ENVIRONMENTAL IMPACT ASSESSMENT

In support of a concession application by Glen Mary Ski Club Inc – August 2018

1 Introduction

This assessment gives a brief overview of all relevant environmental impacts as they pertain to the GMSC. In accordance with pre-application advice from DoC, it focuses in detail on impacts associated with the structures and associated effluent / waste disposal.

The GMSC is aware of the privileged position it has on publicly owned DOC land and values this highly. We wish to work with DOC to protect and maintain the local environment around the club huts for our and the public enjoyment. Values and attitudes are constantly changing, and this can also be seen in our club members. Most members now have a strong conservation focus with several club members also members of the Ohau Conservation Trust.

2 Describing the Environment

2.1 Overview

The environment around the Glen Mary Ski club has been modified over time, beginning with pre-European burning and then again by heavy grazing with the advent of the high-country sheep stations. The Lake Ohau area was heavily grazed by sheep and cattle post the 1870's which resulted in the depletion of the natural vegetation and erosion coupled with the rabbit plague. There have also been several fires which have reduced the Manuka cover.

After the creation of DOC in 1987, 100 years of grazing began to ease and finally ceased in 2005 after which the natural vegetation began to slowly regenerate. The scope of vegetation around GMSC indicates a notable burgeoning of lakeside species. This is most obvious when viewing sequential photos of the area. In particular, a species of the rare mistletoe has been observed, as is matagouri and kowhai. Manuka is making a big comeback and Beech stands are making inroads in the surrounding area.

There are some exotics competing however. These are duly noted and the silver birch, lupin poplar, chestnut and pussy willow, all planted or self-seeded prior to DOC control, are now controlled by the club by cutting down and culling new growth. The rosehip is a major eco problem, but the wilding pine is rigidly controlled around the confines of the GMSC and beyond to a lesser degree. The layout of the site is shown at Figure 1 on the following page.

Figure 1: Site Layout

2.2 The Existing Natural Environment

The ecosystems evident within the confines of the GMSC area, indicate a gradual regeneration of Beech in depressions and gullies. There are isolated specimens on flat areas and scree, intermingling with the Manuka, Bush Totaras, matagouri , bracken, bush lawyer and tussock. These are literally seen by the club as very precious and are strategically supplemented by a very substantial programme of replanting of natives, many from seeds, local to the area scoured from Motukarara, in a bid to hasten the regenerative process.

The avian native fauna from the top of the food pyramid would be the native falcon and harrier followed by the forest/ scrub inhabitants: fantail pied and black, robin, bellbird, tit and waxeye. The exotics of thrush, blackbird, sparrow etc also noted.

Regrettably the invasive opossum, rabbit/hare, hedgehog, feral cats, stoat, ferrets and weasels bring pressure to bear on native plants and birds respectively.

Our native seedlings are enshrouded with chicken netting for protection and watered to give them a good start. It is noted that DOC runs a regular programme of baiting to control the rabbits / opossum numbers.

A grant of $200.00 was recently donated by a club member to buy native plants endemic to the area and these were planted over the last Queen's Birthday weekend.

Threatened species

On the basis of frequency of sighting within or near to GMSC, the mistletoe, the Kowhai and the falcon would be deemed as not common (based on random observations).

2.3 The Existing Social Environment

Possibly subjective, but prior to the development of Twizel and the Ohau Ski Field it would be safe to say that Ohau was "off the beaten track" to most but the hardiest of fisherman, trampers or climbers, as roads and communications were basic to say the least.

With better road access, the development of the ski area, along with better communications and accommodation, the demographics have slowly changed, and more people have been attracted to the area. Later development of The Alps to Ocean bike trail and Te Araroa tramping trail have again increased the number and diversity of people visiting and staying in the area.

- Skiing, tramping, biking, camping, shooting, fishing and boating are some of the sports.
- Tourism at the Lake Ohau Lodge is seasonal based, Skiing on the ski field in the winter and biking on the Alps to Ocean and tramping on Te Araroa from late spring into autumn.
- The area is valued because of its solitude, tranquillity, spectacular scenery and being at one with nature.

