of what works will undertaken during that stage, the machinery to be used and the expected monitoring requirements.
 - (b) A briefing must be provided by the independent monitor to contractors and the concessionaire's staff prior to each key construction stage.
 - (c) All works are to be completed by May 1st each year.
 - (d) Should the concessionaire desire construction be staged over two or more years the project plan is to account for remediation measures for unfinished works that may become redundant due to changing circumstances.

Remediation of works

21. Any remediation highlighted by monitoring will be carried out as specified by the Grantor at the cost to the Concessionaire.

Suspension of works

22. The Grantor, at its sole discretion, may require all works to be suspended until suitable remediation is provided.

Satisfactory completion of works

23. Final completion of re-vegetation and any other remedial works will be at the discretion of the Grantor.

Monitoring the effects of the increased water take

24. After each winter season the Concessionaire is to undertake monitoring surveys of the integrity of the riparian margins, invertebrate habitats and landscape values of both Lake Alta and the Rastus Burn stream;
- (a) This monitoring programme should be designed by a suitably qualified expert who has been pre-approved by the Grantor.
 - (b) Baseline data should be collected prior to the increased snowmaking regime being exercised.
 - (c) The Concessionaire is required to report on the results of this monitoring to the Grantor no later than 1 May of each year during the Term.
 - (d) If after the first two seasons of monitoring there are no new adverse effects that become apparent as a result of the monitoring (in the sole opinion of the Grantor), then the Grantor may (at his sole discretion) vary the intervals that monitoring is required under section 17ZC(3) of the Conservation Act 1987 to instead occur thereafter at three-yearly intervals during the Term, or to any other interval deemed appropriate by the Grantor.

Lake margins

25. As a pre-cautionary approach to safeguard lake margins from unexpected erosion the abstraction of water should not exceed the currently permitted limit of 15cm until Lake Alta is completely covered by a lasting cap of ice and snow. If after the first two seasons of monitoring there are no new adverse effects that become apparent as a result of the monitoring (in the sole opinion of the Grantor), then the Grantor may (at his sole discretion) vary this condition under section 17ZC(3) of the Conservation Act 1987, to any other limit deemed appropriate by the Grantor.

Ice subsidence

26. That the surface of the frozen lake be routinely monitored to detect any rapid subsidence that may affect the usually safe passage.

Lake contamination

27. Any equipment to be permanently or temporarily placed within Lake Alta must be of inert materials that will not rust or otherwise contaminate the lake.

Bubble transducer

28. Landscaping measures to disguise the conduit pipe for lake level measuring equipment should be sufficient to ensure natural character of the lake is maintained.

Removal of temporary equipment

29. The Concessionaire must take all practical steps to ensure all the temporary equipment required to take and pipe water from Lake Alta is removed at the end of the snow making season. If pockets of deep snow prevent removal of the entire temporary equipment at one time, then segments of the equipment must be removed.

Abstraction limits from Lake Alta

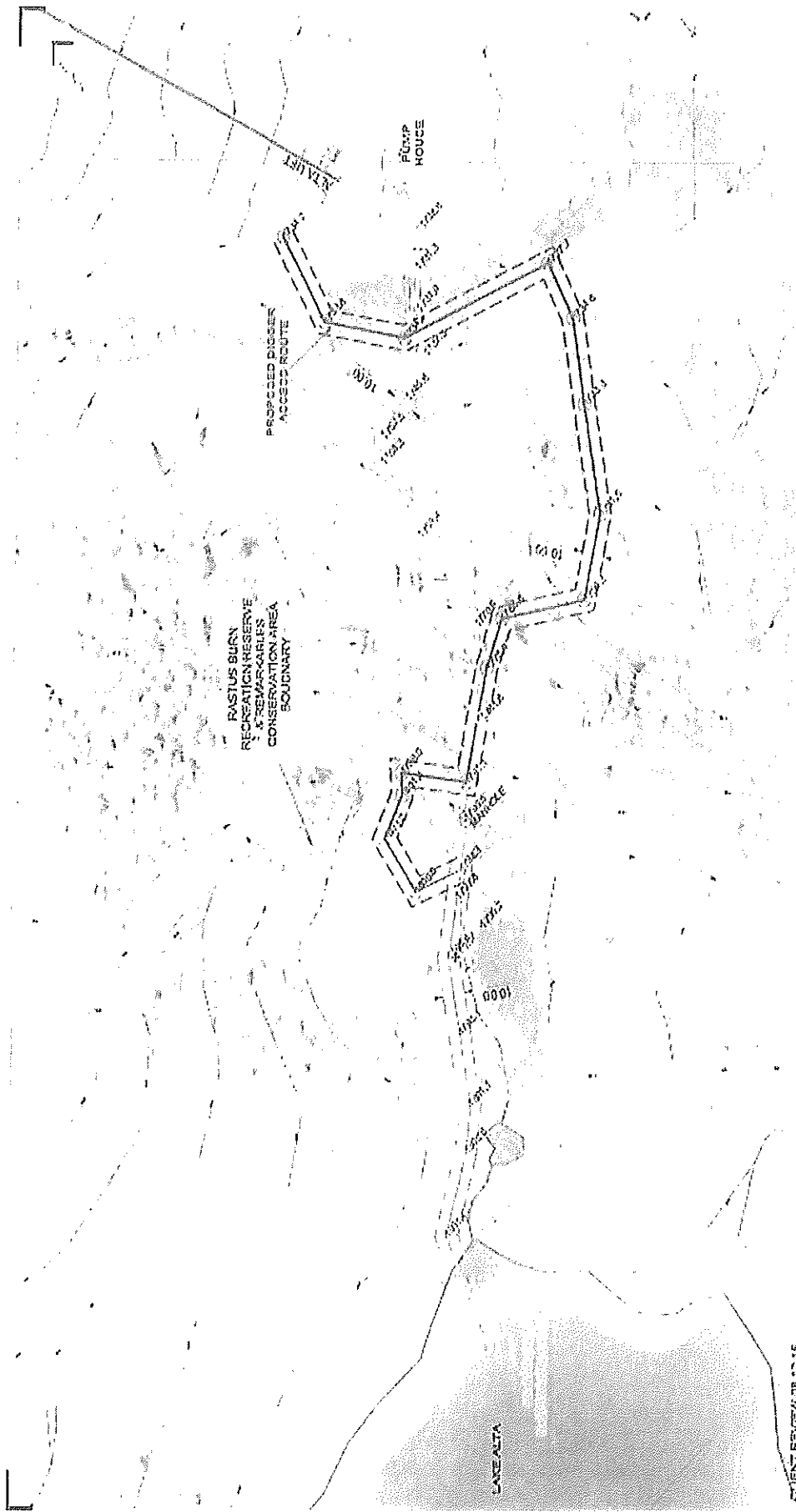
30. The following limits must be complied with:
- (a) Lake draw-down as measured from the draw-down reference point of 1799.97 m asl must not exceed 57 cm over a season.
 - (b) The maximum abstraction rate must not exceed 125 litres per second and the average daily abstraction rate must not exceed 94 litres per second.
 - (c) The total volume of water abstracted over a snow making season must not exceed 400,000 cubic metres.
 - (d) The minimum flow of the Rastus Burn as measured at the pump house by the ski field base building must not fall below 15 litres per second during the snow making season.
 - (e) Lake level data must be provided to the Grantor each month.

Surrender of Concession OT-34110-SKI

31. The Concessionaire, at its cost, agrees to surrender in full before execution of this Concession Document (Easement), concession number OT-34110-SKI as referenced in Item I in the Background to this Concession.
32. This Concession will not become effective until the Grantor holds a signed and executed copy of the surrender document for concession number OT-34110-SKI.

Concession Number: 49957-SKI

SCHEDULE 4



AGENT REVIEW: BB 02.15

<p>Client: Remarkables Ski Field Development Ltd Project: Remarkables Ski Field Development Date: 20/10/2015 Drawn: [Name] Checked: [Name] Project No: 131500</p>			<p>1:000 131500 131500 131500</p>	
<p>Project Name: Remarkables Ski Field Development Project No: 131500 Drawing No: 131500-04 Date: 20/10/2015 Drawn: [Name] Checked: [Name] Project No: 131500</p>			<p>1:000 131500 131500 131500</p>	
<p>Project Name: Remarkables Ski Field Development Project No: 131500 Drawing No: 131500-04 Date: 20/10/2015 Drawn: [Name] Checked: [Name] Project No: 131500</p>			<p>1:000 131500 131500 131500</p>	
<p>Project Name: Remarkables Ski Field Development Project No: 131500 Drawing No: 131500-04 Date: 20/10/2015 Drawn: [Name] Checked: [Name] Project No: 131500</p>			<p>1:000 131500 131500 131500</p>	

SCHEDULE 5

A. LAND TRANSFER REGULATIONS 2002

1. Interpretation

In this schedule, unless the context requires otherwise,—

dominant land, in relation to an easement, means the land that takes the benefit of the easement and that is described by reference to the register in a transfer instrument, easement instrument, or deposit document

easement facility,—

- (a) in relation to a right to convey water, means pipes, pumps, pump sheds, storage tanks, water purifying equipment, other equipment suitable for that purpose (whether above or under the ground), and anything in replacement or substitution:
- (b) in relation to a right to convey electric power or a right to convey telecommunications and computer media, means wires, cables (containing wire or other media conducting materials), towers, poles, transformers, switching gear, other equipment suitable for that purpose (whether above or under the ground), and anything in replacement or substitution:
- (c) Deleted:
- (d) Deleted:
- (e) Deleted:
- (f) Deleted:

grantee, in relation to an easement,—

- (a) means—
 - (i) the registered proprietor of the dominant land; or
 - (ii) the person having the benefit of an easement in gross; andincludes the agents, employees, contractors, tenants, licensees, and other invitees of the grantee

grantor, in relation to an easement,—

- (a) means the registered proprietor of the servient land; and
- (b) includes the agents, employees, contractors, tenants, licensees, and other invitees of the grantor

servient land, in relation to an easement, means—

- (a) the parcel of land over which an easement is registered and that is described by reference to the register in a transfer instrument, easement instrument, or deposit document:
- (b) a stipulated course or stipulated area

stipulated course or stipulated area, in relation to any of the classes of easements referred to in these regulations, means the course that—

- (a) is shown on a plan prepared for the purpose of specifying the easement; and
- (b) is referred to in a transfer instrument, easement instrument, or deposit document.

2. Classes of easements

For the purposes of regulation 10(a), easements are classified by reference to the following rights:

- (a) a right to convey water:
- (b) a right to drain water:
- (c) a right to drain sewage:
- (d) a right of way:
- (e) a right to convey electricity:
- (f) a right to convey telecommunications and computer media:
- (g) a right to convey gas.

