Our reference LW21050a 4 June, 2021

Otago Regional Council ' Private Bag 1954 **DUNEDIN 9054**

Emailed to submissions@orc.govt.nz

Attention Alexandra King

Dear Alexandra

Re: Application RM19.151.01, RM19.151.02 and RM19.151.03 – BSTGT Limited and Anthony Patrick McQuilkin, Nicola Jane McQuilkin, Kate Louise Skeggs, Samuel Angus McQuilkin and Graeme Morris Todd being Trustees of the A P McQuilkin Family Trust

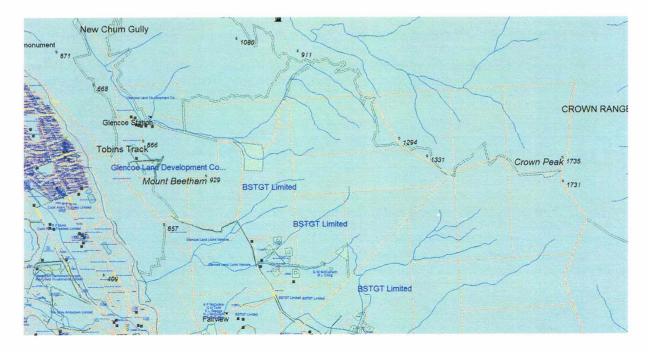
Land & Water Limited has instruction from Mr J Cameron of Darby Partners a representative of Glencoe Station Limited and Glencoe Land Development Company Limited to make a FURTHER SUBMISSION in regards to Applications RM19.151.01, 02 and 03.

This Further Submission is in support of the submission made on 3 August 2020 and takes into account matters raised and not addressed to The Submitters satisfaction in the Sec 42A Report.

Further Submission

The status of The Submitter Glencoe Station Limited and Glencoe Land Development Company Limited as Land owners in the lower catchment of New Chums Creek - Gully.

Glencoe Station Limited (GSL) and Glencoe Land Development Company Limited (GLDCL) land holdings are shown on the Quick map below.



Land held by GSL and GLDCL is located to the north and to the south of New Chums Creek and generally to the north and west of land now owned by The Applicants.

A proposed irrigation scheme – land schedule was reviewed for The Submitter in July 2020. A copy is attached as Attachment 1. Serviceable land is held over several titles that would benefit from kline – spray irrigation.

The Applicants table 1 sets out the consents as existed in July 2020, The Submitters shares are shown in the shaded cells.

Table 1: Deemed Permits to be replaced

Number	Holder	100%		
RM14,364.01 – to take water as primary allocation from the Royal Burn North Branch at a maximum rate of 55.6 U/s	G Coutts, R Coutts and S L Anderson being Trustees of the Barley Station (Glencoe) Trust			
96285 - to take 50,000 Lifty from the	Glencoe Station Ltd	20% (10,000 L/hr)		
Royal Burn North Branch (13.9 Us)	G Coutts, R Coutts and S L Anderson being Trustees of the Barley Station (Giencoe) Trust	80% (40,000 Lihr)		
30738 - to take 48,000,000 L/month from the Royal Burn North Branch at a maximum rate of 400,000 L/hr (111.1 L/s)	100%			
97029.V1 - to take 56,000,000 Umonth from the Royal Burn North	G Couffs, R Couffs and S L Anderson being Trustees of the Barley Station (Gliencoe) Trust	79.9%		
Branch at a maximum rate of 200,000 L/hr (55.6 L/s)	P.C. Little and G.Coutts being Trustees of the Barley Station Trust	20.1%		
95696 - to take 300,000 Lifty from	Glenope Station Ltd	20% (60,000 L/hr)		
New Chums Gully (83.3 L/s)	BSTGT Ltd being Trustees of the Barley Station (Glencoe) Trust	80% (240,000 Lithr)		

The Submitters draft irrigation schedule sets out a land bank of 200 ha with a potential service area of 76.4 ha that would require 42 l.s.