While the above points underpin the club's reasons for being there, there is also a strong sense of maintaining the status quo.

There are no archaeological and historic sites in the area that we are aware of.

2.4 The Tangata Whenua

GMSC acknowledge the historical significance of Lake Ohau to Maori culture, folklore, history, and welcome input into this application by representatives of local iwi.

3 Scoping the Effects

3.1 Overview

The GMSC tries to maintain a positive ongoing relationship with DOC. The club respects DOC's role and (hopefully) DOC respects our endeavour to maintain the highest standards and attitudes within the parameters of current regulations. We value very highly our place on the Ohau lakeside and do everything in our power to blend in and honour this great privilege.

This application is being made on an existing set of buildings in excess of 50 years old and known to DOC since 1987. The existing buildings and associated activities of the GMSC are an established part of the existing environment.

3.2 Pre-Application Meeting

At our Pre-Application Meeting held with Gus and Ursula at Twizel on 3 April 2018, we discussed our draft application, and were advised to focus on the following matters:

- briefly reiterate on all aspects of undertaking the EIA (as per pages 6-8 of DOC's Guide to preparing EIA for Concession Applications).
- include a general review of the effects of the activity, focussing on those aspects which are applicable (p9-11 of the Guide).
- provide an in-depth analysis relating to "structures" and "effluent/waste disposal" (p9-11 of the Guide)

These are discussed in the following sections.

4 Actual and Potential Effects

4.1 General Assessment

In accordance with pages 6-8 of DOC's Guide to preparing EIA for Concession Applications, the actual and potential effects of the GMSC buildings and associated activities, including positive effects, are summarised in the table below (as per Step 3 of the Guide).

Where relevant, the table includes a description of the measures in place to avoid, remedy, or mitigate any adverse effects (as per Step 4 of the Guide). The high-level assessment presented in the table is guided by the Effects Identification Tools in the Guide.

Potential effects of your activity (positive or adverse)	**Description of effects, and any methods to remedy, mitigate or avoid any adverse effects identified**
Rubbish, waste and effluent disposal	Wastewater is disposed to septic tank. Rubbish (all types) is shipped out. See section 4.3 below for further details.

Potential effects of your activity (positive or adverse)	**Description of effects, and any methods to remedy, mitigate or avoid any adverse effects identified**
Water supply	All water is taken from the small stream behind the hut and all unused water is returned to that stream so is a closed system. No draw from lake.
Fire risk	Internal hut fire place modernised to create a more heat efficient system. BBQ gas not open fires. Acknowledge fire bans if in place. Smoking is banned from all buildings but allowed outside and disposal of butts is carefully monitored. Smoke detectors in main hut and Bunkroom. See section 4.4 below for further details.
Social impacts on other users	Stick to existing tracks. If non-club residents are found to abuse the club's environmental philosophy, they certainly do not get invited back! This has happened but is very rare. Most non GMSC groups come up with a specific agenda and many are members of other clubs - e.g. art groups, vintage motor cycle club, rowers, and school groups. They really respect the privilege of using the hut facilities and enjoying the grandeur of the place. In terms of establishing accurate Maori history in the area we refer to known references and value Iwi input. Pressure upon other locals is not an issue by virtue of the fact there are only two other huts in close proximity to GMSC used only spasmodically. Overcrowding not an issue-the hut is basically able to cater for a maximum of 28 but 20 comfortably. Major celebrations (e.g. 50th Anniversary of the club) did had larger numbers but were housed in private caravans, motor homes, at the Ohau Lodge, or at the Village etc. All visitors have the same attitude to the tranquillity and beauty of the place - that is why they come. If there is any negative feedback, incidents etc. it is taken very seriously at Committee level and appropriate action taken.
Aircraft and boats	GMSC activities do not directly include use of aircraft or boat. However, some club members have boats used mainly for fishing/cruising. Launch and retrieve areas for boats at top of lake