Rights and powers implied in easements granting certain rights

3. Right to convey water

- 1. A right to convey water includes the right for the grantee in common with the grantor and other persons to whom the grantor may grant similar rights to take and convey water in free and unimpeded flow from the source of supply or point of entry through the easement facility and over the servient land to the dominant land.
- 2. The right to take and convey water in free and unimpeded flow is limited to the extent required by any period of necessary cleansing, renewal, modification, or repair of the easement facility.
- 3. The easement facility referred to in sub clause (1) is the easement facility laid or to be laid along the stipulated course or stipulated area, as agreed by the grantor at the time of installation of the facility.
- 4. The grantor must not do and must not allow to be done anything on the servient land that may cause the purity or flow of water in the water supply system to be diminished or polluted.

4. Right to drain water

4(1) to 4(3) deleted as not relevant.

5. Right to drain sewage

5(1) to 5(3) deleted as not relevant.

6. Rights of way

6(1) to 6(3) deleted as not relevant.

7. Right to convey electricity

1. A right to convey electricity includes the right for the grantee in common with the grantor and other persons to whom the grantor may grant similar rights, at all times, to lead and convey electricity and electric impulses without interruption or impediment from the point of entry through the easement facility and over the servient land.
2. The right to convey electricity without interruption or impediment is limited to the extent required by any period of necessary renewal or repair of the easement facility.
3. The easement facility referred to in subclause (1) is the easement facility laid or to be laid along the stipulated course or stipulated area, as agreed by the grantor at the time of installation of the facility.

8. Right to convey telecommunications and computer media

1. A right to convey telecommunications and computer media includes the right for the grantee in common with the grantor and other persons to whom the grantor may grant similar rights, at all times, to lead and convey telecommunications and computer media without interruption or impediment from the point of entry through the easement facility and over the servient land.
2. The right to convey telecommunications and computer media without interruption or impediment is limited to the extent required by any period of necessary renewal or repair of the easement facility.
3. The easement facility referred to in subclause (1) is the easement facility laid or to be laid along the stipulated course or stipulated area, as agreed by the grantor at the time of installation of the facility.

9. Right to convey gas

9(1) to 9(3) deleted as not relevant.

Rights and powers implied in all classes of easements

10. General rights

1. All the easements referred to in this schedule include—
 - (a) the right to use any easement facility already situated on the stipulated area or course for the purpose of the easement granted; and
 - (b) if no suitable easement facility exists, the right to lay, install, and construct an easement facility reasonably required by the grantee (including the right to excavate land for the purpose of that construction).
2. The grantor must not do and must not allow to be done on the servient land anything that may interfere with or restrict the rights of any other party or interfere with the efficient operation of the easement facility.
3. the grantee must not do and must not allow to be done on the dominant land or the servient land anything that may interfere with or restrict the rights of

any other party or interfere with the efficient operation of the easement facility.

11. Repair, maintenance, and costs

1. If the grantee (or grantees, if more than 1) has (or have) exclusive use of the easement facility, each grantee is responsible for arranging the repair and maintenance of the easement facility, and for the associated costs, so as to keep the facility in good order and to prevent it from becoming a danger or nuisance.
2. Deleted.
3. If the easement is in gross, the grantee bears the cost of all work done outside the servient land.
4. The parties responsible for maintenance under subclause (1) or subclause (2) (as the case may be) must meet any associated requirements of the relevant local authority.

12. Rights of entry

1. For the purpose of performing any duty or in the exercise of any rights conferred under these regulations or implied in any easement, the grantee may—
 - (a) enter upon the servient land by a reasonable route and with all necessary tools, vehicles, and equipment; and
 - (b) remain on the servient land for a reasonable time for the sole purpose of completing the necessary work; and
 - (c) leave any vehicles or equipment on the servient land for a reasonable time if work is proceeding.
2. The grantee must ensure that as little damage or disturbance as possible is caused to the servient land or to the grantor.
3. The grantee must ensure that all work is performed in a proper and workmanlike manner.
4. The grantee must ensure that all work is completed promptly.
5. The grantee must immediately make good any damage done to the servient land by restoring the surface of the land as nearly as possible to its former condition.
6. The grantee must compensate the grantor for all damages caused by the work to any crop (whether ready for harvest or not) or to any buildings, erections, or fences on the servient land.

13. Default

Deleted.

14. Disputes

Deleted.



Department of
Conservation
Te Papa Atawhai

File Ref: PAC 13 04 75 02

23 January 2013

Ross Lawrence
Ski Area Manager – the Remarkables
PO Box 359
Queenstown 9348

*Sean Dent
Southern Planning*

Dear Ross

**CONCESSION APPLICATIONS: ROAD REALIGNMENT AND CARPARK
DEVELOPMENT, CURVEY BASIN LIFT AND ASSOCIATED WORKS, LAKE
ALTA WATER ABSTRACTION AND ASSOCIATED WORKS**

I am pleased to inform you that the above applications have been granted. No submissions were received on the publicly notified concessions being Lake Alta and the road realignment and carpark works.

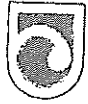
Enclosed are copies of the recommending reports and decisions. I will now prepare the concessions documents and these will be sent out to you shortly.

Please contact the writer for clarification of any matter relating to this.

Yours sincerely

Richard Clarke
Permissions Officer
DDI: 03 474 6956





Notified Concession Final Report to Decision Maker

Final Report to Decision Maker: Greg Lind – Wakatipu Area Manager

Notified Application for a Notified Easement Concession

Applicant: NZSki Limited – Remarkables Ski Area
Permission Record Number: OT-34110-SKI
File: PAC 13 06 75 02

The purpose of this report is to provide a thorough analysis of the application within the context of the legislation, the statutory planning framework and actual and potential effects, so the Decision Maker can consider the application and make a decision whether it should be granted or declined.

1.0 Summary of proposal

A decision in principle was made to grant this concession on 25 September 2012 and it was publicly notified on 29 September 2012. Submissions closed on 30 November 2012. No submissions were received. The Officer's Report detailing the analysis which led to the decision to approve the concession in principle subject to the outcome of public notification is DM 1047242.

Type of concession sought: Notified Easement.

Term sought: Thirty years. To align with the term of the ORC water permit, as requested by the applicant.

Description of the proposed activity: Increased water abstraction from Lake Alta, the installation of a new pump in the lake, a bubble transducer in the lake (for measuring abstraction rates) and the construction of a new pump house and underground pipe. The proposed works form part of a large scale redevelopment of the ski field which includes the installation of a new lift, new trails, new snowmaking equipment and the realignment of the access road entering the car parks and expansion/redevelopment of the car park areas (for details refer to the Officer's Reports: Curvy Basin ski lift and associated works DM 1047140, Road realignment and car parks DM 1047254).

Description of locations where activity is proposed:

Location	Activity
Rastus Burn RR - Remarkables Skifield – NZSki Limited	Commercial ski field. Proposed activities are summarised above.
Remarkables Conservation Area	

The Officer's Report detailing the analysis (DM 1047242), which led to the decision to grant subject to the outcome of public notification is attached at f 28 on the file.

2.0 Information available for consideration

This is contained in the Officer's Report.

3.0 Acknowledgement of complete application (s17S)

An application is deemed complete once all information required under section 17S has been received.

The application was deemed complete before the Officer's Report was prepared.

4.0 Analysis of proposal (s17T, 17U, 17V, 17W, 17X, 17Y)

The full analysis is outlined in the Officer's Report.

5.0 Relevant information about the applicant

This is outlined in the Officer's Report.

6.0 Proposed operating conditions

The special conditions to be imposed on the concession are those outlined in the Officer's Report.

Term: Thirty years.

Fees: A condition is recommended that any fees to be imposed on this concession will be established at a later date.

7.0 Applicant's comments on draft report

NZSki's consultant was advised on 17 December 2012 that no submissions were received. The terms and conditions as outlined in the Officer's Report are acceptable to NZSki.

8.0 Summary and Conclusions

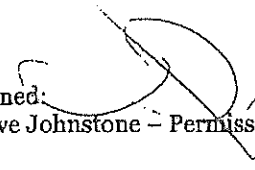
No submissions were received. The analysis/summary conclusions and recommended special conditions are those outlined in the Officer's Report.

9.0 Recommendations to decision maker


Pursuant to the delegation it is recommended that Greg Lind the Wakatipu Area Manager approve the granting of a Notified Lease concession to NZSki Limited subject to the standard concession contract; and the special conditions identified in the Officer's Report.

 14/1/13

Signed:
Richard Clarke – Permissions Advisor

 14/1/13
Signed:
Dave Johnstone – Permissions Manager

Recommendation Approved/Declined

 21/1/13



Notified and non notified Concession Officer's Report to Decision Maker

To: Wakatipu Area Manager – Otago Conservancy

Application: Lake Alta – increased water abstraction and associated works

Applicant: NZSki Limited – the Remarkables Ski Area

Permission Record Number: OT-34110-OTH

File: PAC 13 04 75 02

Date: 20 September 2012

The purpose of this report is to provide a thorough analysis of the application within the context of the legislation, the statutory planning framework and actual and potential effects, so the Decision Maker can consider the application; and confirm that it should be notified; and make a decision in principle whether it should be granted or declined.

1.0 Summary of proposal

Information about the applicant:

NZSki Ltd is an existing ski field owner/operator based in Queenstown.

Type of concession sought: An easement for increased water abstraction and associated structures to abstract the water.

Background and summary of application

The Remarkables ski area is part way through a programme of upgrading its trail network. To date these works have included a range of terrain modifications and the expansion of snowmaking capacity from 3 to 14 ha. The ski area now hosts 70 snowmaking machines. Over the next five years further trail works are planned, including a new chairlift and trails into the "Curvy Basin" area. Once these works are complete the ski area will have up to 125 snowmaking machines covering 36ha of trails.

To operate this extent of snowmaking to its full potential NZSki have requested to use more water from Lake Alta, to directly convey this water from the lake through a combination of above and underground pipes, and to construct a new pumping station by the top of the Alta chairlift.

Snow is the obvious driving force behind the success of the ski area. Snow quality underpins visitor satisfaction and therefore builds repeat business. Furthermore the benefit of snowmaking during an era of climate change is self-evident. However as natural snowfalls are highly variable an immediate imperative for more snowmaking is to ensure the ski area can open on a pre-

determined date in late June. Greater certainty of opening would allow the ski area to command more pre-bookings for the early winter, a time of high set up costs and uncertain patronage. This benefit was evidenced in the 2012 winter when artificial snow allowed a limited opening of the ski area prior to any significant natural snowfall.

