

## Site Visit Report

I attended a site visit for Bendigo Station Limited (RM20.079) on Tuesday the 15<sup>th</sup> of September between 10 am – 12 pm.

I was taken around the site by Will Nicolson (agent, Landpro) and Grant Porter (farm manager). From the office at the farm, we travelled to the intake. On the way, we inspected Bendigo Creek in various locations. Grant noted that they had received a substantial amount of water (for this time of year) recently, so flows would appear higher than usual. At the confluence with the Clutha, it was completely dry, and it was evident that there was very little flow through it due to Rye Grass in the bed upstream (**Figure 1**). Further upstream, it remained dry until a river crossing where there were small flows (20-30 L/s). Grant noted that it was unusual to see flows at this point and it would typically be dry. It was clear that this was the case given the fences that ran through the river (around the ford) were small mesh with no debris. If there were higher flows regularly, it would be expected that this would require regular clearance of debris - it would seem impractical to put the fence in if this was the case (**Figure 2**).



*Figure 1: Bendigo Creek towards the confluence with the Clutha River/Lake Dunstan.*



*Figure 2: Bendigo Creek at culvert crossing.*

We then arrived at the intake (**Figure 3**). Flows at the intake were significantly higher with pools and riffles in a large boulder bed. Grant explained how the water was abstracted via the open pipe and conveyed via gravity fed piping to the junction box (**Figure 5**) (where the meter is located) followed by the dam (2 km). At the point of take, a valve controls flow (**Figure 4**) – it is noted that this is also managed at the meter. This was upgraded in 2018 by the original concrete and copper pipeline. He noted that the intake had the ability to abstract up to 180 L/s but currently it just takes the consented 55 L/s.



*Figure 3: Intake pipe.*



*Figure 4: Intake pipe with control valve.*



*Figure 5: Pipeline conveying water from the point of take across Bendigo Creek towards the ponds/junction box.*

Grant explained the irrigation area and the area for expansion. A large cherry development was being established and along with this, an additional centre pivot was to go in on a part of land that is currently used for dry land farming. A subdivision was also proposed in the area of the application that was indicated for viticulture. Water for this would be limited to domestic water and a small portion for curtilage/irrigation of crops. These additional areas of water use would be supplied by the proposed supplementary take of 110 L/s (enabled through storage).

We then inspected the location of the water meter and the second valve for controlling flows (**Figure 6**). This is where water is conveyed via the junction to either the dam or for stockwater drinking (**Figure 7**). Grant estimated only a very small portion of water was taken for stockwater (5L/s).



*Figure 6: Second valve, junction and meter.*



*Figure 7: Stockwater pipe.*

We then moved on to the dam, first inspecting the overflow (Figure 8Figure 10, followed by the dam itself. Grant demonstrated how water is fed into the pond through a valve near the spillway. It is noted that this makes three valves between the intake and the pond in order to restrict water. Grant discussed the ecological significance of the dam (see **Figure 11**).



*Figure 9: Photo of lake from boatshed side.*



*Figure 8: Spillway weir looking downstream*



Figure 10: Spillway diversion channel flowing towards Bendigo Creek.



Figure 11: Sign showing features of pond (ecological)



Will asked about the damming rules and asked if damming of water would include damming beneath the dam surface – dug into the ground. I advised that damming would be the impoundment of water and if it is caused by digging, this would not be impounding (rather a bore, albeit a large bore). Will noted that with this in mind the volume impounded behind the dam may in fact be much less than what was initially anticipated. I advised that I am happy to consider further evidence if required and the requirement for this consent may be lifted (if it could meet the permitted thresholds).

We then left the dam and travelled back to where we started. On the way, I also inspected the outflow to Bendigo Creek. This is a discharge that comprises of any water that is overflowed from the dam. It seemed that this discharge was fairly operational.

We discussed the submissions from Fish and Game and Aukaha. Will advised that he had been in contact with Aukaha and had offered a shortened duration of 15 years which is in line with F&G's relief. He advised that Aukaha would not budge on 6 years but noted that they were not concerned with any other aspect of the application. Will raised concern over the added cost and time associated with going to a hearing over just the duration. He asked if there was a mechanism to avoid this. I advised that an option could be to undertake conferencing where we could have all parties discuss the application and come to agreement on the aspects of the application that remain unresolved. This could be provided in a report or similar to the hearing panel so as to reduce the time required for the hearing and to streamline the process. Grant advised that he would be agreeable to this. I advised Will that I would look into this and come back to him.

This concluded the site visit. I advised that I would get in contact to confirm how we can proceed for the conferencing.