Potential effects of your activity (positive or adverse)	Description of effects, and any methods to remedy, mitigate or avoid any adverse effects identified
	or at Round Bush. Water skiing on the lake is not common but the area of the lake is so big it is simply not an issue and the question of excessive speed or not respecting anglers does not arise. Aircraft have a landing strip near the Ohau Lodge but no members currently fly. Choppers are used by the ski field in case of ski accidents, search and rescue or fire control. Everybody respects the fact that lives may well depend on the use skill and efficiency of these aircraft pilots in these isolated communities where time is critical. Noise in an emergency is of no consequence.
Recreation	With reference to GMSC skiing is a self-evident activity, and (almost always) undertaken off site at the Ohau Ski Area. Skiing in terms of the club does have a spirited competition for all members willing enough to participate with trophies at stake!!! Proliferation of mountain bikers may well be a problem in terms of vegetation and wildlife and pressure of this type will need to be monitored, although this is not directly attributable to the GMSC activities. No activities associated with GMSC other than skiing, biking, bush walks and boating have environmental impact and all care is noted by all club members. These activities are not hindered by the presence of the huts and associated activities of the club. By maintaining the driveway and toilet facilities, the GMSC provides a positive contribution to recreational use of the tracks behind the huts by walkers and mountain bikers alike.
Grazing	Since stock were removed post 2005 the regeneration of the natural vegetation has been noted. Sub canopy and ground covers were seriously compromised by trampling, pugging and browsing until stock was removed but are now quickly gaining ground again.
Security	With stock now removed worrying about gates being left open by public is not an issue. There is still a strong sturdy gate that separates GMSC from the land behind and delineates a boundary that is clearly understood by the public. The basic mantra being “Leave the gate as you found it.” The gate also advertises

Potential effects of your activity (positive or adverse)	Description of effects, and any methods to remedy, mitigate or avoid any adverse effects identified
	poisoning programmes.

As per the pre-application advice, a detailed assessment of the structures and the waste / effluent disposal is outlined in the following sections.

4.2 Structures / Buildings

This summary pertains to the existing Glen Mary Ski Club (GMSC) buildings and their basic footprints.

The GMSC was started in 1958 and a single room building was built on land between Freehold Creek and Parson's Creek. This single roomed dwelling was soon joined in 1959 by a separate toilet facility building (forever to be known as the "Hereitis") and a septic tank with field distribution drains.

A standalone bunkroom (an ablutions block was added on later) catering for 28 (now reduced to 24) was the third building which was built in 1960/61. Major extensions were next made to the original building with the addition of a kitchen and dining area in 1965/66. The Kitchen is equipped with two stoves and three fridge/freezers and sundry electrical appliances. This flows into a generous dining area that can table 10 to 12 comfortably and more if necessary!

Although modest on today's standards, the exterior of these buildings reflects the style of the 60/70's. They were built with the technology of the time by qualified tradesmen and have stood the test of time.

The final major structure was a custodian's hut known as the "Ocker's Hut". A caretaker was in residence during the ski seasons in the 1970's and 80's and was there to take bookings, to maintain the buildings and services and to collect fees. This building was in fact a single man's quarters from Twizel. It too has been updated over the years boasting power for lights, a thermostatically controlled heater, cold running water and basin, curtains and carpet to finish it off. It is now used as a room for couples.

Not much insulation was available at the time save a compressed sandwich comprising straw with cardboard sides that was installed in the ceiling of the main hut. The walls of the huts and the bunk hut ceilings have now been retro fitted with the proper grade Batts and the rest of the buildings are scheduled to be attended to in due course.

From its very beginning the buildings were designed and constructed as cheaply as possible but not compromising safety and integrity. Much of the timber in the very first hut was from demolition timber. A huge packing case/container become the basis of the toilet block (Hereitis), the chimney was local stone. Paving around the main hut is of local stone and designed to blend in environmentally. The design is simple and understated yet very practical. Two large scenic windows were incorporated in the living area and the dining area to allow views of Ben Ohau and Glen Mary. Furniture is simple practical comprising sofa chairs and window seats.