Glencoe St	ation Limit	ed and Adj	acent La	ndowners - Crown	Terrace Q	UEENS	rown				File	LW005	New Chums
											Status	Draft	
											Date	Jul-20	
Irrigation S	cheme Pla	nning											
Location o	r feature	Irr Zone	Land Bank		Owner				Demand				
			Lot	DP		На	Irr Ha	l.s Irr ha		m3 day	m3 week		
New Chum	Creek												
	Intake		Adj Lot	398297	Soho Pr	operty	Ltd						
	Pond												
	Pump												
		A	4 & 5	398297	GLDC	26	5	0.55		238			
		В	3	393411	GLDC	91.8	2.6	0.55		124			
		С	3	393411	GLDC		17.5	0.55	9.6	832	5821	24948	187110
			1	398297		4.13							
			2	398297		4.08							
		D	3	393411	GLDC		2.3	0.55		109			
		E	Sec 9	Blk X Shotover SD	GLDC	9.48	9	0.55		428			
		F	Sec 3	Blk X Shotover SD	GLDC	18	40	0.55	22.0	1901	13306	57024	427680
			Lot 18	DP 370651		46							9 7 9 9 9 9
						200	76.4		42	3631	25414	108916	816869
Resources													
New Chum	Creek with	Brackens											
	%	of I.s											
95696	20	83							16.6				
96285		14							2.8				
New Chum	alone at lo	ower intake						Sum	19.4				
95696	20	27.7	5.54	l.sec				deficit	23	l.s			

Allowing Kline irrigation at 0.55 l.sec over 76.4 ha at 100 %, water demand would be 42 l.sec. As set out above, and assuming the historic consented flows were in fact available The Submitters historic allocation would be 19.4 l.sec.

As noted in The Submitters submission, reinstating Brackens Gully water race was considered too expensive in 2013. Please see attached The Submitters field notes from the inspection of 10 July 2013 with a summary of assessed flows at various points along the historic augmentation system.

Field notes indicate approximately 29 l.sec present in the upper New Chums drainage lines with no water coming from Brackens whilst the upper catchment was flowing around the 80 l.sec level.

Observations by The Submitter's staff working Glencoe Station in the past 10 years thereabouts identify that Brackens Creek at altitude was good for flows of around 2 heads (or 56 l.sec) and that flow naturally available in New Chum Gully was seldom above 14 l.sec with a good summer flow being in the order of 28 to 30 l.sec.

Flow levels identified on the 10th of July 2013 occurred with light snow (150 mm) on the ground in a state of snow melt and would be considered typical winter flow conditions.

The Submitters share of allocation, in their opinion, is being taken over by The Applicant in context to the initial application for 45 l.sec noting that The Applicants 80 % share or the New Chum's allocation is described as 240,000 l.hour or 66.6 l.s and the reality of reliable seasonal flow as supported in The Applicants flow data record seldom exceeds 28 l.sec.

With The Applicants reduced proposed take from New Chums of 24.5 l.sec The Submitter believes their historic share is still being partly over taken.

The Submitter wishes to assert their earlier view, as submitted, that with Brackens out of the flow equation The Applicants hydro graph reflects a regime typical of New Chums as standalone and while occasional high flow peaks do occur summer flows are typically a third of the historic allocation of the combined augmentation scheme.

A third of the historic allocation of 300,000 l.h, albiet out from New Chums Creek alone, or augmented, would be 27.7 l.sec.

That being the case, The Submitter believes that The Applicants should only be seeking a further consent for no more than 80% of the 27.7 l.sec that New Chum's typically produces being equal to 22.2 l.sec.

Proposed draft Condition 3c of RM19.151.01 recommends a flow of 24.5 l.sec be authorised from New Chums Creek. The Submitter asserts that, on reflection of historical assessments, that this is not a correct reflection of The Applicants historic allocation.

