

Address to BSTGT Water Consent Hearing

My name is Peter Clarke, I live with my partner, Niki Mason and our two children at [REDACTED]

The Royal Burn traverses our property which is located immediately below the area variously referred to by the applicants' representatives as:

"a swamp"

"a groundwater upwelling" and

"a moist patch in a paddock" all of which seem to me to carry somewhat derogatory connotations and so for the purpose of this commentary I prefer to use the term "wetlands".

We are immediate neighbours to Barley Station, sharing boundaries on our Eastern and Northern perimeters and we have about 10 acres of similar type wetlands as part of our property.

We have owned this property for some 30 odd years and lived here permanently for the last 21 years. Our residence for 16 of those was within 30 metres of the Royal Burn, access for which was via a bridge over the Royal Burn and so we were, and still are, intimately familiar with the seasonal and climatic moods and health of the burn. We now live overlooking our wetland and a portion of the Barley Station golf course while our access takes us over the Royal Burn daily.

Part of my income is derived from work as a raceman managing two water races in the Gibbston Valley supplying water for irrigation to some 39 properties, roughly $\frac{3}{4}$, say 26 of which would be vineyards or wineries.

My duties have included construction of a weir/control gate/bypass system and subsequent management of flow rates within the context of the deemed permits which allow takes of 28 litres/sec(1 head) and 56 litres/sec(2 head) respectively; a total of 84 litres/sec.

Not only does this allow me to control the amount taken but significantly, also the amount not taken by way of a constricting passage so that during periods of heavy rain or snow melt resulting in high flow and increased pressure, there is no significant increase in take so we stay within the consented limits as against what would be the case with a basic overflowing weir which simply allows more water past.

Also, as part of the job, I carry out weed control, most significantly in the waterway itself. Vegetation in the race has a profound impact on the flow speed and consequently, the amount of water that will seep through the base of a water race and be effectively lost. In the same vein, the location of the metering device is fundamental to a true picture of how much water is actually being taken at the source. The further it is from the point of take, the more water will have leaked prior to arriving at the meter resulting in a higher net take from the source than what is being metered.

Financial Benefits

To give some perspective to the relative economic values secured against the quantities of water delivered; there are scores, possibly hundreds of seasonal and full-time workers gaining employment with these Gibbston Valley vineyard, winery and farm operations plus the flow on benefits derived by these industries, the dollar value of which, we can only speculate on, but overall economic benefits to the community must be in the millions.

By contrast, the applicants are wanting to secure a take of 89.5 litres/sec, against economic benefits that I am, admittedly, even less qualified to speculate on but I would suggest there might be 6 golf course employees, 2 probably part-time farm managers and occasional contractors. Likewise, I am

occasional contractors. Likewise, I am unqualified to comment on the flow-on benefits of a private golf course, perhaps because they are less than obvious or because there are none.

Of course, a cynic might suggest that the farmland identified as potentially capable of being irrigated is being used to substantiate a large portion of the applicants' claim when in reality, it is for golf course use.

Far be it for me...I do though acknowledge that there are flow-on benefits from the respective farming operations but I suggest that the lion's share of any water allocation will be directed towards the golf course and so the focus on economic benefits should be there.

My knowledge of golf course management is limited but it is an industry notorious for its profligate use of water.

I would sum it up as a glorified hydroponics operation for the purpose of growing grass. The tees and greens are constructed of free draining material and sown with grass. This precarious arrangement is sustained by the application of fertilisers and weedicides, the bulk of which must percolate through to the subsoils and end up in groundwater, washed down with large quantities of water; necessary because the base material is incapable of retaining moisture. As a final gesture, the tees and greens are treated with pesticides to avoid unseemly worm castings on the verdant surface.

No doubt, the turf industries are exploring more efficient management techniques and I suggest that this should be encouraged by restricting what has been, effectively, an unlimited supply of water.

With regard to the so-called "losing reach".

It defies belief that this would be the only section of the entire network of open races that could be defined as a losing reach. In my experience as a raceman, water is lost over the whole length of a water race to varying degrees depending on the material that has been used to form the race and the free flowing nature of the race which is influenced by its width and depth and most significantly, by the amount of vegetation in the race which slows the flow and allows more time for leakage.

It seems more credible that it is a convenient justification for taking all of the water flowing down the North Branch because "the water is disappearing underground anyway". This justification doesn't stand up to scrutiny as by Matt Hickey's own advice, the water soaking below the surface probably resurfaces as a contribution to the wetland below Glencoe Road and so any water sequestered at the two North Branch takes is effectively depriving the wetland and the Royal Burn of its natural flow volumes. Dean Olsen's suggestion that this losing reach below the Lower take has limited ecological value because of the presence of overarching willow presupposes that it will stay that way.