The bunkrooms have recently been renovated by way of painting, new mattresses and carpeted. Panel heaters and new double-glazed windows have been fitted. The ablutions block too has undergone a considerable modernisation boasting generous shower facilities, hand basins, hot and cold water ample space to place your clothes etc and their own heaters.

Safety is a paramount and the club is equipped with Fire Extinguishers (checked and serviced yearly), as well as smoke alarms strategically placed along with a medical kit to handle minor medical misadventures. In the case of major medical events the clubs rapid number is displayed at the road entrance (2001) and 111 procedures would be activated by those in residence.

Close to the club complex there is a Ohau Lodge communications repeater station.

Cell phone coverage is a little erratic. Vodafone reception is good but with Spark it is a matter of finding a location where the signal is strong and able to be accessed.

In conclusion all the buildings are subject to regular review and a long-term maintenance programme is in place.

Work Parties are a yearly event and various tasks are performed. While every effort is made to have all aspects of the club running efficiently breakdowns do occur at the oddest times and trades people are called in from Twizel to rectify problems.

The actual and potential effects of the existing structures, including any mitigation measures where relevant, are summarised in the table below.

Potential effects of your activity (positive or adverse)	**Description of effects, and any methods to remedy, mitigate or avoid any adverse effects identified**
Design, Location and Colour System	The area occupied by the huts has been modified over time, first by pastoral grazing and subsequently by the activities of the GMSC and establishment of the huts. The structures now form an established part of the environment, blending in with the surrounding landscape and vegetation. The huts are nestled at the base of a low hill and are not situated in a visually prominent location. The use of muted colours and low reflectivity surfaces, including natural stone, assist in reducing the visual impact of the buildings. Retention of existing planting and establishment of new planting by club members also helps to screen the buildings from the surrounding areas.
Transport and Access	The main access track used by the club for over 50 years has cut down in places and does pond in places after rain/snow. It has been shingled over the years by club work parties. It is part of a shared 4wd access road used by DOC, the A2O construction and maintenance teams, power lines maintenance workers, and

Potential effects of your activity (positive or adverse)	Description of effects, and any methods to remedy, mitigate or avoid any adverse effects identified
	communication agencies. It is relatively well maintained as a track and can be used by emergency services if necessary. The section used by GMSC to get to their club premises is worn after 60 years but is totally driveable by all vehicles (except for in very deep snow). The public are encouraged to use a parking facility a little away from the club huts. The accessway does not pass through any areas of significant conservation value. Use of the club huts does not generate any significant traffic flows or cause safety problems on the surrounding road network. Visibility from the entranceway is excellent in both directions.
Construction and site restoration	All structures are existing, and no new construction activities are proposed as part of this application. There are no erosion or stormwater runoff issues from the site. Site restoration in terms of native planting and weed management is ongoing.
Water quality	The quality of the spring fed stream that meanders through GMSC huts has come to a stage of balance where the aquatic ecologies are beginning to thrive and riparian features in terms of weeds and grasses are re-establishing themselves. The spring source being the club water supply is constantly monitored and both lines and tanks are flushed on a regular basis. Stormwater from the club huts and surrounding areas falls naturally towards the stream or towards the low areas to the east, and then to the lake. There do not appear to be any downstream effects once the stream leaves the GMSC site and heads down to the lake.
Maintenance	The club has been on the site for 60 years and the present facilities have been developed over that period from a single room plus a septic tank and toilet, to include a kitchen/dining area, bunkroom/ablutions block, and a Custodians (Ocker's) hut. All are functional buildings that through colour and design fit modestly into the environment and have served us well. As with all buildings that take a punishment environmentally, maintenance is a high priority and the club takes pride in its keeping of all systems, components and facilities in top form by a system of work parties usually at Queen's Birthday. This ensures

Potential effects of your activity (positive or adverse)	Description of effects, and any methods to remedy, mitigate or avoid any adverse effects identified
	that any long-term effects of ongoing operation are managed appropriately.
Electrical systems	The entire complex was completely rewired recently. Justified because of the big increase in the use of electrical appliances and new wiring systems and regulations.
Storage	The club does have areas of storage between the toilet facilities for tools, paint, timber and general maintenance gear. There are no hazardous substances or contaminants used or stored on site, apart from normal domestic quantities of paint and cleaning products.

