

## **IRRIGATION WATER STORAGE**

**Members are aware the Board has been investigating and applying for resource consents to construct a water storage facility on the back 9 (B9) and can confirm we now have consents from Otago Regional Council (ORC) and the Queenstown Lakes District Council (QLDC) to undertake that development.**

**There has been a lot of “grapevine” feedback from members about this and comments ranging from “not required” to “there are better ways to achieve storage”.**

**However the Board considers this is the best option and we should proceed with the project.**

**The rationale behind this decision is really quite simple.**

### **USE IT OR LOSE IT**

**To ensure the Club will have sufficient water after October 2028, when the existing permit expires, for our future water requirement to satisfactorily irrigate B9.**

**Even under the current permit we can fall short in a dry season and in the future when the Club wishes to update the irrigation there is insufficient supply under the existing permit let alone from the likely reduced take upon a renewal under the current circumstances.**

**Water permits are based on an annual volume which is then allocated to a monthly, weekly and daily maximum use.**

**Advice from Landpro (backed by our experience with the renewal of F9 Permit and other evidence from the Rural sector) is that based on historic use ORC would be unlikely to grant a renewal at the current level and will base a renewal on what has been used over the previous 3-5 years.**

**Added to this the ORC currently utilise the Aquiline Guidelines to determine reasonable and efficient irrigation volumes which, without any further evidence or supporting facts, most likely would result in a renewal annual take of 45,430 m<sup>3</sup>/y for B9. To counter this we need to demonstrate higher usage.**

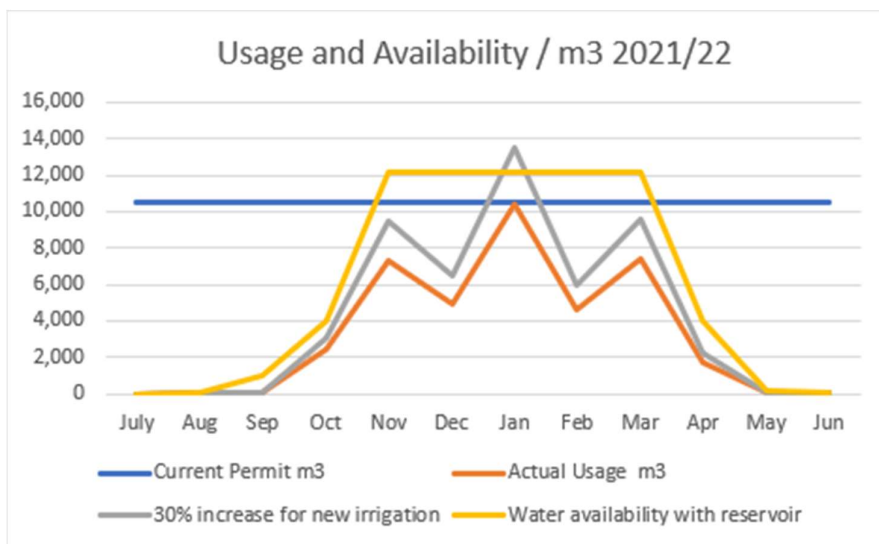
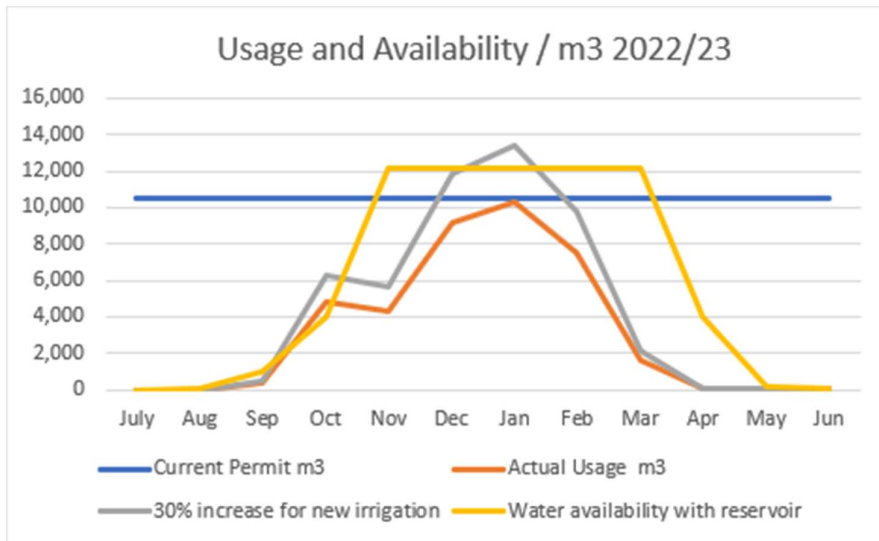
**On top of everything ORC consider the Cardrona River Aquifer to be over allocated and take every opportunity to cut back allocations.**

