

## Submission Form 16 to the Otago Regional Council on consent applications

Submitter Details:

This is a Submission on (a) limited notified/publicly notified resource consent application/s pursuant to the Resource Management Act 1991.

please print clear	1y)		
Full Name/s:	PETER CLA	ARKE / NIKI MASON	J
Postal Address:			
		Post Code:	
Phone number:	Business:	Private:	
	Mobile:		
Email address:			
/ we wish to SUP of:	PORT / OPPOSE / submit a	a NEUTRAL submission on (circle one) the	e application
Applicant's Nam	e: BSTET ETS	/APM CQUILKY/NJM	CSLILLE
And/or Organisa		S/SAMCQUILKIN/GMTG	
Application Num		REFERENCE A142113	
Location:	GLENZOE	ROAD ADI QUERN	JOUN
Purpose:	RENEWAL	OF DERMED LATTER	RIGHT.
The specific parts	of the application/s that my	y submission relates to are: (Give details)	
REFE	12 70 ATTM	CHRD DOCUMENTS	-
		support or oppose the application or specification or specific parts of it and the reas	
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I/We seek the following decision from the consent authority (give precise details, including the general nature of any conditions sought)				
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I/we: _/				
<ul> <li>☑ Wish to be heard in support of our/my submission</li> <li>☑ Not wish to be heard in support of our/my submission</li> </ul>				
If others make a similar submission, I/we will consider presenting a ☐ Yes ☐ No	joint case with them at a hearing.			
I, am/am not (choose one) a trade competitor* of the applicant (for the Resource Management Act 1991).	the purposes of Section 308B of			
*If trade competitor chosen, please complete the next statement, or	therwise leave blank.			
I, am/am not (choose one) directly affected by an effect as a result application that:  a) adversely affects the environment; and b) does not relate to trade competition or the effects of trade competition.				
I <b>do/do not</b> (choose one) wish to be involved in any pre-hearing rapplication.	meeting that may be held for this			
I do not request* that the local authority delegates its functions decide the application to 1 or more hearings commissioners who authority.				
I have have not served a copy of my submission on the applicant.	YET			
Mig.	24/1/21.			
Signature/s of submitter/s (or person authorised to sign on hehalf of submitter/s)	(Date)			

# Submission on BSTGT et al Water Application.

To whom it may concern:

My name is Peter Clarke. My partner Niki Mason and I, with our two children, own and live at 401 Crown Range Road and the Royal Burn traverses our property.

One of my contractual obligations for work is to monitor, maintain and control the flow of water in two water races in the Gibbston Valley. I have designed and built the control gates on these races and as such have a reasonable understanding of the principles involved with not just controlling the "take", but also in controlling how much is not taken i.e. the residual flow. This latter function is critical if one is to maintain minimum flows in the main water source assuring its good health, especially in times of low flow.

There are two aspects of the application that, to my mind, are glaringly absent:

#### 1. An hydrology report.

I note that the applicants make reference to an historical hydrology report but don't actually include it in their application and so must be regarded with some degree of scepticism; but even so, and they acknowledge this, their proposed take exceeds the volume of the source.

I suggest that this is inconsistent with responsible management of the resource. I submit that a current, disinterested hydrology report should be an essential and fundamental part of any application to use a natural water resource.

How else is it possible to assess what is available and the potential effects of its use?

#### 2. Control mechanism

A control gate should be recognised as an essential management tool but there doesn't appear to be any proposed structure at any of the points of take that would satisfy what I would say should be the following basic requirements:

- a. It should be able to limit the maximum amount of take from the source
- b. It should maintain and guarantee a minimum flow in the source
- c. It should return any immediately unneeded take, back to the source

With regard to (a) and (b), the principle behind the design should be one of maintaining a minimum residual flow as a priority over the take so that the take represents the surplus water available after the source's minimum flow has been assured.

The applicants' philosophy appears to be the reverse; one of prioritising the take whilst any promise of a residual flow in the source could at best be described as "the devil taking the hindmost".

The suggestion that an observable trickle up to but not beyond 50 metres downstream from the take should be an acceptable measure of residual flow, implies that the source could be permitted to be dry beyond this point.

I submit that this is not an acceptable measure. It's hardly surprising that there would be no fish (not to mention the myriad other organisms that would be present) when the conditions for their survival are intermittent.

Once again, I submit that the residual flow should have priority over the take

With regard to (c); on casual observation of the take from New Chum's, it appears that, in addition to there being no mechanism to control the maximum amount of water diverted into the water race that eventually ends up in the storage dam, the unneeded overflow from the dam is not returned to New Chum's.

Where does this go?

I appreciate that due to the distance from New Chums to the storage dam it may be impractical to return any overflow to that source but that should serve to give greater emphasis on the need for an effective control mechanism at the point of take.

As a casual observation; the two branches of the Royal Burn go under Glencoe Road before merging to form the main Royal Burn channel.

On the 30th December last, the culvert carrying the North Branch was dry while the South Branch was running. After the rain in early January, they were both flowing again.

At the risk of labouring the point, the natural ecosystem of that tributary will not sustain its natural rhythm with an intermittent flow of water.

I therefore submit that whatever the subsequent allocation of water, the primary focus should be on an uninterrupted minimum flow.

### Water Storage and Demand

In comparing water storage in the dam(13,000 m3) with daily consumption for irrigation purposes (7,593m3/day refer Table 3), I note that this represents less than 2 days worth of storage and so to suggest that:

"the instantaneous rates of take sought will allow the applicants to harvest higher flows when they are available and store this water in onsite ponds as required. This stored water can be accessed during periods of lower flow to ensure that the irrigation activities can continue whilst reducing pressure on the creeks where possible"

Is clearly disingenuous.

Let's not forget that the time when the greatest demand will be placed on the water supply is when the supply will be at its most vulnerable.

Yours Faithfully

Peter Clarke Niki Mason