

My name is Jef Desbecker and together with my wife, Robina Bodle, we have lived on the Crown Terrace since late in 1988. The Royalburn Creek flows through our property, south of the Crown Range Rd.

We have before us a resource consent application by Russell Coutts, BSTGT, and Tony McQuilkin to take water from 2 of the 3 major creeks providing water to the area known as the Crown Terrace. These 2 creeks, the Royal Burn and New Chums, have their headwaters high on the northern and western aspects of Mt Sale and Crown Peak. Early in the last century, long before the specifics of hydrology and water quality were understood or monitored, mining permits for water use and abstraction were issued by the powers that be for amounts of water that had no regard or relevance to actual flow, or fluctuations of flow, in these creeks.

And that is why we are here. Russell Coutts et al want more water than physically flows in the creeks and through their use of this water, the quality and quantity of any water flowing past or exiting their properties, or moving into the underlying aquifers, is being severely compromised. You have already heard from a number of others on this, but this is my view and it will help to clarify what I present further on.

Here are some important figures taken from the Ministry of the Environment River Flows website:

New Chums Creek has a Mean Annual Flow of 19.8 litres/sec and a Mean Annual Low Flow of 4.7 l/s.

Royalburn North Branch has a MAF of 33.7 l/s and a MALF of 10.7 l/s.

These 2 creeks combined have a total MAF of 53.5 l/s and a combined total MALF of 15.4 l/s.

It is necessary to understand that the definition of Mean Annual Low Flow is (from Land Air Water Aotearoa): "This is how low the flow gets in a typical year. The lowest flow for each year is averaged across recorded years to estimate the MALF (Mean Annual Low Flow). Flows were averaged across 7-days before calculating the minimum for each year. To avoid splitting a single drought event across years, we use a water year (July to June), instead of a calendar year (Jan-Dec)". I believe records to be at least back to the mid 1970's by the Ministry of the Environment so the MALF figures have been achieved by averaging at least about 50 years of data.

The BSTGT application has asked to roll the allocations for their 3 current deemed permit takes into one permitted l/s amount with an overall annual m³ amount. The original application, lodged in April of 2019, sought combined allocation amounts at the 3 points of take that were 3 x the MAF and over 10 x the MALF of the 2 creeks combined. In their amended application, lodged in November of 2020, BSTGT graciously reduced the requested combined allocation amounts at the 3 points of take to 1.67 x the MAF and over 5.8 x the MALF of the 2 creeks combined. These

requested allocations are unchanged in the latest iteration of their application, lodged in early March 2021. The annual amount currently being requested is 1,822,608,000 litres which equates to 57.8 l/s if water were to be taken 24/7, 365 days/year. This is still 1.08 x the MAF of the 2 creeks combined and 3.75 x the MALF of the 2 creeks combined. To achieve this, the applicant has stated that, "...rates sought will allow the applicants to harvest higher flows when they are available and store this water in onsite ponds....".

In other words, because the 2 creeks do not provide as much water on a regular basis as the applicant is requesting, the applicant seeks to take all the water at the 3 points of take whenever it is available to achieve their requested allocations and virtually run the creeks dry, leaving virtually dry creek beds beyond their points of take and leaving no water to find its way into the underlying aquifers fed by these major water sources in this area.

In a pathetic gesture of goodwill, the applicant initially stated that there would be "...a visible residual flow past the point of take at all times", but in their amended applications, they further defined this to read "...maintain a connected visible flow immediately downstream of the point of take for a distance of no less than 50 metres." What exactly is a "connected visible flow"? And 50 metres? Really? That's about 3 x the length of this room! By their own admission, they have stated that they have measured water losses to ground of between 7.8 and 13.2 l/s beyond their Lower take in the Royalburn North Branch. This indicates that a substantial amount of water travels through the substrate of the creek beds into the underlying aquifers. Where else would it be going? If there is only a trickle of water making it to the 50 m mark ---well, this is an insult on many fronts.

