

From: [Bishop Farms Oxford Ltd](#)
To: [Plan Hearings](#)
Subject: ATTN: Hearing Office PC7 Hearing Evidence for Darcy Bishop
Date: Friday, 17 July 2020 1:04:04 pm
Attachments: [DarcyBishopPC7EvidenceSubmissionLB.docx](#)

To Whom It May Concern,

Please see attached the evidence for Darcy Bishop in relation to PC7.

Regards,
Darcy Bishop

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under: the Resource Management Act 1991

in the matter of: Proposed Plan Change 7 ('PC7') to the Canterbury Land and Water Regional Plan ('CLWRP')

Statement of evidence of Darcy William Kenneth Bishop in support of
submission by Bishop Farms Oxford Limited

Dated: 17 July 2020

STATEMENT OF EVIDENCE OF DARCY BISHOP

INTRODUCTION

- 1 My full name is Darcy William Kenneth Bishop.
- 2 I am a director of Bishop Farms Oxford Limited ('Bishop Farms') and provided a submission (Number 325) on behalf of Bishop Farms on proposed plan change 7 to the Canterbury Land and Water Regional Plan.
- 3 Bishop Farms owns a 285-hectare dairy enterprise on German Road, Waimakariri District, Canterbury. We employ three staff members and winter graze our dairy cows on two local farms.
- 4 I have lived in Oxford for 7 years. Our staff and family members are heavily involved in the community. My children attend Cust Pre-school and Cust Primary School. Our employee's children attend Oxford Area School and their wives work in the local aged care facility.
- 5 We belong to the Oxford Rugby club, Oxford cricket club Waimakariri Golf Club and Oxford Workingmens' Club. My father, Wayne Bishop, is involved in WIL remuneration committee.
- 6 We support all local businesses and we use local rural service providers.
- 7 I am a shareholder of Waimakariri Irrigation Limited ('WIL').
- 8 I am a fourth-generation dairy farmer and I pride myself on always adapting to an ever-changing industry through technology that makes farming both easier and better for the environment.

SCOPE OF EVIDENCE

- 9 My evidence provides:
 - 9.1 an overview of our farming operation and environmental compliance requirements.
 - 9.2 the implications and effects of the proposed rule framework.
 - 9.3 An overview of how PC7 will affect the whole community

OUR FARMING OPERATION

- 10 As noted previously, we run a 940-cow family owned dairy farm, on German Road in the Waimakariri District. The total area of our farm is 285ha that is all

under irrigation. On farm we have 9 centre pivots and a small area of sprinklers to cover the corners so that all of the effective area on farm can be irrigated.

- 11 Bishop Farms stocks 940 dairy cows and farms a "System 4" production system. System 4 of the five production systems described by DairyNZ is where approximately 20 to 30% of total feed is imported onto the farm and used at both ends of lactation and for dry cows. This system works very well in our farming operation because it means our cows are always fully fed throughout the season even in the colder months when grass growth slows down significantly.
- 12 All of our irrigation applications are made as informed decisions using a combination of technology with four soil moisture meters under the REGEN system located under the three largest pivots. With this technology we are able to take into account the available water in the soil for the pasture, the weather forecast including likelihood of rainfall events and the capability of our irrigation system to minimise the risk of drainage events occurring due to overwatering of the soil. It also gives us a ground temperature reading so we know when we can irrigate, apply fertiliser and effluent to get the maximum returns and minimal risk of leaching on farm.
- 13 WIL requires us to have REGEN which promotes good management practice decisions around irrigation on farm, and also when we should be applying effluent. Our effluent is applied following good management practices, that are audited as part of our FEP audit on farm.
- 14 The water for irrigation comes via WIL's open channel races, which feed into our 10ha storage pond (300,000 cumecs). Our pond allows us to store approximately a month of water, depending on seasonal demand. This storage allows us to manage our irrigation season demands more accurately as we can continue to make as and when required scheduling decisions in the lead up to when, the scheme goes on restrictions, or is fully restricted due to river flows.
- 15 When we first purchased the farm in 2014, we upgraded the irrigation from long line sprinklers to centre pivots with the investment in 6 wiper pivots. This was costly but we understood the importance of being more efficient and how it was better for the environment. We have invested in more technology on these pivots to make sure that the largest pivot has GPS and solenoids which turns the irrigation water and effluent off, so the pivot walks over the main cow lane keeping it dry. We also have plans to invest GPS and solenoids on another pivot on farm in the New Year.
- 16 We have also invested in re-nozzling 2 of our pivots on farm, this means that we can irrigate more efficient especially during the shoulder months of the season as we have better control over how much water is applied on farm.