The key points of the current application are summarised below:

Increased water take from the Rastus Burn and Lake Alta

- To generate and then maintain a sufficient coverage of snow over 36ha of trails would require up to 400,000 m³ of water per winter season.
- This water would be sourced from both a) the Rastus Burn stream at the current pumping house and b) directly from Lake Alta. Water would be taken from the stream before any draw down from the lake would occur. At times water would be drawn from both points simultaneously.
- The stream would not be taken below a minimum flow of 15 ls⁻¹ at the current pump house. The lake would not be drawn down further than 57cm below its stream outlet. When both these limits are reached snowmaking would be suspended until the stream and/or lake receive more water from natural inflows.
- The increased water take would draw down the lake up to 42cm lower than under the current concession.
- Under the current concession Lake Alta is usually drawn down to its minimum by late June and is not fully restored until the end of August. With the increased abstraction, full replenishment is not expected to occur until late October.
- To improve monitoring of lake levels a NIWA designed 'bubble transducer' will be placed on the lake bed. This transducer will be housed within a thin 25 metre conduit to be disguised to minimise any visual effects.

Directly conveying water from Lake Alta to the ski area.

- NZSki currently pumps water for snowmaking from Lake Alta back into the Rastus Burn stream. From the in-stream discharge point it takes about 2 ½ hours for the water to flow 1.3km to the current pumping station near the base building.
- During this transit some of the pumped lake water is lost through the permeable stream bed. More of the extracted lake water is lost whenever cycles in weather conditions halt snowmaking. Every time this occurs about 2 ½ hours of extracted lake water will bypass the pumps unused.
- To eliminate these inefficiencies NZSki propose to convey water directly through pipes from the lake to a new pump house and then onto the ski area. This would provide a protected and instantaneous flow of water to the snowmaking network.
- Overall the new piping would run about 520 from the lake outlet to a new pumping station by the top of the Alta Chair. The first 210m of pipe would be a temporary, above ground installation for the winter period. The remaining 310m of piping would be permanently buried within a trench.

- The first 210m of pipe is to remain above ground to avoid the adverse effects of constructing a trench within the Lake Alta Basin. The connection between the above ground and underground pipes will be located at the boundary of the Remarkables Conservation Area and The Rastus Burn Recreation Reserve.
- The 310m of underground pipe would be dug by 20-ton class excavators within a construction corridor up to 9 metres wide. These excavations would disturb up to 3,000m² of vegetation which will be restored as works are completed. The vegetation habitats predominantly affected would be bouldery tussock grassland and a small wetland.
- This underground pipe would terminate at a manhole sized junction over which the above ground pipe would commence. The above ground pipe would then connect to a control box located 5 m from the lakeshore. From this control box will be feeder pipes to two underwater pumps which will draw the water from the lake. A cable from the bubble transducer will also connect to the control box. Smaller power and communications cables would traverse the same line as the piping.
- With the exception of the bubble transducer conduit, the above ground pipe and all the equipment in or close to the lake will be temporarily installations for the winter period.

New pumping station

- Additional pumping capacity is required to service the increased snowmaking network. The new pumps would be housed in a single story pump house 14m long by 6m wide.
- The optimal position for a new pump house would be the top of the Alta Chair. The high elevation will assist generating water pressure. This location is unobtrusive, has little vegetation and minimises the length of above and underground piping from Lake Alta. Some excavations will be required to build a level building platform. The underground pipe would connect directly to the pump house.
- The existing pump house will be retained to manage water taken from the Rastus Burn.

Limit	DOC concession	ORC water permit	Proposed
Lake draw down	15 cm	20 cm	57 cm
Draw down reference	Not specified	Average lake level	Outlet level – 1799.97m asl
Rate of lake draw down (mm) / abstraction (ls ⁻¹)	5 mm day ⁻¹	Max of 74 ls ⁻¹ AND In any rolling 14 day period 1) no more than 31,100m ³ of water 2) no more than 20cm draw down.	Absolute max of 125ls ⁻¹ Avg daily max 94ls ⁻¹
Estimated volume of lake water used	40,000-90,000 m ³	248,800 m ³	400,000 m ³ (inclusive of Rastus Burn take)
Minimum flow of Rastus Burn (from the ski area)	Not specified	15ls ⁻¹	15ls ⁻¹

Refer plan 1 and photographs attached to this report. The full analysis is undertaken in section 4 of this report.

2.0 Information available for consideration

Staff comments

The Wakatipu Area Office comments are attached on the file (Area report DOCDM-1033354). A site inspection with ski area personnel and staff from the Conservancy and Area Offices occurred on 26 April 2012. The inspection included visits to all the areas where the proposed works may take place.

Area Office staff have undertaken site inspections on several occasions prior to 26 April 2012. This report incorporates comments from the area report on the effects of the proposals and makes recommendations on the proposals.

Otago Conservation Board

The application was discussed at the Board meeting on 20 July 2012. The advice (unconfirmed minutes) provided to the Department concerning this proposal was:

The board supported in principle the increased water take from Lake Alta, including the new monitoring equipment (bubble transducer) and data that will be available through DOC and the ORC.

Recommend that revegetation and aftercare conditions be given high priority in the concession, and follow up requirements specified and monitored.

Recommend the option of no pipes is explored, with a small reservoir constructed at the existing pumphouse, to cover lag demand.

Comment

Revegetation and its implementation is given high priority by the Department (refer to recommended special conditions 7 – 9 in section 6 of the report).

The option of no pipes and augmenting the flows in the Rastus Burn with a new holding reservoir at the base building was not considered a practical option by NZSki.

Loss of water through the stream bed, and loss after the pump is turned off as water abstracted from Lake Alta passes the existing pump house, makes the existing system very inefficient.

As mentioned above there is a time delay of 2 ½ hours before water abstracted from the lake reaches the pump house. Delays in snowmaking due to adverse weather conditions means the pump has to be turned off and this leads to further loss of water.

In addition, the reservoir needed to hold the water would be large (about the size of a commercial swimming pool), and would be an extra unnecessary modification close to the ski field base building which has limited space available for such a structure.

Iwi consultation

The application does not trigger any consultation triggers with Ngai Tahu or the runanga for Otago Conservancy.

3.0 Acknowledgement of complete application (s17S)

The application was deemed complete on 14 March 2012.

4.0 Analysis of proposal (s17T, 17U, 17V, 17W, 17X, 17Y, 17 S (W))

Section 17T(2) requires the Minister to decline an application within 20 working days of it being deemed complete, if "...the application does not comply or is inconsistent with the provisions of this Act or any other relevant conservation management strategy or plan..."

Comment: The application is consistent with the conservation management strategies as outlined below.

4.1 Public notification s17T (4):

It is recommended that the intention to grant this concession is publicly notified for the increased water take and permanent bubble transducer conduit to be located on the bed of Lake Alta.

It is not considered necessary to publicly notify the intention to grant the overland temporary pipe; the temporary control box, pumps and connecting pipes; the underground pipe and the new pump house. The temporary overland pipe and ancillary equipment has already been approved and the other developments should be managed similarly to any other trail, snowmaking and building approvals, which have been non notified.

4.2 Analysis - Statutory context (consistent/inconsistent) and assessment of effects:

4.2.1 Conservation General Policy and the Otago Conservation Management Strategy

Conservation General Policy – May 2005

The activity of ski field development is not inconsistent with the objectives and policies of the General Policies. These policies are subject to the more specific policies found in the CMS and management plans.

Otago Conservation Management Strategy – August 1998

The application is consistent with objectives and implementations points of the Otago Conservation Management Strategy, in particular the provisions for the Remarkables Special Place (10.26) and the functional objectives relating to Commercial Recreation and Tourism (28.1):

28.10 Commercial Recreation and Tourism

Management issue for the ski fields: *The three skifields (on Department managed land) have undergone a resurgence in the last three years with development investments particularly for snow making and good snow conditions raising interest in skiing to new heights. With this has come the desire of the skifield owners to develop further facilities and further modify the areas to cater for current demand and projected increases. The department has a very important job considering the large scale development and modification plans of these companies and undertaking objective monitoring.*

Objective for commercial recreation: *To ensure that recreation and tourism concessions (including concessions for special events) bring benefits in terms of opportunities to enjoy natural and historic resources or recreational opportunity in natural settings, without causing undue adverse effects on those resources or settings or on the enjoyment of them by other people.*

10.26 Remarkables Special Place provisions

Management issues: *Skifield development, eg, snowmaking and its water supply and storage; sewage disposal to Rastusburn; slope grooming in areas of exposed rock; road maintenance and safety; car parking.*

Retention of natural tussock grassland, wetland and alpine ecosystem communities.

Objective for Remarkables: *To protect the very high landscape and ecological values of the area, and its historic value, and the remoteness of parts of it, while allowing appropriate parts of it to be used for a range of recreational opportunities including the existing commercial skifield.*

Implementation policies:

The lessor's (departments's) discretionary powers in the ski area lease will be exercised in terms of the objective, subject to provisions of section 17 of the Reserves Act to the extent that the lease is of parts of the recreation reserve.

Detailed analysis of effects – the analysis provided below outlines and discusses each component of the application.

4.2.2 Description of the area

Lake Alta is situated within an alpine cirque basin. The lake is approx 14 hectares in size and up to 35 m deep. During the winter the lake is covered by a thick layer of snow and ice. The lake is enclosed by steep walls of rock and scree to the north, west and south while to the east a moraine forms a large hill which retains the lake within the cirque. This moraine is composed of unsorted glacial debris of rocks, boulders and gravels occasionally mixed with finer material. The moraine is permeable which leads to subsurface water forming many seepages and springs. While the top of the moraine is mostly flat the outer slopes drop steeply into the wider Rastus Burn landscape in which the ski area has been built. This outer slope is predominantly bouldery tussock grassland.

The Rastus Burn stream begins at the lake's outlet and initially flows for about 80 m to a small tarn. At this point the stream is considered to gain flow through subsurface seepage from the lake. The stream then cascades down to the wider alpine basin where it gains more flow from various sources at the base of the moraine wall. The stream then reaches a meandering wetland until it gathers pace again, joining another waterway from the Sugar Bowl basin before reaching the existing pumping station close to the base building.

The proposal covers crown land managed by the Department. This area is divided into The Remarkables Conservation Area and Rastus Burn Recreation Reserve. The ski field lies within the Recreation Reserve and operates through a series of leases, licenses and easements. The Rastus Burn Recreation Reserve is 659 ha in size. Overall the greater Remarkables Conservation Area is over 17,000 ha in size.

The management of public conservation land across the Remarkables is directed through the 1998 Otago Conservation Management Strategy (CMS). While many provisions of this CMS are relevant the Remarkables is identified as a Special Place (section 10.26). This designation aims to protect the area's very high landscape, ecological, historic and remote values while allowing appropriate parts to be used for recreation, include the existing ski field.