Overall, the effects of the existing structures are considered acceptable, and any impacts are appropriately managed.

4.3 Effluent and Waste Disposal

This section outlines the systems in place to deal with effluent and waste disposal, especially sewerage.

4.3.1 Effluent Disposal

This section is about the process following flushing in the toilets. Effluent is flushed by water from the WC in the standard manner and travels by gravity into a standard Septic Tank, whereby the solid waste is broken down by a process of aerobic bacterial action and oxidation. The purifying liquids rise to the top of the tank and through a further process of natural purification disperse into the surrounding porous subsoil by way of distribution drains. This allows the treated wastewater to seep in a purified manner back into the environment.

Handwashing in the toilet cubicles is via cold water. Water from the hand basin (grey water) flows by pipe directly outside into a small depression where it soaks away naturally into the ground. It is absorbed and dealt with by appropriate bacterial action, purification and filtration. It is not directed to the septic tank. Grey water from the showers and ablutions block is also discharged directly to ground near the buildings.

The club toilet facility is open for the public to use by passing trampers, bikers and other people enjoying the area. Local bike trails, walking tracks and Te Araroa travel up our drive past the toilet. As a result of a 2005 negotiation, we understand that DOC agreed to maintain the septic tank in return for GMSC leaving the facilities open for the public. However, the nature of that agreement is uncertain, and we are unable to confirm whether DOC are actually responsible for the overall

maintenance and emptying of the septic tank. There is clearly a public benefit to having the facilities, so some sort of shared maintenance would seem appropriate.

4.3.2 The Grease Trap

This system is designed to prevent solid, fats and food particles from entering a sewer system where they can quickly clog and cause serious problems.

Kitchen wastewater, fats, oils and grease float to the top of the trap allowing clear water to flow away filtrate purify and disperse. When the grease, oil and fat fill the trap it has to be cleaned out. The intensity of use in the kitchen sink requires careful emptying and care to remove larger food scraps where possible. Cleaning of this grease trap has regularly occurred during club work parties

4.3.3 Rubbish and Recycling

Solid waste disposal is governed by the simple mantra - "What you ship in, you ship out''. Basically, the rubbish situation is categorized as:

- Food waste/scraps/peelings etc. - Biodegradables
- Glass, plastic and cardboard, fire place ash, and old furniture/plant etc.

These classifications are bagged respectively and dumped either in Twizel at the Council facility, or taken home by club members and disposed of by kerbside collection facilities.

The club provides ample waste bins and bin liners to hygienically wrap and remove food bi-products scraps etc. We place a strong emphasis on this system as mice are a problem. We actively discourage anti-environmental attitudes such as the burning of plastic and throwing food scraps waste or ash etc. into the bush or the stream.

When major renovations or maintenance are taking place e.g. carpeting, replacing roof iron, replacing fridges/stoves etc. the rubbish demolition material and caste off appliances/furniture are all transported to the Twizel Recycling Centre for sensible disposal. The club does not horde unnecessarily. Bits and pieces timber panels etc may have a short stay in storage but it's not uncommon to see this material jettisoned.

4.3.4 Ash Disposal

An issue of very serious importance is the disposal of fire ashes from the hut. While often these are left in the hearth the inevitable clean out is required. While in the past these may have been disposed of outside all club members have been told this is now not acceptable and the following system is being implemented if the terms of safety.

Ash/embers must be placed in a metal container and lidded for 3-4 days ensuring that they die off and go out. When cold they may be disposed of by bagging and removing from the club grounds. Under no circumstances are they to be tipped in to the stream or dumped in the bush, this being unethical and dangerous to various ecological communities as well as being a possible fire hazard.