Someone might do something about those willows one day. It would be a shame if there was no water to support an environment with more appropriate vegetation.

With regard to the wetlands below Glencoe Road:

I can assure you, it is not a mere "damp spot in a paddock" and its ecological values don't deserve to be defined by the presence or otherwise of exotic fish. Rather, I would prefer to define it by the presence of Harrier Hawks, Paradise and Mallard Ducks frequenting the pond, Oyster-Catchers, Plovers, Pippets, Skylarks, Welcome Swallows, Starlings, Falcons, Tui, Bellbirds. How about we define this wetland by these itinerants, some of whom directly derive their livelihoods and nesting habitat from it while others have indirect relationships on the margins of these diverse environments?

When you start cutting off the lifeblood to these habitats, it's a short step to "draining the swamp".

Questions.

I have a number of questions that have sprung to mind in the course of reading the various submissions and in walking the races and catchment. For the purpose of today's hearing I appreciate that they may need to remain rhetorical but nevertheless I believe they need addressing.

Q.1. Were the losses between the points of take and the meters assessed and will they be considered when making an overall determination?

Q.2. Was abstraction completely shut down for an extended period prior to assessment by Matt Hickey? This would have allowed the natural flow of the North Branch to re-establish itself prior to assessment.

Q.3. Was there any detailed assessment made of the South Branch?

It seems to me that it would have been a very useful benchmark, particularly when talking about "losing reaches" and ecology present as it traverses very similar terrain and carries a similar volume of water.

During the numerous occasions when I observed the North Branch at Glencoe Road completely dry, the South Branch appeared to still be in full flow. Indeed, I have never seen it run dry.

Q.4. Will the applicants be charged for the use of this natural resource?

Q.5. There is water being diverted into New Chums race from an unnamed side creek. Is this a permitted water source?

Q.6. The overflow from New Chum's pond goes into the Brodie race having already been metered above the pond. Does it get metered again at the McQuilkin property, effectively double metering? While I appreciate this would be to the disadvantage of the applicants, it muddies the waters when trying to get an accurate assessment of water take.

Q.7 Will there be a requirement to account for water use ie farm usage as against golf course?

This would be useful information to have at the time of any future application for renewal.

In summary:

It seems to me that these proceedings are not so much about establishing how much water the applicants should be allowed to take but rather how much they shouldn't take as well as how best to achieve the objective of ensuring a healthy, sustained minimum flow for downstream users, wildlife and humans, and to establish a regime of monitoring to hold the applicants to account.

I submit that the lesser time of 6 years be consented as there are long term questions and uncertainties to be addressed over the impact to the wetlands and downstream users.

I submit that 10 litres/sec as a residual flow downstream of the wetland is little enough given the quantity that may be drawn off at the two takes above the wetland.

I submit that control mechanisms at points of take be designed and constructed in such a manner as to prioritise the residual flow over the take.

I submit that the respective water consumption for irrigated farmland versus other amenity uses be metered separately and recorded.

There is a statutory requirement to prioritise the health of waterways and wetlands over human needs and wants.

I would ask that a firm focus be kept on those priorities.

I am intrigued by the suggestion of the formation of a water users group; a suggestion I think from Alexandra King, as a means of maintaining an overview of the needs of the community and the health of the local ecosystem.

While I appreciate that it can't be mandated, it warrants further discussion.

Let's be clear that this is an application to secure the bulk of the surface water on the Crown Terrace and deserves a high level of justification and scrutiny prior to consent and subsequently.

I have trouble reconciling the 1,214,683,000 litres per year of water being applied for to sustain fairly modest farming operations and a private golf course against the potential environmental and amenity impacts as well as the needs of downstream users.

Let's not forget that this water is not owned by anyone. It flows through our respective properties and we have a responsibility to "do no harm" if you will.

Finally, I wish to make the observation that the process for this consent application almost excluded the participation and contribution of the landowners through whose properties the Royal Burn passes and this has created unnecessary extra friction and angst in a process that is already fraught.

The contribution from these landowners, I suggest, should be fundamental to any assessment of the health and well being of the waterways in this country and the potential impacts of any consents being issued. Who better placed to convey anecdotal evidence?

My family and I feel privileged to live in this environment and we know that we have a duty of care and so we plant and trap and control weeds and keep stock out of our own wetland. It is incumbent upon us to protect these wetlands. Their numbers have been in retreat across the nation for too long.

Thank you for the opportunity to comment.

Peter Clarke
Niki Mason