4.2.3 Effects of the activity applied for

NZSki were first granted a concession to take water from Lake Alta in 2005. The approved concession limited the lake draw down to 15cm. In 2009 NZSki applied to increase the draw down limit from 15cm to 50cm. At this time the Department considered the assessment of effects was insufficient, leading to NZSki withdrawing the application.

This new application proposes to draw down the lake by up to 57cm. NZSki have provided several reports to support their environmental impact assessments, including accounts of the lake's aquatic ecology (Ryder Consulting), the basin's hydrology (Raineffects) and on indigenous vegetation (Davis Consulting Group).

This report reviews NZSki's application in stages of hydrology, freshwater habitats, terrestrial habitats, landscape and recreational amenity.

4.2.3.1 Hydrology

Lake Alta

It is proposed to lower Lake Alta by up to 57cm below the level of its stream outlet. The outlet level is considered a more reliable reference point than either an 'average' or 'start of winter' lake level. The level has been surveyed at 1799.97 metres above sea level (asl). The minimum lake level would therefore be 1799.40 m asl.

A once-off draw down of 57cm provides a volume of 75,000m³. In reality this will be gradually replenished and abstraction would continue whenever the lake rose above the minimum. NZSki proposes to cap abstraction at 400,000m³ per season, which is to be inclusive of water taken from the Rastus Burn stream. If at the start of winter the actual lake level is greater than the outlet level, this extra water would not affect the minimum allowed lake level. However any additional storage would be counted towards the overall abstraction cap.

NZSki have used rainfall records to model the effect of taking more water on the lake's surface level. Due to the high demand for snowmaking early in the season the lake would typically reach its minimum extent by the end of June. For the rest of winter natural inflows should then sustain the lake at least at this minimum, with any additional recharge being available for snowmaking use. Once snowmaking ceases the lake is expected to return to its natural level by the end of October. This is approx. 20 weeks after the beginning of winter.

The Department notes these calculations are based on a set of rainfall records from 1993 to 1999. During this period the region experienced three major floods (1994, 1995 and 1999) which may have skewed rainfall averages over this time². For example the average rainfall for Queenstown Airport from 1993 to 1999 was 819mm while from 1969 to 1999 the average was 726mm (11% less). There is therefore a risk that the calculated recharge rates are overestimates and that lake levels could remain below normal for a longer period than anticipated.

2: David Hamilton and Associates, (2010). Shotover Country Plan Change River and Flooding Risk Assessment.

The Rastus Burn stream

Increasing the water take from Lake Alta and piping this water directly to the snowmaking pumps will reduce the natural flow of the Rastus Burn stream. As the lake falls below its outlet the initial surface flow of the stream will dry up. At about 80m from the lake the stream enters a small tarn where subsurface seepage of lake water would partially recharge flow (fig 1). After the tarn the stream is further replenished by both surface and subsurface flows and NZSki expects the stream to attain at least its minimum flow of 15ls^{-1} by the time it reaches the current pump house. Any flow over this minimum would be used for snowmaking as required. However as demand for snowmaking varies the stream is expected to flow above its minimum on a regular basis. NZSki considers this will mirror natural flow patterns.

NZSki consider that any artificial changes to stream flow will be within natural fluctuations. NZSki has observed that during dry periods the first 80m reach of the stream has been observed to dry up naturally. However the Department notes that unlike Lake Alta NZSki has not modelled how artificial changes would be superimposed over natural patterns. Without such estimates it is difficult to judge whether the stream will retain a healthy flow through the snowmaking season. It is possible that artificially triggered low flows will be more frequent than what naturally occurs.

4.2.3.2 Freshwater habitats

Lake Alta

Lake Alta is a relatively inhospitable habitat for freshwater flora and fauna. This can be attributed to its high elevation, low nutrient status, low productivity and the strong seasonal influence of ice and snow. No fish have been recorded in the lake and there is little algae, emergent plants or submerged macrophytes. The lake's shallow margins provide some habitat for benthic invertebrates capable of enduring the winter extremes. Within the lake Zooplankton are seasonally abundant, taking advantage of reverse thermal stratification during the winter.

NZSki considers the ecological impacts of taking more water from Lake Alta will be minor. The Zooplankton are not unique to the area and NZSki considers that their abundance would be resilient to any abstraction of water within the top $1\frac{1}{2}$ metres of the lake. Furthermore NZSki do not expect the increased water take to affect the lake's winter temperature stratification.

The Department considers that an artificially lowered lake may expose a greater width of the shoreline to the rigours of ice. This could exacerbate the stresses facing benthic invertebrates in the lake margins and lead to a decline in their abundance. There may also be unexpected effects on the abundance of Zooplankton, as sampling to date may not have sufficiently accounted for natural fluctuations of Zooplankton within the lake.

The lake's freshwater habitat may also be affected by the disturbance of sediment during installation of the conduit for the bubble transducer. To minimise this problem NZSki undertake to conduct all underwater works by hand using scuba divers.

This new snowmaking proposal will require 2 underwater pumps to be temporarily placed on the lake bed (currently only 1). Any equipment placed within the lake has the potential to rust or otherwise degrade the lake's water quality. NZSki have undertaken to only place equipment of inert materials into the lake.

The Rastus Burn stream

While the natural flow patterns of the Rastus Burn stream could be affected the stream provides little freshwater habitat. No fish have been recorded and there is no emergent plant growth or

macrophytes. The main effect of any flow changes may be the reduction of habitat for benthic invertebrates such as mayflies, stoneflies and caddisflies.

However the extent and significance of invertebrate habitat loss is uncertain. As the stream's flow is naturally variable any invertebrates may have lifecycles already adapted to water stress. Another mitigation of flow loss is that the winter snow pack may naturally maintain a moist, oxygenated environment in which invertebrates could survive³. Furthermore many benthic invertebrates are highly mobile and numbers could quickly recover over summer through dispersal from nearby water bodies. While any artificial changes may have no significant effects on species already attuned to natural disturbance, the scale of these artificial effects may exceed natural tolerances.

3: Ryder Consulting Ltd, (2000) Aquatic ecological assessment of the upper Rastus Burn catchment in relation to potential flow manipulations.

4.2.3.3 Terrestrial habitats

Lake margins

While most of the shoreline of Lake Alta is steep and rocky some sections harbour a mixture of tussocks, shrubs, mosses and lichens. When present this vegetation ceases abruptly just above the waterline as winter ice acts to prevent growth closer to the water (fig 2). Any lowering of the lake is therefore not expected to directly impact riparian vegetation. There is a risk that some riparian vegetation could be indirectly lost through undercutting of the shoreline by wave erosion across a lowered lake surface. This risk is better detailed under Landscapes. Other than some vegetation the lake margins provide little other habitat. No birdlife has been found breeding at the lake.

Alpine vegetation

The first 210m of pipe will be placed above ground for the winter period. This temporary installation is not expected to impact the alpine vegetation in the Lake Alta basin.

To install the 310m of underground pipe a trench would be dug from the border of the Remarkables Conservation Area to the top of the Alta Chair. While the trench would only be 80cm in width and 1.5 m deep the construction corridor will be up to 9m wide. Heavy equipment to be used will include 20 tonne diggers. Fig 3 illustrates the construction of a similar pipeline in the Sugar Basin in 2006.

Construction will disturb up to 3,000m² (0.3ha) of alpine habitat. This area is predominantly bouldery tussock grassland (fig 5) and seepage wetland (fig 6). Table 2 and Map 1 provide further detail of the location and composition of these habitats.

After insertion of the pipe NZSki would progressively backfill the trench, spreading surplus material over the trench line and then restore the displaced vegetation. Replanting would be timely according to current protocols to minimise soil erosion and maximise survivorship rates.

While no threatened plant species have been identified the affected vegetation is valued as highly representative of the Remarkables Ecological district. However NZSki considers that while some temporary effects are unavoidable that restoration will avoid any permanent effects on the ecology of these habitats. NZSki also point to the small size of the disturbed area (0.3ha) relative to the extent of neighbouring public conservation land.

The Department is concerned that the composition of the glacial terrain may complicate the construction and restoration of the underground pipeline. This may lead to damage occurring outside the construction corridor and project delays suspending replanting until at least the following summer. Alpine vegetation can be difficult to rehabilitate and there are many risks to a

timely and complete restoration. Any replanted tussocks are expected to re-establish within 2-4 years. While this is sufficient for maintaining visual amenity a complete restoration will take longer as the establishment of inter-tussock species is a slower process. This may be compromised if topsoil is eroded prior to new plants taking hold.

The tussock grassland also features some rock outcrops through which the pipeline will traverse. These areas will require drilling and blasting of large boulders and infilling of surface hollows to maintain a consistent slope for the pipe. Any tussocks in these areas would be replaced by rocks.

The seepage wetland to be affected is part of a recognised network of wetland areas within the Rastus Burn. To minimise environmental impacts to this wetland NZSki propose to dig through a narrowed construction corridor of 6m. To speed up restoration and avoid hydrological problems the low lying vegetation will be uplifted in segments and quickly replaced.

In addition to the underground pipeline the footprint of the new pumping station will require some excavations to create a level building platform. This would remove some alpine cushion plants and snow tussocks however as proposed site is mostly rock NZSki does not expect any significant environmental effects (fig 4).

Distance from lake	Vegetation	Area of disturbance (m ²)	Notes
0-205	Bouldery cushion plants	Temporary (winter) above ground pipeline	
- Approximate boundary of Conservation Area and Recreation Reserve -			
206-515	Tussock grassland	2,790	<i>Chionochloa macra</i> interspersed with inter-tussock species, large boulders and surface hollows.
516-520	Wetland	30	6m construction corridor. Turf to be removed in segments

Alpine wildlife

While no direct surveys were conducted for this proposal some endangered species are known to inhabit alpine habitats such as The Remarkables including Kea (naturally uncommon), cryptic skink (gradual decline) and velvet worm (recommended as threatened). However none of these species are unique to the Remarkables. It is also expected that a multitude of common insects are spread over the alpine area. Any of this wildlife could be affected either through displacement from their usual habitat or indirectly through a reduction of food sources. NZSki consider that as the disturbed area is relatively minor and any vegetation loss temporary, no wildlife will be significantly affected by the construction of a section of underground pipeline.

4.2.3.4 Landscape

Lake Alta

Under normal conditions the lowering of any lake by over ½ metre would have significant adverse effects on its natural character. In the case of Lake Alta a lowered shoreline would extend over a muddy rocky substrate, particularly along the eastern margins which are most visited in summer. Furthermore an artificially lowered lake could lead to wave erosion gradually undercutting substrate below the normal shoreline. This could lead to slumping of the lake margins which would irrevocably degrade the lake's natural form. However the abstraction of water from Lake Alta occurs over the winter period when the lake is usually covered by a cap of snow and ice.