4.4 Fire Risk

The GMSC is geographically isolated and is therefore vulnerable to fire as well as a myriad of other emergency scenarios. To offset and mitigate this GMSC is cognizant of its responsibilities as they pertain to the hut occupants and the wellbeing and integrity of the buildings themselves.

For the purpose of this review we have been requested by DOC to focus on the ramifications of fire and to that end the following is tabled.

Fire to the club is twofold - contained, it provides warmth in the case of bad weather and power outages. However, uncontrolled it may well be disastrous to club facilities and in the worst-case scenario lives could be lost. Fire could also damage vegetation and habitat on conservation land surrounding the huts.

To that end, we have in place the following strategies in no specific order:-

1. Our rapid dispatch is displayed prominently at the entrance to the club grounds - 2001.
2. The area immediately around the huts has been cleared of undergrowth, the grass in the surrounding area is regularly cut back and mowed where possible to help prevent any fire from getting to the huts.
3. The large open fireplace in the living area is inspected regularly and the chimney cleaned. It has lately undergone repairs and modifications. The fire has a satisfactory fireguard to cater for the safety of hut at night, when unattended, when hut is temporarily unoccupied and in respect to small children.
4. Old ashes from the fire place are placed in a steel ash can provided and then removed from the site for disposal.
5. Suitable strategically place smoke detectors are installed. These are checked at Daylight Saving change over when new batteries are fitted.
6. Fire extinguishers strategically placed (1 in the main hut and one in the bunkroom) and inspected yearly by appropriate authorities.
7. Two fire exits are provided, one each in the ends of the two bunk rooms.
8. The electric heater in the main living area is fitted with automatic cut out switch if knocked over.
9. The electrical switch boards have been replaced and rewired in the past couple of years. All electrical maintenance work to wiring systems e.g. installing/wiring in new stoves and panel heaters in the bunkroom is contracted out to a registered electrician based in Twizel.
10. Automatic cutouts at switchboard and power pole in case of power surge, lightning strike etc. to prevent fire.
11. All buildings suitably earthed in case of direct lightning strike.
12. Fire bans imposed by district authorities are rigidly enforced.
13. To that end all BBQ activity is gas based all the time.
14. A sauna on the premises is used infrequently. A new log fire and flu in excellent condition has just been donated to replace the existing log fire. This will be installed in the near future.
15. In case of a major fire in any of the club's buildings the rule is "Get out and say out"

16. Cell Phone coverage for Vodafone is good, but for spark can be erratic but emergency 111 calls would get through although the time frame is not good in terms of saving buildings.

In conclusion it is fair to say that fire is an enemy that is always ready to strike and we are aware of past fires and other club or personal building lost, including:

- Waitaki Rod and Gun Club 1980 totally destroyed
- Holiday huts erased in 1965 scrub fire
- 1995 Lodge very close to being lost
- Irvings Hut 1991 Totally destroyed
- Fire damage at the Lodge 2000
- Kershaws Hut 1960's Totally destroyed

Being off the beaten track has its advantages but vulnerability is the price.

4.5 Water Reticulation

The water that feeds GMSC comes from a natural spring approximately 3-400 metres behind the buildings. This source of water was protected by a swamp from the animals that grazed the area up until about 10 years ago and has flowed consistently over the last 60 years. It has produced a steady clear source of water that is not affected by weather variables. A small dam was established near the spring source, and a pipe inlet fitting is suspended in free water in the middle of the dam.

The system of water reticulation is a simple one based on the natural fall between the source (the dam) and the main storage facility in the club grounds. The water falls along a pipe until it has built up sufficient pressure to lift the water up into the GMSC storage tank behind the Hereitis. Excess water, when the tank is full, overflows by pipe back into the stream. The water is not treated in any way.

From the storage tank the water is dispersed to the huts by pipe in the normal way. All the piping in the system is above the ground enabling a visible check capability all the time. Areas serviced are the Kitchen, Ablutions and Toilets.