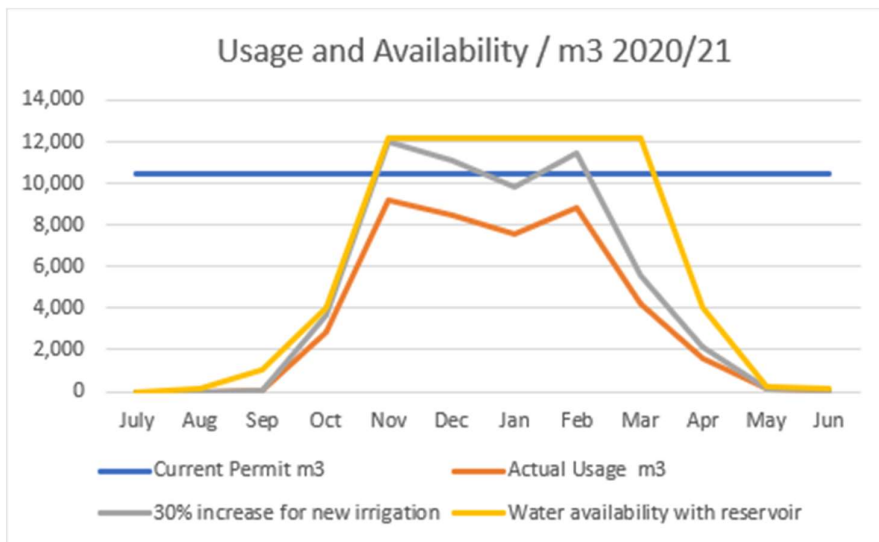
**We are currently pumping at the maximum rate per day and can't increase that under the existing permit however our annual usage is only 42,000m3 compared to our permit allowance of 126,000m3. Occasionally we do breach the daily limit but advise ORC immediately and why. This may result in a small fine.**

**Although constant and continued breaches will result in the cancellation of our permit!!!**

**Consequently if we don't increase the annual usage as soon as possible a permit renewal will be based on the current annual usage. When reducing that into monthly, weekly & daily takes we will not have insufficient water for the existing irrigation let alone an updated system in the future.**

**This graph demonstrates the seriousness of that outcome.**





**By building a storage facility we will increase the our take considerably over the next 4 years (by filling and using water from that facility) which will push our used annual amount to a much higher amount than what would be the case if nothing was done. Also it creates a top up water reserve for the irrigation season which will allow us higher daily usage in really dry periods.**

**Therefore the Board considers to take the risk and do nothing, hoping to get a satisfactory Permit renewal in 2028, is a serious gamble and should not be considered from a governance or asset protection point of view.**

**Not only do the Board but all members have an obligation to future generations to protect the Club's assets as best we can, as those have done in the past, so that they can enjoy this great course.**

**Going forward at some point the Club should upgrade the irrigation on B9 to match the front thereby providing a consistent level across the 18 holes. To do so will require a higher volume of water therefore we need to protect our consent as much as possible.**

**By constructing a water storage facility of a size to help future proof the course requires a reservoir.**

**Other storage methods have been considered, such as tanks, however to be effective approx. 500 x 30,000l tanks which would cost in excess of \$2million before any of the setup, line and pumping costs are added. Although it would not be feasible to install that number of tanks on the course both physically and extremely unlikely the Council would approve that number even if we could. Underground is not an option either, to costly, difficult to maintain and creating a health & safety issue.**

**Although we cannot get firm quotes for various parts of the project as final plans & specifications have not been compiled we have estimates from a number of contractors and knowledge regarding pumping and irrigation material (piping, fittings etc) and believe we can deliver a storage reservoir for \$550,000.**

**We have retained cash in anticipation of this project coming to fruition and can complete from cash flow.**

**There will be no call on members or levies proposed.**

**As always with projects like this if not done properly with a meaningful outcome then it is money wasted therefore this proposal is of a scale that will provide a worthwhile future contribution to the Club for a long time.**

**There is also a great side benefit in the aesthetics created. By having the storage facility as an integral part of the B9 character is established which will make B9 much more interesting and will be a real feature on holes 12 & 17 and from the tee of 18**

**A positive flow on from the build is that excavation material will be used to fill the gullies on 12, 18 & soften the base of the gully on 10 providing a level more useable area especially during the winter for 12.**

**Ongoing costs for the Club will/may arise from:**

**Cleaning every 5-10 years depending how much organic material builds up at a current estimate cost is \$5,000 – \$10,000**

**Liner Repairs; the liner has a 25 year warranty (except any damage caused by golfers walking in trying to recover balls will not be covered!!!) there should be no reason for leaks & repairs. In David Mahoney's experience he has never known a liner replaced on an irrigation with some well over 30 years old.**

**Algae but unlikely as bubblers and a fountain have been allowed for to create water movement which combined with the continued filling and drawing of water should elevate and issue with algae.**

**Filter Cleaning. Proposed to have a floating intake which will be readily accessible therefore will be easily handled by staff.**

**The resource consent application prepared by Landpro is attached which provides you greater detail of the project.**

**From the WGC Board.**