Therefore NZSki considers that any visual change to the lake will not be observable. This ice cap would also protect any sensitive shorelines from wave erosion.

The Department considers there is a risk that artificially low lake levels may co-occur during warmer periods where the lake has little or no ice. Two recent examples include a) a site visit by Area Staff in late May 2006 (fig 7) and b) media reporting from the 27th May 2009 showed that snow blanketed the area while Lake Alta was unfrozen¹. If this scenario would occur while the lake was being drawn down for snowmaking wave erosion could quickly undermine the natural lake margins.

The lake's margins may also be at risk from lower than normal ice abrasion. Each winter the lake's shoreline is abraded by a layer of ice that moves up and down with natural changes to lake levels. If the lake is drawn down to artificially low levels this abrasive effect may erode underneath the natural shoreline. This could also lead to slumping of sensitive parts of the shoreline.

Other potential effects on the lake's landscape include the installation of a bubble transducer conduit. If installed flush on the lake bed the conduit would be easily observable through the lake's clear waters (fig 8). NZSki will therefore partly bury the conduit beneath the bed and camouflage it with rock material. The conduit will also require a small trench to be cut by hand into the lake shoreline. Given the narrow width of this trench NZSki considers it appropriate to restore the cut with rocks and vegetation.

1: Source URL (retrieved on 18/04/2012 - 16:27): <http://www.odt.co.nz/news/queenstown-lakes/58176/snow-thick-too-quick-lake-freeze>

The Rastus Burn stream

As previously described increasing the use of lake water will reduce the natural flow of the Rastus Burn stream. If any flow changes are greater than expected the natural character of the stream may be adversely affected. NZSki explain that as snowmaking coincides with extensive winter snow any changes will not be observable. By the time the snow pack melts the flow of the stream will be restored ensuring the visual amenity of the stream is unaffected.

The Department notes that during the early and intensive part of the snowmaking season the Rastus Burn might only be partially snow covered (fig 7). There is also a direct relationship between a stream's flow and the accumulation of snow over its surface. However as the timing and scale of any artificial changes are uncertain it is also difficult to predict if the natural character of the Rastus Burn will be affected and if these changes would be seen by visitors.

Alpine Terrain

The construction works of the underground section of pipeline will have significant temporary adverse effects on the natural character of the alpine terrain (fig 3). The restoration of vegetation is detailed under Terrestrial Habitats. In terms of visual amenity, while the transplanted vegetation will partially disguise the trench's construction the Area Office is concerned that visual effects will remain until re-growth is completed (fig 9).

The new pumping station will be clearly seen from higher elevations of the Rastus Burn basin and adjacent ridgelines and saddles. However as the structure will be located close to the top of the Alta Chairlift any additional impacts on landscape are considered minor.

4.2.3.5 Recreational amenity

Summer

Outside the winter season the Rastus Burn Recreation Reserve is visited by locals and tourists who take advantage of the ski field's road to access the alpine setting. While some visitors are content to undertake a short car stop others will walk to Lake Alta and other nearby features. The Rastus Burn basin is also clearly visible from the surrounding peaks, ridgelines and saddles frequented by mountaineers, rock climbers and trampers (fig 10). Several concessionaires have rights to guide to the lake and/or provide mountaineering instruction for Single and Double Cones. While no accurate counts of overall visitor numbers are available some track counter and survey estimates suggest that during summer Lake Alta alone may receive over 100 visitors a week.

The Department considers the main effect on recreational amenity would be the incomplete restoration of the tussock grassland and seepage wetland on the outer moraine wall. Any construction over these areas will leave a longer lasting change to the reserve's natural character. Any other effects of the proposal on recreational amenity would be minimal. These include the bubble transducer conduit and temporary winter surface piping, control box and pumping equipment.

During the construction period there will be a range of significant temporary adverse effects on the area's recreational amenity. The Area Office notes that NZSki has not yet provided information to address these effects, including the management of public safety.

Winter

During the winter season the basin is frequented by skiers and snowboarders, most of who are traversing steep chutes and slopes from Shadow Basin. The Lake Alta basin is also sought by ski tourers, snow cavers and ice divers. For most of winter the lake is frozen with a thick ice cap which safely supports these winter pursuits.

The first application to take water from Lake Alta generated discussion about how reducing the lake underneath the ice could leave a void into which the ice may collapse. This risk was further investigated and discounted in preference for a gradual lowering of the ice cap according to sinking water levels. This would have few adverse effects on winter amenity except some surface cracks (which would rapidly refreeze) and the presence of broken, rubbly ice at the lake's edge. The Area Office expects this conclusion to remain relevant for the increased water take. However ongoing monitoring is recommended for unexpected effects, particularly during periods of rapid lake draw down.

There will some visual effects from some of the temporary pumping equipment. The above ground pipeline will extend approximately 210metres and will not be completely removed until late spring. During years of heavy snowfall sections of the pipe may be overlain by snow until early summer.

4.2.3.6 Effects on culture and heritage

There are no known sites of cultural or historical significance in the area affected by this proposal. However the proposed activities occur in a Statutory Acknowledgement Area, pursuant to the Ngai Tahu Claims Settlement Act 1998.

4.2.4 Further comments

Abstraction rates

The existing concession and resource consent set limits to both the volume and rate of water abstraction from the lake (table 1). Under the new proposal NZSki have stipulated limits to per second abstraction rates however they also request that no other daily or fortnightly abstraction limits be applied. While this limit is a matter for the ORC to consider, NZSki's current concession has an abstraction rate limit of 5mm a day. To align the conditions of the new concession and resource consent is considered advantageous.

NZSki's new proposal sets limits on water use at 400,000m³ per season provided the lake level does not fall further than 57cm below its outlet and the Rastus Burn stream maintains a minimum flow of 15ls⁻¹ from the current pump house. NZSki's per second abstraction limits are determined by the capacity of the network rather than having any environmental function.

In this situation there appears little conservation benefit from restricting the rate of water abstraction. Limits on abstraction rates are typically implemented to allow adequate replenishment of water reserves where multiple users are continually using a single resource. Abstraction limits may also minimise adverse effects to riparian margins. In the case of Lake Alta and the Rastus Burn stream; there are no other consented water takes, there are few riparian habitats and abstraction would only occur for a the winter months. It is recommended that no limits to abstraction rates are imposed on the concession and this would defer to resource consent processes in this regard.

Resource consent requirements

Under the Otago Regional Water Plan both the increased water take and disturbance to the lake bed will be assessed as discretionary activities. Concurrent to their concession application NZSki have lodged applications for these ORC consents for a term of 30 years.

Under the Queenstown Lakes District Operative Plan the subject site is contained within the Ski Area Sub Zone of the Rural General Zone. Correspondingly the new pump house will be assessed as a controlled activity as the building is within this zone and associated with ski area operations. However the vegetation clearance will be assessed as a restricted discretionary activity as the clearance of indigenous vegetation is above 1070m. QLDC consents are on hold pending approval of a DOC concession.

Existing concession

The current system for extracting water from Lake Alta to augment the flow of the Rastus Burn is approved under concession PAC-13-04-150. Though this new application requires some components of the existing concession, several changes will be required. These include the extension of surface piping for up to 210 metres, the placement of two water pumps in Lake Alta and the connection of the NIWA bubble transducer to the control box. It is recommended that the existing concession be surrendered and all temporary pumping equipment and pipes be authorised through a new concession.

4.6 Purpose for which the land is held s17U(3):

Ski field development is considered to be not contrary to the purposes for which the land is held. Provided the recommended conditions are complied with, any adverse effects on the Land are expected to be no more than minor.

5.0 Relevant information about the applicant

Convictions on any charge related to the activity applied for or on any conservation related issue: Not applicable.

Past compliance with concession conditions: The applicant has complied with concession conditions in the past.

The applicant has concessions for 3 ski fields on public conservation land (the others being Coronet Peak and Mt Hutt). Over the past few years, a good re-vegetation and monitoring protocol has been implemented to ensure earthworks such as those described in this application proceed with few problems

Credit check result: Not applicable.

6.0 Proposed operating conditions

Term: A term of 30 years is recommended. This will align the concession with the recommended term of the ORC water permit.

Fees: To be established upon reaching a final decision for the application.

Special conditions: These conditions are recommended in addition to the conditions outlined in the existing lease:

1. Other consents, approvals and assessments

This concession approval will not supersede any other lawfully required consents, approvals and assessments from other agencies. This includes (but is not limited to) geotechnical, engineering, district and regional resource consents, and building consents. Copies of these approvals are to be provided to the Grantor prior to works commencing.

2. Monitoring

- a. Monitoring of silt control, disturbance of wetlands, revegetation and all works at sensitive sites is to occur by an independent monitor (agreed to by the grantor and the concessionaire) at a frequency of an average of one site visit per week for the duration of works. All costs are to be at the expense of the concessionaire. Reports are to be provided to both parties.
- b. Monitoring of other works may be conducted by Departmental staff as required by the Department. All costs are to be at the expense of the concessionaire.
- c. All works will be included in the annual monitoring conducted by the Grantor in conjunction with ongoing independent monitoring.

3. Contractor selection

Only contractors with a demonstrated ability in alpine earthworks and restoration are to be used.
4. Fuel

Vehicle fueling and storage is to take place only in designated areas established by the concessionaire's staff in consultation with DOC staff.
5. Avoidance of Wetlands
 - a. Wetlands are to be avoided where possible. Where areas of surface or sub-surface drainage are unable to be avoided, suitable provision for maintaining their flow and quality is to be installed eg. coarse rock, geocloth, piping, silt traps.
 - b. If construction debris falls into non target wetland areas this must be reported to the Grantor and immediately remediated.
6. Control of surface runoff and silt
 - a. Suitable drainage, cut-outs and silt traps are to be installed to control new surface flows into lower areas of vegetation, wetlands and watercourses.
7. Public Access and Safety
 - a. The public is to be able to pass freely and safely through the area, particularly the walking track to Lake Alta, whenever possible.
 - b. When this access is required to be temporarily restricted, it is to have prior agreement of the Department, is to be publicly advertised by the concessionaire at their expense, and suitable alternative access is to be provided.
 - c. Signage advising the public as to the nature of the work is to be installed at the expense of the concessionaire.
8. Removal and storage of vegetation
 - a. Vegetation is to be stripped and stored locally as construction progresses. It must be stripped with enough surrounding soil and humus to allow for successful storage and replanting survival.
 - b. Stripping may be by machine or by hand, whichever will provide the best chance for success given the nature of the vegetation.
 - c. Watering of this material may be required, at the direction of the Grantor or its nominated Monitor, to ensure its survival while stored.
9. Re-vegetation
 - a. Vegetation is to be replanted as soon as possible following completion of works. Re-vegetation planning must include provision for follow-up maintenance prior to the end of the growing season.
 - b. Where there is sufficient plant material and humus to allow survival, stripped material can be split. To supplement re-vegetation works split material may also be sourced from other areas in the Rastus Burn Recreation Reserve.
 - c. Plant spacing is to be at a density as specified by the independent monitor on site.
 - d. To intensify re-vegetation of tussocks, nursery reared plants must be used where there is insufficient existing vegetation available for transplanting. The rearing and planting of any plants to be brought on site must be to the satisfaction of the Grantor.
 - e. The seed of appropriate species should be broadcast to promote vegetation growth in the rock walls and between transplanted/planted tussocks.