In addition to normal cold water into the sink in the kitchen, a small under -bench hot-water cylinder provides the hot water for dishes etc. Out flow from this system is into a grease trap (recently modified in 2018). An instant continuous boiling water system has recently replaced a well-used old zip for tea/coffee.

The ablutions (shower) area is catered for by a header tank (recently replaced) in the ceiling and this provides water to a Hot water cylinder for hot water and a cold line that provides two showers and two hand basins. These too have recently undergone modification.

All care is given to the internal piping as these are very susceptible to freezing. These pipes are heavily lagged, and there is a system to keep the water moving to prevent freezing and a passive form of heating also helps overcome this problem.

The toilet block – “Hereitis” (pronounced here eye tis) was built from a huge packing case/container. The building has two toilet compartments each with a flush toilet. Flushing is in the normal manner and refilling the cistern is moderately fast being close to the main header tank. Each toilet room is fitted with a hand basin provided with cold water only.

These toilet systems are susceptible to frost damage but that can temporarily be remedied by a bucket of water to flush from the stream although all care is taken with preventative measures to exacerbate this problem. Toilet waste is flushed into an effective septic tank system (see section 4.3 above).

The only other water source we have to contend with is rain/snow roof water. This where necessary is moved via spouting and down piped away as storm water into the ground

The spring and stream is treated with care and great respect. Every effort is made to keep it clean, and free flowing.

In conclusion the question of water purity is a major issue in New Zealand today and we value our natural water source highly. To my knowledge the water purity has not been analysed, but it would be safe to say that no club member has ever been laid low with water- born illness as a result of drinking the natural water provided by the reticulation system at Glen Mary.

4.6 Alternative Designs and Monitoring

With regard to Steps 5 and 6 of DOC’s Guide to preparing EIA for Concession Applications, no alternative designs are proposed, given the established nature of the structures and activities and the conclusion that all effects are appropriately managed. Proposed monitoring is limited to providing records of club visitor numbers to DOC, as part of an annual report. Copies of AGM minutes will also be provided, which will detail the activities of the club.

5 Public use of GMSC Buildings

The GMSC huts are open to the public to stay through our booking system. There are some ‘’members only’’ times during the ski season and at Christmas and of course bookings are subject to availability.

An indication of the huts usage by the public is outlined below. Accommodation is free to members therefore all hut fees that are paid are paid by non-members. Accommodation costs are $ 25.00 per night for adults. Hut fees and approximate bed nights (not including members) for the past five years are shown below.

- 2013 $ 4,540.00 therefore approx. 180 bed nights
- 2014 $ 10,907.00 440 bed nights

- 2015 $ 4,426.00 180 bed nights
- 2016 $ 6,549.00 260 bed nights
- 2017 $ 4,732.00 190 bed nights

We have catered for Rowing groups, Fishing groups, Tramping clubs, School camps, Botany groups, Motorcycle clubs, biking groups as well as skiing groups.

Rowing groups using the hut include Blenheim rowing club, Cambridge High School Rowing, Glendowie College Rowing and Whanganui Rowing Supporters all using the hut as accommodation for local rowing competitions or the Maadi cup.

Other groups include Christchurch Tramping club, The Post vintage motorcycle club, NZ Nature safaris, Hiking (Tramping) New Zealand, Dunstan High School, Watlington School, St Kevins School Tramping group, Canterbury Art Society, Timaru Canoe & Kayak Club, Adventure Consultants Wanaka, and the Oamaru walking & Tramping club. There may also be others but these group show up in the club records.

The current position on public membership of the club is that the club is open to new members who are family of existing or past members or by invitation from existing members. This year five new members or families have joined the club.

6 Conclusion

The assessment clearly shows that the potential environment impacts and risks of the GMSC buildings and associated activities on conservation land are managed appropriately and will continue to be managed in the future. The buildings are an established part of the existing environment and provide a number of public recreational benefits in terms of maintaining access and provision of toilet facilities.