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

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

"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 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 of the stream. We now live overlooking our wetland but our access is still over the Royal Burn.

Part of my income is derived from managing two water races in the Gibbston Valley supplying water for irrigation to some 39 properties, roughly ²/₃, 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

[&]quot;a swamp"

[&]quot;a groundwater upwelling" and

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.

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 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 must be in the millions.

By contrast, the applicants are wanting to secure a take of 160 litres/sec, almost double the volume, against economic benefits that I am, admittedly, even less qualified to speculate on but I would suggest there might be 6 golf course employees, 1 probably part-time farm manager and 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.

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 essentially a huge hydroponics operation for the purpose of growing grass. The tees and greens are constructed of sand and sown with grass. This precarious arrangement is sustained by the application of fertilisers and vast 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.

One has to ask; is this an efficient or indeed appropriate use of our natural resources?

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, water is lost over the whole length of a water race to varying degrees depending on the material in the bottom of the race and 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 argument doesn't stand up to scrutiny as by Matt Hickey's own testimony, 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

Someone might do something about those willows one day.

way.

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 of overarching willow presupposes that it will stay that

presence or otherwise of exotic fish. I would prefer to define it by the presence of Harrier Hawks, Paradise and Mallard Ducks frequenting the pond (which has had no mention), Oyster Catchers, Plovers, Pippets, Skylarks, Welcome Swallows, the 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 inhabit the margins of these extraordinarily diverse thriving sponges. These are just some of the obvious participants.

When you start cutting off the lifeblood to these habitats, it's a short step to "draining the swamp". Let's not forget that this water is not owned by anyone. It flows through our respective

My family and I are so privileged to live in amongst this diversity 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 are in retreat across the nation.

properties and we have a responsibility to "do no harm" if you

Questions.

will.

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. Was abstraction completely shutdown for an extended period prior to assessment by Dean Hickey. This would allow

the natural flow of the North Branch to establish itself prior to assessment and was there a comparison made with the South Branch?

Q. Why is there no reference to the South Branch except in passing?

It seems to me that it would have been a very useful comparison particularly when talking about "losing reaches" and organisms 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. Will the applicants be charged for the use of this natural resource?
- Q. There is water being diverted into New Chums race from an unnamed creek. Is this a permitted water source?
- Q. 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?

Q. 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.

Submissions.

- -I submit that the lesser time be consented as there are long term questions to be addressed over the impact to the wetlands and downstream users.
- -I am intrigued by the suggestion of the formation of a water users group as a means of maintaining an overview of the needs of the community and the health of the local ecosystem. It warrants further discussion.

Recommended Conditions of Consent:

- 1. No comment
- 2. No comment
- 3. As maximum limits I think they are too high.
- 4. I would prefer to see this higher as half of this, assuming a 50:50 condition, will be harvested at the Lower NB take
- 5. I agree
- 6. I agree
- 7. I agree in principle as this prioritises the residual flow over the take but would like to see the specifics of the design

and suggest that a suitably qualified person be engaged to design it.

- 8. As per 7
- 9. I agree
- 10. I agree
- 11. I agree
- 12. I agree
- 13. I agree
- 14. I agree
- 15. I agree. Reference to Poison Creek? Is this just a typo or is the whole page misplaced?
- 16. I agree
- 17. I agree
- 18. I agree
- 19. I agree

In summary, let's be clear that this is an application to secure the lion's share of the surface water on the Crown Terrace and deserves the highest level of scrutiny prior to consent and subsequently.

I have trouble reconciling the volumes of water being applied for against the merits of a private playground for a handful of participants against the potential environmental and amenity impacts as well as the needs of downstream users.

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 property 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

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 on the ground observations?

We all have a duty of care to these waterways. They have been under siege in this country for too long.

Thank you for the opportunity to comment.

Peter Clarke Niki Mason Merlin Clarke Cilla Clarke