- f. Geo-textile cloth is to be laid over any areas where there has been insufficient replanting by May 1st. This is to be removed in the following spring and re-vegetation works continued.
- g. Completion of re-vegetation works will be at the discretion of the Grantor.

10. Re-vegetation Protocol

- a. The existing re-vegetation protocol must be updated to ensure it reflects both the extra requirements of this new project and the ongoing requirements of any concurrent re-vegetation actions.
- b. The protocol must set standards for re-vegetation actions, timeframes for achievement of goals and processes for remedying problems as they arise.
- c. The reviewed protocol must be approved by the Grantor prior to this project commencing.

11. Construction timeframes

- a. Prior to works commencing the concessionaire must submit an overall project plan to the Grantor and the independent monitor. This plan should provide a timeline of the key construction stages, the works to be completed in each stage, the equipment to be used for each stage and anticipated monitoring requirements.
- b. A briefing must be provided by the independent monitor to contractors and the concessionaire's staff prior to each key construction stage.
- c. All works are to be completed by May 1st each year.
- d. Should the concessionaire desire construction be staged over two or more years the project plan is to account for remediation measures for unfinished works that may become redundant due to changing circumstances.

12. Remediation of works

- a. Any remediation highlighted by monitoring will be carried out as specified by the Grantor at the cost to the concessionaire.

13. Suspension of works

- a. The Grantor, at its sole discretion, may require all works to be suspended until suitable remediation is provided.

14. Satisfactory Completion of works

- a. Final completion of revegetation and any other remedial works will be at the discretion of the Grantor.

15. Monitoring the effects of the increased water take.

After each winter season NZSki is to undertake monitoring surveys of the integrity of the riparian margins, invertebrate habitats and landscape values of both Lake Alta and the Rastus Burn stream;

(a) This monitoring programme should be designed by a suitably qualified expert who has been pre-approved by the Grantor. (b) Baseline data should be collected prior to the increased snowmaking regime being exercised. (c) The Concessionaire is required to report on the results of this monitoring to the Grantor no later than 1 May of each year during the Term. (d) If after the first two seasons of monitoring there are no new adverse effects that become apparent as a result of the monitoring (in the sole opinion of the Grantor), then the Grantor may (at his sole discretion) vary the intervals that monitoring is required under section 17ZC(3) of the Conservation Act 1987 to instead occur thereafter at three-yearly intervals during the Term, or to any other interval deemed appropriate by the Grantor.

16. Lake margins

As a pre-cautionary approach to safeguard lake margins from unexpected erosion the abstraction of water should not exceed the currently permitted limit of 15cm until Lake Alta is completely covered by a lasting cap of ice and snow. If after the first two seasons of monitoring there are no new adverse effects that become apparent as a result of the monitoring (in the sole opinion of the Grantor), then the Grantor may (at his sole discretion) vary this condition under section 17ZC(3) of the Conservation Act 1987, to any other limit deemed appropriate by the Grantor.

17. Ice subsidence

That the surface of the frozen lake be routinely monitored to detect any rapid subsidence that may affect the usually safe passage.

18. Lake contamination

Any equipment to be permanently or temporarily placed within Lake Alta must be of inert materials that will not rust or otherwise contaminate the lake.

19. Bubble transducer

Landscaping measures to disguise the bubble transducer conduit should be sufficient to ensure natural character of the lake is maintained.

20. Removal of surface pipe and equipment

That NZSki take all practical steps to ensure the above ground pipe is removed prior to the summer walking season. If pockets of deep snow cannot be removed then the pipe should be removed in segments where possible.

7.0 Applicant's comments on draft Officer's Report

The applicant was sent draft copies of the reports on 28 August 2012. With respect to this application they make the following comments. The Department's response is in italics.

Page 4, Section 3.0: There was an error in the draft report, the application was deemed complete on the 14th March 2012.

The report has been corrected.

Page 7, Section 4.2.3.1: Lake Alta hydrology. NZSki assures DOC that the hydrological monitoring is accurate and that Lake Alta will recharge as proposed in the application.

The Department was attempting to illustrate the difficulties involved with modelling the lake's recharge with a limited set of data. The Department is not questioning the structure of the model or the assumptions that underpin it. The concern is that the model's results are only derived from a limited set of rainfall data - 7 years. As such it is believed there will always be a degree of uncertainty in the conclusions. Had the modelling been based on a larger set of data these uncertainties would be reduced. In either case, the Department is not suggesting the requested water take be reduced, or for further modelling or more data collection. Instead the recommendation is for follow up monitoring of the effects of the water take on freshwater values as outlined in condition 15. This is simply a precautionary approach to ensure the conservation values are protected as has been anticipated, but not guaranteed, by the applicant.

Page 8, Section 4.3.3.1: NZSki assures DOC that NZSki has assessed impacts on the Rastus Burn as part of their hydrological monitoring and that any ecological effect of low flows will be less than minor.

The Department accepts that NZSki has broadly considered adverse effects on the Rastus Burn. The report attempts to highlight that the artificially lowered flow levels of the Burn have not been modelled to the same degree of detail as Lake Alta. The Department's concerns were focused on the Upper Rastus Burn, and not the flow below the pumphouse. As with the Lake Alta, the Department is not proposing to reduce the proposed water take, or any further modelling or data collection. Instead the Department recommends follow up monitoring once the concession is in operation. This should be clarified as monitoring of the Upper Rastus Burn only, and that the stream below the pumphouse does not require any oversight in this regard.

Page 10/11 Section 4.2.3.4. NZSki assures DOC that the proposed snowmaking regime will not affect lake margins.

The Department broadly agrees with NZSki's assessment that it would be unusual for snowmaking to occur without the lake being frozen and that wave generated erosion associated with water abstraction will be unlikely. However the Department maintains that it remains plausible for naturally low lake levels coinciding with the onset of intensive snowmaking before the lake has a substantial ice cap. The main concern is for subsequent erosion of the vegetated sections of the lake margins, as this would cause irreversible damage, hence the precautionary approach not to allow the additional water abstraction until the ice cap is solid. The Department anticipates that the window of time when NZSki would require more than 15cm of lake water before the lake is fully frozen would actually be very small. If snowmaking commenced before an ice cap formed, it would be just before the ice cap formed, and NZSki would quickly be able to access the additional water once the ice did form. However the right combination of environmental variables could certainly erode the shoreline in a very short space of time.

Page 14 – Section 6 - proposed operating conditions

Recommended term. NZSki requested that the term of the concession line up with the term recommended for the ORC water permit which is 30 years.

This is accepted by the Department, subject to the implementation of the recommended monitoring conditions.

Condition 11 – Construction timeframes

NZSki supports the requirement to submit an overall project plan for the proposed works. NZSki will provide internal project plans and copies of the minutes from its weekly construction and rehabilitation meetings.

Condition 15 – Monitoring the effects of increased water take

NZSki support the requirement that some monitoring needs to be undertaken, however, have some concerns over the expense of annual monitoring and generation of information (baseline data) that is already available in the consultant reports. NZSki suggest that annual monitoring occur for the first 2 years, and at 3 yearly intervals thereafter if the first 2 years reveal no significant adverse effects are occurring.

The Department agrees in principle that the frequency of the freshwater/riparian/landscape monitoring should be decreased over time if no significant adverse effects are detected in the early

years of the concession. However the Department does not recommend locking in a phase down of the monitoring as unforeseen events could warrant a different response. With regards to what is the baseline data, the Department considers it is important to obtain baseline information on every parameter to be monitored in the summer immediately prior to the concession becoming operative. The Department believes this is in NZSki's best interests, as much of the data in the reports is derived from surveys completed several years ago. By collecting 2012/2013 data then both the Department and NZSki will have a current view of the state of freshwater values. In regards to what to monitor, the proposed monitoring is centred on the uncertainties identified in the report, including the health of macroinvertebrates in the Upper Rastus Burn, the zooplankton in Lake Alta, and the riparian margins of both the Lake and Upper Burn, and general landscape values of these features. This will require a mix of photo monitoring, possibly some measured transects of lake margins, and objective, repeatable surveys of fauna in the upper stream bed and water column of the lake. However the Department will take advice from a suitably qualified consultant before confirming what should be monitored and how it should be monitored. In summary, the condition could be reworded as follows.

"After each winter season NZSki is to undertake monitoring surveys of the integrity of the riparian margins, invertebrate habitats and landscape values of both Lake Alta and the Rastus Burn stream;

(a) This monitoring programme should be designed by a suitably qualified expert who has been pre-approved by the Grantor. (b) Baseline data should be collected prior to the increased snowmaking regime being exercised. (c) The Concessionaire is required to report on the results of this monitoring to the Grantor no later than 1 May of each year during the Term. (d) If after the first two seasons of monitoring there are no new adverse effects that become apparent as a result of the monitoring (in the sole opinion of the Grantor), then the Grantor may (at his sole discretion) vary the intervals that monitoring is required under section 17ZC(3) of the Conservation Act 1987 to instead occur thereafter at three-yearly intervals during the Term, or to any other interval deemed appropriate by the Grantor."

Condition 16 – Lake Margins

NZSki object to this condition and request that it is removed. NZSki considers it would be unlikely that climatic conditions would be conducive to snow making prior to an ice cap having formed over Lake Alta. NZSki does not want to be unnecessarily restricted by this condition. NZSki state that this condition is not in the ORC recommended conditions for the water permit.

The Department agrees it would be unusual for the lake to be artificially lowered without an ice cap, however if this risk is realised the damage to shorelines may be irreversible. To protect the conservation values of the basin the Department recommend's the restriction is retained. It should be noted that the window of an unfrozen lake during intensive early season snowmaking should be small. The Department proposed that this restriction could be reviewed after two years, as per the proposed water take monitoring conditions, when the Department will have more information to evaluate chances of unexpected erosion occurring.