The Submitter contends that the 300,000 l.hour of entitlement under 95696 was based on the abstraction from Brackens Creek as well as any water that could have been available in New Chums Creek, as set out in the Submitters submission dated 3rd August 2020.

The Submitter would agree with a new allocation to The Applicants of 22.2 l.sec from New Chums Creek.

The Submitters share of 95696 would in this case be the balance of 5.54 l.sec and The Submitter is still investigating how to best manage a new water permit application given they cannot comply with the provisions of WPC7 through non exercise, but have every right and intention to make a new water permit application from a point downstream closer to their irrigable land in the knowledge that their share in 95696 would be surrendered as a part of the new application process that would focus on Supplementary Allocation.

2 Base Flow in New Chums Creek

In The Submitters submission the matter of historic context of shared allocation and the matter of The Submitter proposing to make a further application to take their historic interest being 20 % of 95696 was discussed.

We wish to further address this matter in context to the base flow component of the Application RM19.151.03 – New Chums Gully (95696).

The Applicants, in their Table 4, have asked for a daily base flow of 1,296 m3 day derived from 5 l.sec from each of the three abstraction points. We understand that this has now reduced to only 2 of the 3 intake points but leaves New Chums Creek in the equation.

Focusing on New Chums Creek only, 5 l.sec or 432 m3 per day is proposed to be taken as base flow to support stock water within the 2 km length of water race that is reported to be piped for 650 m of it's length and has minimal race losses.

The submitter considers the stock water could not possibly require 5 l.sec and that the race could be turned off in winter and a small gravity fed piped flow could be carried to troughs in the paddocks removing the need to draw continuous flow from the resource of New Chums Creek allowing for water havesting to occur further down stream.

The Submitter considers that when irrigation water is required, the water should be drawn to the storage pond and the volumes taken should be metered to a limit specific to New Chums Creek.

A flow of 5.5 l.sec (being 20 % of 1/3 of 95696) taken continuously could provide an important percentage of The Submitters key water demand, and before the Applicants had lodged their application RM19.151.03, The Submitter had investigated in general terms taking water from the New Chums water race or leaving it instream to draw from a more stable location lower in the catchment.

The following assessment was prepared in July 2020 and scopes the benefits that leaving a base flow in the section of the New Chums water race fom the intake to the confluence of the Royal Burn water race would in effect cost The Submitters.

Single Ph	ase twinned / gallery adj	pump op	ation Option P tion - New Chums eit		stead of se	Jul-20 It into lower
Irr Ha	l.s Irr ha	l.s	m3 day	m3 week	m3 month	m3 pa
8	0.55	4.4	380	2661	11405	85536
Trees	l.tree.d	l.s	m3 day	m3 week	m3 month	m3 pa
2000	24	0.6	48	336	1440	10800
		5.0	l.s			

As proposed by The Applicant, The Submitter understands that base flow would be to protect the water race and would be bywashed from the end of the water race, removing water from New Chums Creek that could otherwise be efficiently used elsewhere.

The Submitter supports the Sec 42A recommendations to reduce base flow to winter months only and would ask Council to consider it's comments as made above regarding piping stock water as further reason to support there being no base flow in the New Chums water race in the irrigation season.

3 Proposed Condition 3 (d) (i) and New Chums Creek

The Submitters recognise that as drafted Condition 3 is setting the scene for The Applicants to operate a water harvesting scheme operating from three intakes within 2 catchments using 2 flow meters to co ordinate abstraction and duly considers that Council should place a cap on monthly abstraction from New Chums Creek.

The Submitters disagrees with the monthly allocation sum being a volume of combined abstraction from each of the 3 intakes and would ask that Council apply a monthly volume limit specific to New Chums Creek based on the service zone – command area relative to New Chums Creek and to a maximum take limit of 22.2 l.sec.

4 Residual Flow

Draft Condition 6 of RM19.151.01 requires a residual flow of 4.2 l.sec to be left below the intake of the New Chums Creek abstraction point equal to 90 % of MALF.