Hilary Lennox of Ahika Consulting cheekily quoted me from one of my submissions in her latest set of amendments as if I was in agreement with her. This is not the case. I did indeed state that, "In the very dry summer months, when the creek runs low or it is dry in the vicinity of Glencoe Rd, the creek is naturally fed by swamps and seeps west of Glencoe Rd which bring the Royalburn back to a modest flow." However, the following sentence of my submission, which she neglected to quote, was, "If the Royalburn North Branch is run dry by BSTGT...what will happen to the aquifers along the Crown Terrace? Will these seeps and swamps dry up and cease to feed the lower Royalburn? Will we be without drinking water? ...Will our well run dry because the water tables have dropped...?"

In the original 16-page Resource Consent application prepared by Hilary Lennox dated 26 April 2019, there was a lot of information on the infrastructure of dams, weirs, water races, pipes etc that was in place to provide water for irrigation, domestic use, and stock water supply. There were figures and tables showing how much water was currently allowed in their hundred-year-old mining permits and how they were gallantly applying for a much-reduced allocation. On page nine of the 16 pages, the words "golf course" were written when describing the attributes of the "productive

farm” along with several dwellings and a claim that 160 ha were irrigated...that is a lot of irrigation! This was the only mention of a golf course in the 16-page document and there was no mention in the entire application of a commercial turf growing business.

In the amended application, lodged in November of 2020, the words ‘golf course’ appeared only once, in a caption of a photo showing purported irrigated areas of the Coutts and McQuilkin properties.

By the time the third iteration of this application rolled around in March of 2021, the cat was out of the bag and there was extensive mention of the golf course and its irrigation requirements. For the record, I could not care less if Russell Coutts has a golf course, a polo field, or a star gazing planetarium on his property, as long as he doesn’t mess with the surrounding natural environments. I pass by the Coutts and McQuilkin properties often and I seriously question the claim that McQuilkin irrigates 15.2 ha and Coutts irrigates 160 ha. I would like to see some evidence of this. I see no evidence of the large irrigation machinery required to irrigate acreage of these amounts. It is more likely that with a 9-hole golf course construction completed, and this may already actually be 15 holes, and a resource consent application lodged with QLDC, or maybe already consented, to enlarge that golf course to 18 holes, the water allocations sought are primarily for maintaining the golf course and the turf growing business.

Most of the photos used in the 3 iterations of this application are from many years ago and show a predominance of farmland. The current Google maps show approximately 25 ha of developed golf course and approximately 8 ha of turf growing...to the best of what I can discern. Again, I do not really care if there is a golf course or not, as long as the application is truthfully transparent and the aquifers and surrounding groundwaters are not degraded, polluted, or diminished, and the creeks feeding the Crown Terrace are also not degraded, polluted, or diminished.

I could probably continue to bore you for hours picking holes in the BSTGT application and their amendment documents as I have already done in my 2 previous submissions, which you have apparently read, and which a number of passionate submitters and expert witnesses have done, but the main problem with this application, is that it blatantly flies in the face of the National Policy Statement for Freshwater Management 2020 which came into force on 3 September 2020. The fundamental concept of this document is Te Mana o te Wai which is a concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. THE NPS APPLIES TO ALL FRESHWATER, INCLUDING GROUNDWATER.

This NPS mandates that all regional councils, including the Otago Regional Council, must now make decisions about freshwater that prioritises the health and well-being of freshwater, now and

into the future. There are no grey areas in the NPS. The word “**must**” is used throughout the document and the priorities of Te Mana o te Wai are, in order of importance:

1. The health and well-being of water bodies and freshwater ecosystems
2. The health needs of people (such as drinking water)
3. The ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future

The framework of the document is clear. Principle #4 of the 6 principles making up the framework of the NPS states that “the responsibility of those with authority for making decisions about freshwater do so in a way that prioritises the health and well-being of freshwater now and into the future”. **This is exactly why we are here in this room right now.**

The objectives and policies of the NPS are clear. **The first and foremost objective** is that the health and well-being of water bodies and freshwater ecosystems has utmost priority. The health needs of people - drinking water - is next in priority. And the last consideration is the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future. I would think that it is very clear that the watering of a private golf course and growing grass to sell commercially fall squarely into the last category.

All of the policies of the NPS can be related directly to the BSTGT application however, the following policies deserve special mention:

Policy 5 states that freshwater must be managed to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved. This application is clearly an attempt to not only degrade 2 large water ecosystems further but to totally destroy them.