Comments by Ryder consulting

NZSki commissioned Ryder Consulting (RC) to review the sections of the report that cover the effects on aquatic ecology (section 4.2.3.2 Freshwater habitats). In summary RC, does not agree with parts of the Department's assessment. RC states that there is little sign of benthic invertebrates in the lake margins. RC indicates that the lowering of the lake level will not significantly affect any benthic invertebrates in the lake if there are any. No significant adverse effects are expected on the Ratus Burn, including increase sediment discharge or any significant adverse effects on invertebrates.

The Department acknowledge that in terms of benthic invertebrates, it will be those species adapted to flowing conditions in the stream that would be more affected rather than any species residing in the lake margins where the water is still. RC's feedback in this regard should be considered when designing the freshwater monitoring programme. It might not be necessary to survey for invertebrates on the lakes margin, just the zooplankton in the water. However at this stage the Department does not recommend entirely discounting benthic macroinvertebrates in the lake margins until the monitoring programme is agreed upon. It must also be clarified that the monitoring of freshwater fauna and lake margins should occur during the summer period once the ice is melted and the lake fully recharged. It is intended for this monitoring to investigate environmental values once the system has returned to its natural state, and not to measure environmental effects during winter abstraction.

The Department accepts RC's comments that Lake Alta and the Rastus Burn have low sediment and detritus levels. This part of the draft report can be discounted. We also accept that the invertebrate fauna are generalists, and this informs our conditional acceptance of scaling back the freshwater monitoring programme after the first two years.

8.0 Summary and Conclusions

The application is consistent with the relevant legislation, and the purposes for which the land is held. The special conditions are designed to avoid, remedy or mitigate any adverse effects on the environment.

9.0 Recommendations to decision maker

Pursuant to the delegations it is recommended that Greg Lind, Wakatipu Area Manager:

Lake Alta water abstraction and associated new structures

1. Deem that this part of the application is complete in terms of s17S of the Conservation Act 1987; and
2. Agree that if the application to increase the volume of water abstraction from Lake Alta with associated new structures on the lake bed is approved in principle, then the intention to grant the concession will be publicly notified; and
3. Approve in principle the granting of an easement for the increase in water abstraction and new structures in Lake Alta, subject to the outcome of public notification; and
4. Having regard to s49(1) of the Conservation Act 1987, be satisfied that any intent to grant the Concession would be of local or regional interest only, in which case the publication of the public notice on this matter be limited by way of notification only in the local papers.

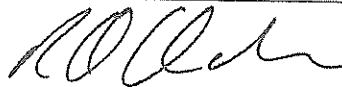
New structures within the Rastus Burn Recreation Reserve; underground pipe, temporary surface pipe and ancillary equipment

4. Deem that this part of the application is complete in terms of s17S of the Conservation Act 1987, and
5. Agree that is not considered appropriate to give public notice of the intention to grant the easement; and
6. Approve the grant of non notified easement for the a) the underground pipe; b) temporary surface pipe and ancillary equipment; and c) pump house.

Name: Richard Clarke
 Permissions Officer (Concessions)

Date:

20/9/12

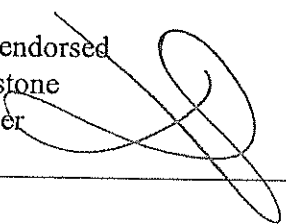


Recommendation endorsed

Name: Dave Johnstone

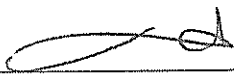
Permissions Manger

Date: 25/9/12



Recommendation:

- 1 ~~Approved/Declined~~
- 2 ~~Approved/Declined~~
- 3 ~~Approved/Declined~~
- 4 ~~Approved/Declined~~
- 5 ~~Approved/Declined~~
- 6 ~~Approved/Declined~~

Signed: 
Greg Lind
Wakatipu Area Manager
Date: 25/9/12

Map 1: Location of proposed new infrastructure. All position indicative only and not to scale.

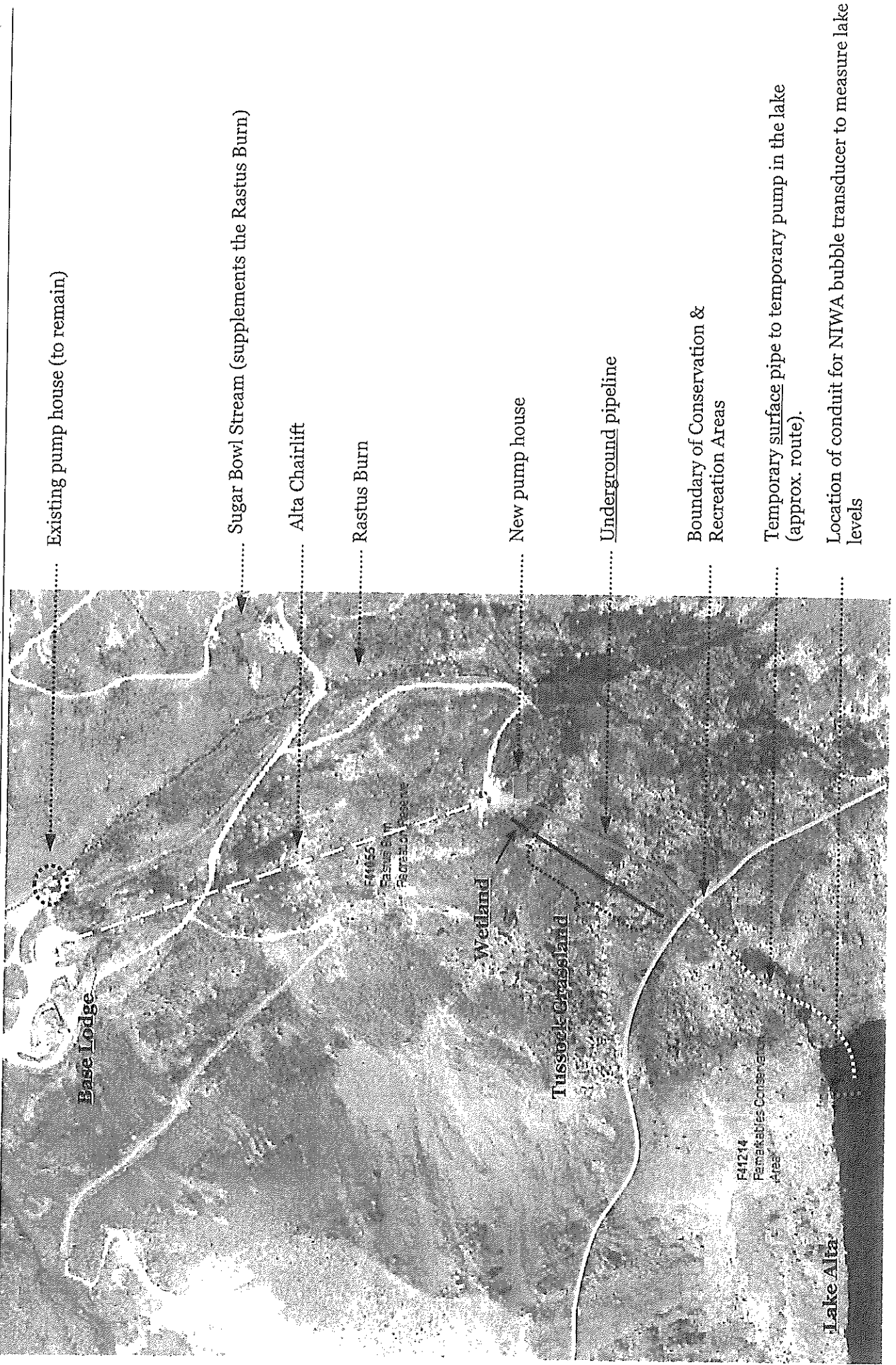


Figure 1: The small tarn 80m from the outlet.

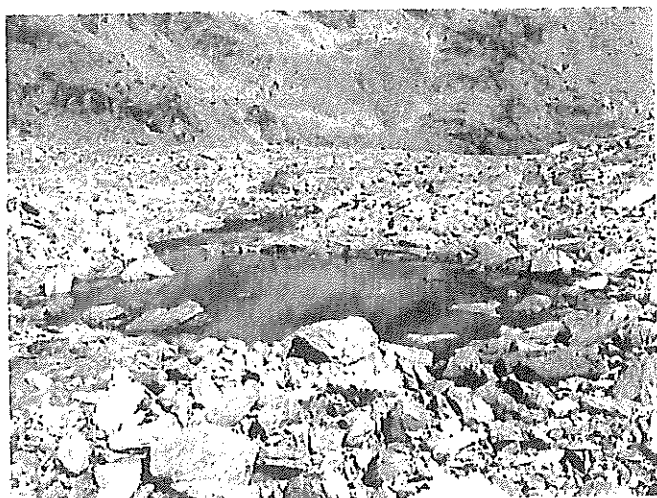


Figure 2: The main vegetated section of the Lake Alta shoreline

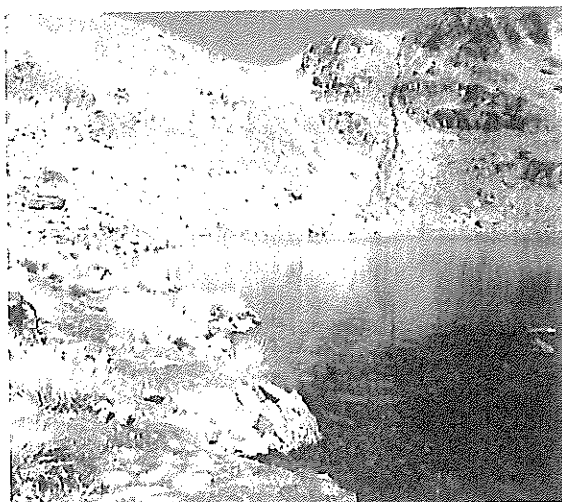


Figure 3: Previous construction of underground pipe in the Sugar Basin in 2006.