The Submitter believes that the residual flow to be passed should be 20 % of what ever flow is present to reflect The Submitters 20% allocation of 95696 over and above the recommended residual flow in order that The Applicants do not consume the historic GSL GLDCL allocation and that The Submitter may proceed to plan their next water permit application in the knowledge that historic water sharing continues and that there will be a residual flow requirement of 90 % of MALF at their future intake site.

The Submitters would expect the Council would require a timeframe to manage such a constraint within and would request Condition 6 become Condition 6 a) and that a further condition 6 b) be added to draft Condition 6 b) to read;

At the time of commissioning an irrigation scheme drawing water from the catchment of New Chums Creek to service land presently owned by Glencoe Station Limited and Glencoe Land Development Company Limited, the consent holder shall pass 20 % of water taken at the intake back into the wet bed of New Chums Creek. Notice of commissioning shall be given between the parties in writing and should the proposed Glencoe Station Limited and Glencoe Land Development Company Limited irrigation scheme not be commissioned within 5 years of the consent RM19.151 taking effect, this condition shall lapse.

5 Timing to Replace The Applicants 20 % share in 95696.

A high level of uncertainty has occurred for the Submitters over the past few years and this has occurred as land has been sold off the original holdings and they have not reached a water sharing agreement with The Applicants, and as water allocation planning across the region has varied in content and direction and become further complicated by a higher level of planning required since 2020.

Once The Applicants consent has been issued The Submitters can attend to their planning requirements with a more certain knowledge of the water allocation likely to be achievable based on having to retain a residual flow at any new intake they may need to develop and working in the knowledge that their take would likely be a supplementary allocation abstraction based on trigger levels in the Arrow River and a set flow point at their preferred intake location.

Resource planning, flow monitoring and data collection would be expected to take 2 years then scheme design, out of stream storage and reticulation may occur.

In order for The Submitter to move forwards the points raised in matters 1 to 4, if addressed as requested, would provide a fairer planning basis than use of The Applicants original water take values associated with New Chums Creek component of the water harvestion scheme would have allowed.

6 Royal Burn

The Submitter is satisfied with the Sec 42A report and proposed outcomes recommended for the two Royal Burn water takes.

Thank you

Yours Faithfully

Grant Richards

Manager

Land &Water Limited

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Darby Partners Limited P O Box 1164 Queenstown 9300

Attention Mr J Cameron
Emailed on jay.cameron@darbypartners.co.nz

Attachments

- 1. Draft GSL GLDCL Irrigation Scheme Review
- 2. Field inspection notes July 2013

Glencoe St	ation L	mited a	nd Adjac	ent Landowners - (Crown Te	rrace	QUEEN	STOWN			File		New Chum
								1			Status	Draft	
											Date	Jul-20	
Irrigation S	Scheme	Planning	3										
Location or	r featur	Irr Zone	Land Bank		Owner				Deman d				
			Lot	DP		На	Irr Ha	l.s Irr ha	l.s	m3 day	m3 week	m3 month	m3 p
New Chum	s Creek												
	Intake		Adj Lot	398297	Soho Pr	operty	Ltd						
	Pond												
	Pump											2	
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		Е	Sec 9	Blk X Shotover SD	GLDC	9.48	9	0.55	5.0	428	2994	12830	96228
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	%	of l.s											
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New Chum	alone a	t lower i	ntake					Sum	19.4	l.s			
95696	20	27.7	5.54	l.sec				deficit	23	l.s			
	80	27.7	22.16	l.sec									
Single Phas	e twinn	ed pump	option -	- wet well adjacent	to New (Chums	either	at Home	estead of	set into l	ower Pac	ldocks.	
							Irr Ha	l.s Irr ha	l.s	m3 day	m3 week	m3 month	m3 pa
							8	0.55	4.4	380	2661	11405	8553
							Trees	I.tree.d	l.s	m3 day	m3 week	m3 month	m3 p
							2000	24	0.6	48	336	1440	1080
							_		5.0	l c			