Policy 6 states that there must be no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted. If the flow of the Royalburn is curtailed directly uphill geologically from a major natural inland wetland, and the water supply to the underlying aquifer is decreased, it is only a matter of time before this wetland is degraded. This wetland is noted as the source of improved flow to the Lower Royalburn downstream from the confluence of the North and South branches of the creek which then supplies drinking and stock water to a significant number of properties. I am sure there are other natural wetlands on the Crown Terrace that rely heavily on water entering the underlying aquifers from seepage through the substrate of the creek bottoms of New Chums and Royalburn creeks and these would also be subject to degradation.

Policy 9 states that the habitats of indigenous freshwater species are protected. These species are defined in the appendices of the NPS as microbes, invertebrates, plants, fish, and birds. If the natural flow of the creeks is diminished beyond a certain level, all of these species will be affected.

Policy 11 is extremely relevant to this application. It states that freshwater must be allocated and used efficiently, **all existing over-allocation is phased out, and future over-allocation is avoided**. The time is now to make decisions on this application that clearly support the objective of the NPS, prioritise the health of the creeks, and allocate amounts of take from these 2 creeks that support healthy ecosystems in the creeks, not a green golf course.

Policies 13 & 14 state that the condition of freshwater ecosystems must be systematically monitored over time, action must be taken to reverse deteriorating trends where freshwater is being degraded, and the information from the monitoring must be regularly reported on and published. In my conclusions, I will make recommendations pertaining to this.

EVERY COUNCIL MUST GIVE EFFECT TO TE MANA O TE WAI AND IN DOING SO, THEY MUST APPLY THE HIERARCHY OF OBLIGATIONS.... THE HEALTH AND WELL-BEING OF THE FRESHWATER ECOSYSTEMS ARE **PARAMOUNT!!** Everything else takes a back seat.

In conclusion, and in response to the proposed conditions put forward by Hilary Lennox and BSTGT in the application and its amended forms, I would suggest the following:

- 1) The applicant currently has an open water race transporting water from New Chums creek to the south along the base of the hills that cleverly collects water from other un-named flowing drainages along the way for which they have no permits. This open race must be destroyed and replaced with a pipe so that these drainages can return to flowing freely along their entire natural course. I believe there are also other small drainages that have been illegally redirected in a similar manner which must be restored to their natural free-flowing water course.
- 2) Expert witnesses for the applicant have made much ado about the low flow levels of the RBNB in certain areas, losing reaches, etc, stating that this creek is perennial in some places and often drying up in others. It should be pretty obvious that if the applicant is taking a large amount of water from their upper take, then taking another large amount at their lower take, it's not rocket science that the creek is going to exhibit low flow, or no flow, further downstream. People who have lived on the Crown Terrace more than thirty years have no memory of either the North Branch, South Branch, or the Lower Royalburn ever running dry prior to the arrival of Russell Coutts on the Crown Terrace. I suggest these expert witnesses in support of the BSTGT application have not told the whole story of what was happening upstream when they made their observations.
- 3) I suggest that allocation amounts be set that give effect to Te Mana o te Wai and preserve the health of New Chums and Royalburn North Branch creeks. I would think that taking a maximum of 5% of the total flow from any one take, at any one time, would be sufficient to achieve this. In this day of advanced technology, I am confident there are diversion setups that

automatically adjust for changes in flow volume, and I would suggest that the applicant be required to invest in hardware that will allow for this. If the applicant feels he needs more water, he should investigate drilling bores on his properties. Contrary to what has been implied in the original application by Hilary Lennox, one does not need to drill down to the level of the Arrow River to reach water as is evidenced by the number of wells and bores currently operating on the Crown Terrace (6 that I know of but probably more like a dozen).