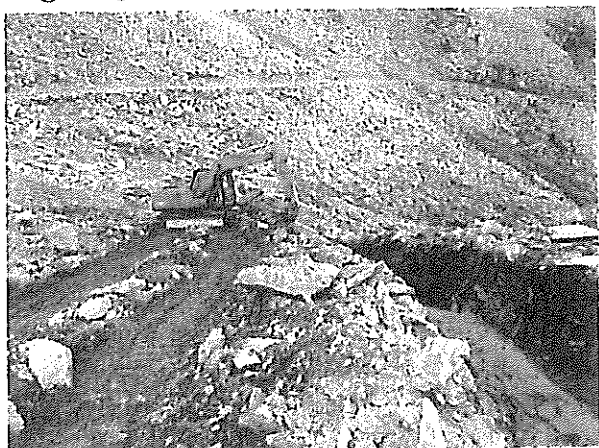


Figure 4: Approx. location of the new pump house close to top of Alta Chair. *Approx. position of pumphouse and route of pipeline shown in red.*

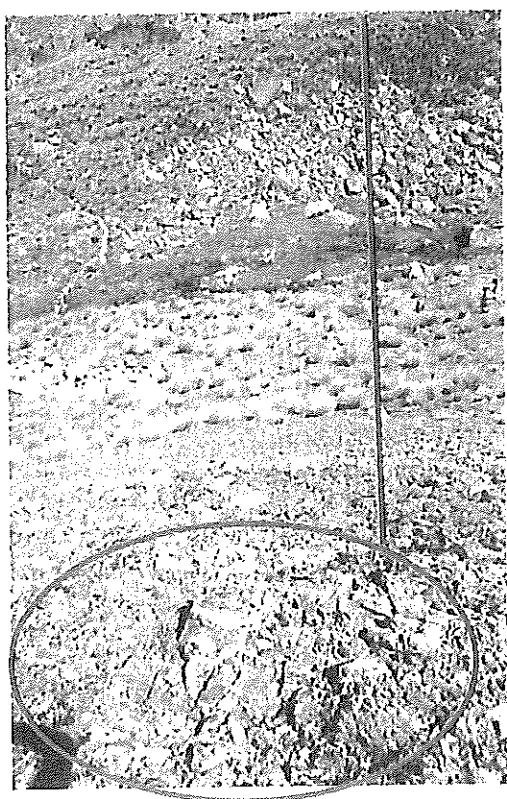


Figure 5: Route of the pipe through bouldery Tussock Grassland. *Approx. route of pipeline shown in red.*

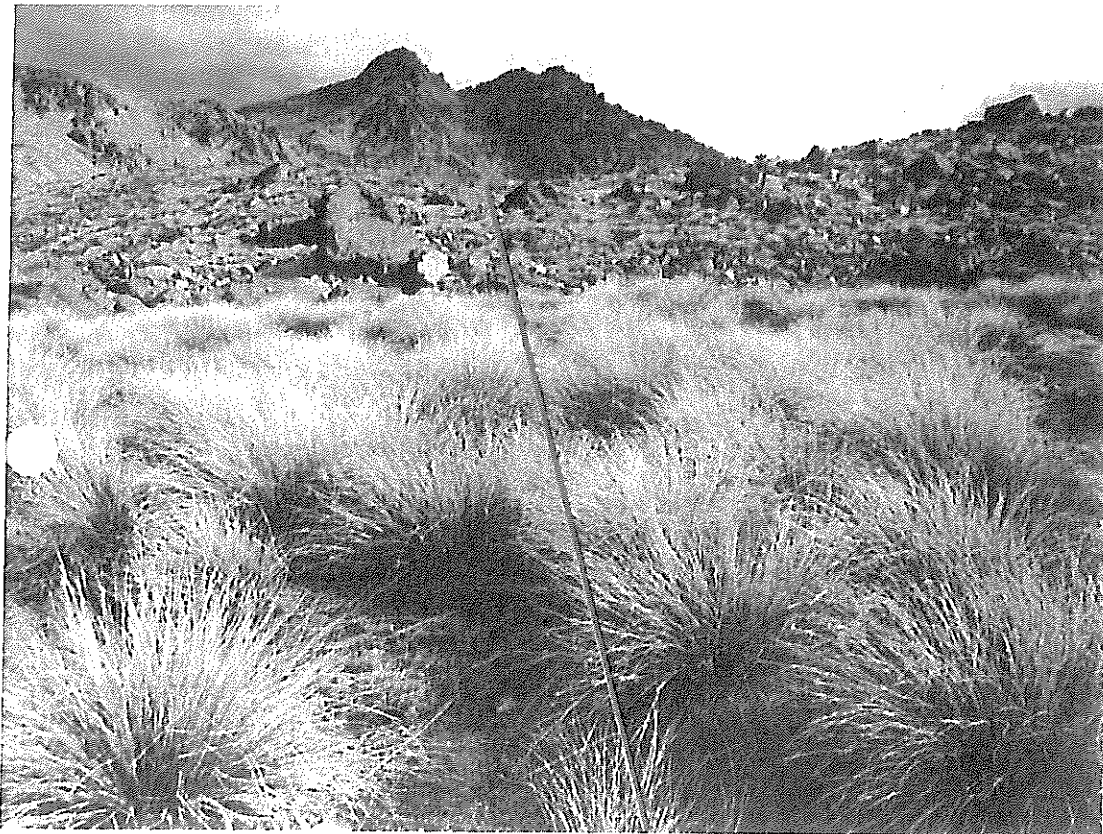


Figure 6: Route of the pipe through Seepage Wetland. *Approx. position of pump house (not to scale) and route of pipeline shown in red.*



Figure 7: Lake Alta late May/early June 2006. The lake was unfrozen during early winter conditions. This photo also shows the natural character of the stream during partial snow cover.

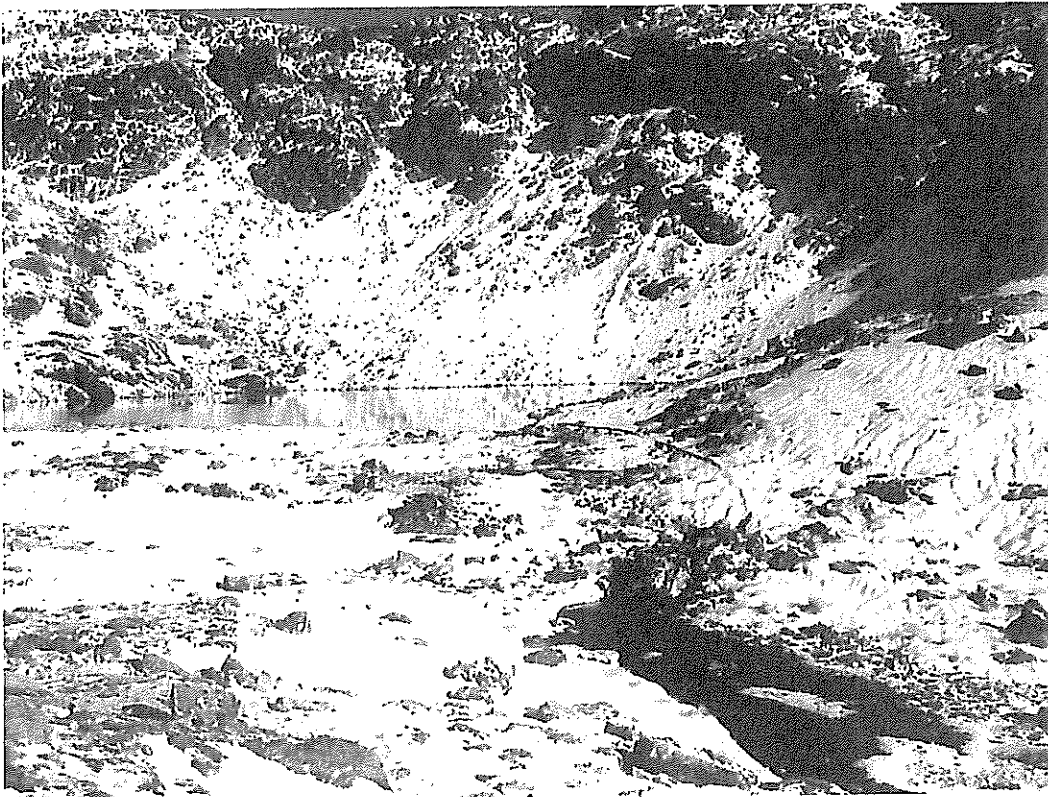


Figure 8: Margin of Lake Alta showing rocky bed through which the conduit pipe would be buried. *Approx. route of conduit shown in red.*

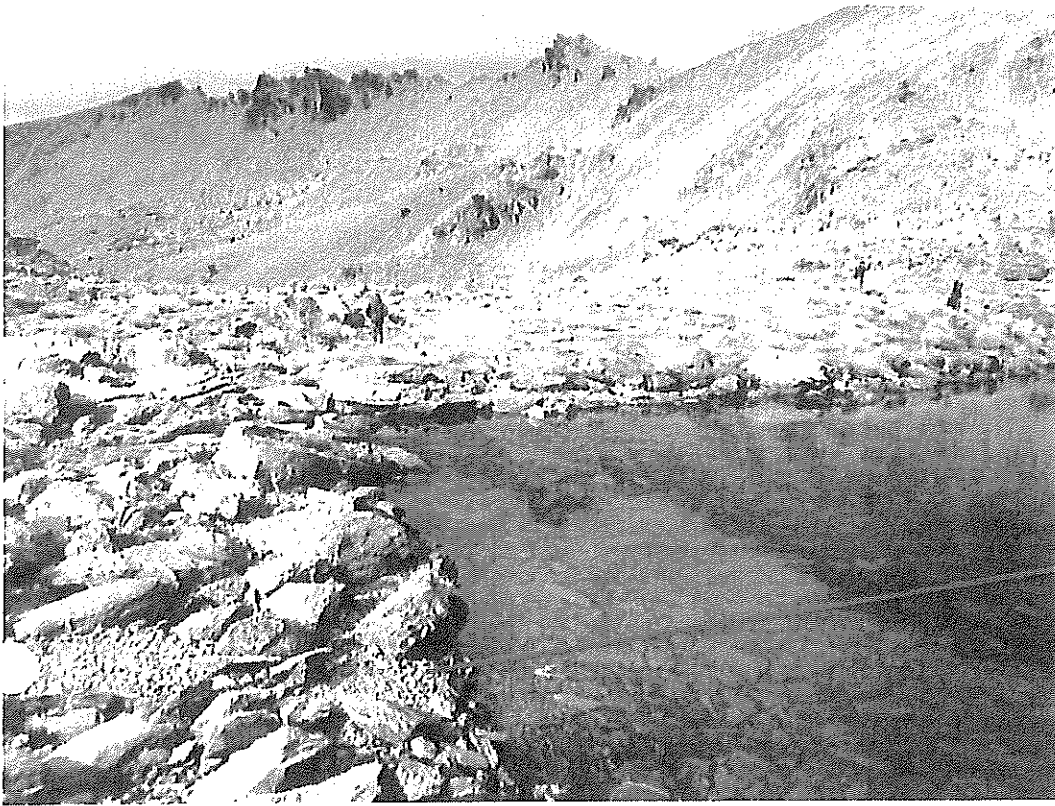


Figure 9: Example of early-stage re-growth of tussock grassland: Waterfall Face Mar 2012



Figure 10: Lake Alta Basin as viewed from Doolans Saddle.
Approx. route of the proposed pipeline is marked in speckled grey.