- 4) There should be only one take on New Chums creek and only one take on Royalburn North Branch creek.
- 5) The rolling of multiple permits into one should be denied for obvious reasons already covered.
- 6) The consent term should be for a maximum of 5 years so that monitoring of the data (see below) and the health of the creeks and ecosystems can be evaluated, and assurance can be had that those trends are moving in the 'improved' and not the 'deteriorating' direction.
- 7) As most irrigation is required during the warmer months when creek flows are typically lower than at other times of the year, it should be assumed that the water usage will only be needed for 6 months. The reasoning is that if one equates the 1,214,683,000 litres requested annually in the latest iteration of the application's Proposed Consent Conditions, this equates to 38.5 litres/sec over 12 months but 77 litres/sec over 6 months. Once again, these figures have no regard for the health of the creeks, the other downstream users, or anything other than taking all the water. I would suggest that there be no yearly allocation, only a litre/second allocation as the applicant has sufficient storage to handle the variances of flow in the creeks at different times of the year.
- 8) The residual flow condition proposed by BSTGT is a joke. **There should be virtually no visually discernible decrease in flow past the point of take in New Chums or Royalburn North Branch creeks.** This is a condition that all other surface water users must abide by, the same should apply to Russell Coutts.
- 9) The idea that the applicant wants to monitor the flow of the Royalburn at a point (NZTM2000 1274996E 5011547N) below the large inland wetland that augments the flow in the creek is ludicrous and has no relevance. This point is the main Lower Royalburn which has the combined volume of the North Branch, South Branch, and any flow stemming from the wetlands west of Glencoe Rd and north of the Crown Range Rd. See 10 below.
- 10) Monitoring and gauging:
 - a) The cost, supply, setup, and maintenance of all the monitoring and gauging suggested below should be covered by the applicant but inspected before operation by an independent IQP contractor.
 - b) Accurate, wifi capable flow gauging must be installed in the flow of water into the applicant's 'take' pipes as well as in the flow of water moving past the point of take in the creek. These are the only monitoring locations that make sense.

- c) Access to the take sites on New Chums and Royalburn North Branch creeks must be user friendly and maintained so that a person can easily walk to the take point.
- d) All the natural wetlands on the Crown Terrace north of the Crown Range Rd and east and west of Glencoe Rd should be mapped and monitored by the applicant as per section 3.23 of the NPS. This will give some insight as to effects on the aquifers feeding these wetlands from flows in the creeks and allow for monitoring into the future.
- e) As there are a substantial number of people downstream of the BSTGT properties and Russell Coutts's golf course specifically, an accurate wifi capable monitoring station should be installed in the Royalburn Creek at point NZTM2000 1274996E 5011547N to record levels of nutrients on a weekly basis as per section 3.13 of the NPS. There should also be, at this geographic point, weekly testing for pesticide and herbicide levels in the water from Watercare in Queenstown.
- f) Golf courses are notorious for the amounts of pesticides and herbicides required to establish and maintain pristine fairways and greens free from weeds and in-ground pests. Many golf courses around the world, especially in the USA, are now being run organically. There is currently a productive 485 ha farm on the Crown Terrace growing a variety of commercial crops, running mobs of sheep, producing eggs from thousands of chickens, and growing vegetables, all organically. I would suggest that Russell Coutts (BSTGT) transition the golf course from its current regime to that of one that is totally organic. One needs only to look at the problems currently being experienced with Lake Hayes to realise what can happen downstream of a golf course that leaches pollutants into surrounding waterways and groundwaters.
- g) Any suggestion by the applicant that the costs of these proposed conditions or the gauging and monitoring is prohibitive should be ignored, for obvious reasons. If they can afford to build an 18-hole private golf course, they can afford to look after the environment in the process.
- h) ORC (Alexandra King) has submitted a Section 42A report which very handily hides behind subjectively interpreted current legislation, allowing for a decision which boasts blatant disregard for virtually all the common sense and factual presentations of a significant number of opposing submissions to this application. Her opinion as to what is "minor" I find abhorrent from someone supposedly representing a government body tasked with looking after our natural resources.

To not see that this application is a non-transparent, duplicitous attempt to wreak havoc to natural environments and other domestic users right across the entire Crown Terrace, solely for the benefit of the applicant, is an abuse of authority invested in the ORC by ratepayers.

I believe the recommendation(s) of the Section 42A report should be entirely ignored in any decision of this hearing.

This application as it stands should be declined...and this process should really start again as Publicly Notified.

Thank you for listening