- 17 On farm all of our water used for irrigation is monitored via telemetry which both WIL and ECan monitor. This is done at both at our pond intake and at our pumps for the pivots.
- 18 We have invested in a stock underpass on farm. This has given us both a health & safety benefit and environmental benefit. We no longer have the risk of our stock and staff on the road stopping traffic, and as a result we have better cow flow and the cows are not stopped so effluent does not build up on the laneways if they were waiting to cross the road.
- 19 We utilise industry professionals in all aspects of our nutrient management and planning to ensure good management practices are followed. Local agronomists ensure that are managing our pastures on farm effectively. Local fertiliser experts' soil and herbage test on farm to ensure that we are only applying what nutrients are required for plant growth. Local fertiliser spreading contractors use proof of placement (Trac Map), and calibrated machinery (Spreadmark Certified) to spread all fertilisers on farm which gives us comprehensive records for compliance and ensures that plans are followed.
- 20 We ensure that when our cows are away for winter grazing on two other local farming properties that their management is in line with the practices we do on farm. We are actively involved in making sure that not only the animal health and feeding of our animals is top priority, but the environmental conditions are taken into account as well. Both of our grazers are experienced and have plans in place so they can minimise the nitrogen leaching and environmental impacts that comes from wintering stock on forage crops.
- 21 As part of WIL we have an FEP and are required to be independently audited. This involves showcasing our on-farm management practices, so they can be compared with the industry good management practices. This requires use to keep records such as stock numbers on farm, fertiliser use, soil tests, effluent irrigations etc to demonstrate how we do things on farm. We currently hold a B grade for our FEP audit.
- 22 The farm environment plan process has been a useful tool to show us what we can do to make our farming operation more efficient and where we can make improvements for both profitability and the environment. We have received B's on both occasions and have found the audit process beneficial to our farming business. To receive an A is what we strive for, but this involves spending money on capital expenditure on improving irrigation etc. We have already invested heavily in on farm environmental initiatives and if our farming business is and will continue to do so providing our farm continues to be profitable under the proposed rules for PC7.

EFFECT OF PC7

- 23 The proposed changes under PC7, for sub area E that are farm is located in will have a major impact on our farming business. The long-term reductions that have been proposed are daunting and effectively de-value our farming

business as under the level of reductions required no-one would be able to run a profitable farming system on our property.

- 24 Under PC7, we would have to severely reduce our farming operation. This will not only affect the profitability of our farm, but also the livelihoods of our staff who would face reduced hours or job losses as the farming operation is made smaller and less profitable. We pride ourselves on keeping our staff long-term and investing in their personal development and skills. They play an important role in both our farming business and the local farming community.
- 25 We are aware that changes need to be made and have already invested in infrastructure and practices that make sure our farm is operating sustainably.
- 26 Currently our farm already operates 17% below GMP, due to our investment and willingness to adapt through using good management practices on farm. By 2040 we will have to further reduce our nitrogen leaching by an additional 13%, to achieve this we will have to make major changes on farm such as reducing fertiliser, reducing cow numbers and eventually have to build more infrastructure like a concrete feed pad and buy in low nitrogen feed like maize and cereal silage. The cost of these changes impacts not only the profitability of our business as we look to reduce our operating profit by 30%, but also the ability to service the farm business debt.
- 27 These requirements will put us in a position where we will not be willing to continue investing in capital expenditure on farm, such as investing in new technology and making improvements to our irrigation which will be beneficial to the environment. Technology is always evolving, as a farming business we embrace the advantages it can bring both to our business and the environment. Advances within the next 10-20 years are likely to be massive game changers, and we want to have the ability to embrace this, but the current PC7 reductions will not allow us to do so.
- 28 When we purchased our farm in 2014, we made sure to do our due diligence both for the farming business but also to consider the longevity of the farm under the proposed environmental regulations. Back in 2014, our farm was an area that did not require the highest level of reductions within the catchment, it was the polar opposite of the PC7 reductions. The zones have changed completely with the area classes as Sub Area A being classed as having the greatest impact, and reductions required.
- 29 We purchased this farm with the view of having a long-term investment, one where our children would have the opportunity to be the 5th generation of dairy farmers in the family. We made the decision to purchase a farm that had the infrastructure and adaptability to change, but never considered that there would be such a change proposed of PC7.
- 30 We are concerned that the reduction in farming operations in our area will have a knock-on effect to the community and may even erode the financial viability of businesses within the local towns.

- 31 Like all businesses we like to have peace of mind and certainty that we can continue to operate. The proposed PC7 reductions have imposed a large level of stress and uncertainty for our farming business, and this has taken a personal toll on myself and others in our family and farming business.

CONCLUSIONS

- 32 We believe we are good custodians of the land and have been working in partnership with ECan for the past six years having effluent audits and checks on our irrigation storage pond for compliance
- 33 We made informed decisions back in 2014 when we purchased this farm, taking into account the environmental regulations that we would have to adapt to and these have completely changed in the last 6 years, which does not provide us with a strong level of certainty for the future of our business.
- 34 We have actively taken part in the WIL FEP auditing program, use good management practices on farm and continue to invest in environmental improvements on farm.
- 35 There needs to be recognition of and incentives for environmental initiatives that are not recognised by the Overseer tool, which is used to determine nitrogen-loss at a farm scale. Farmers want to continue to invest in activities such as native or riparian planting and exploring new technologies and practices.
- 36 We believe that having forecast reductions proposed until 2080 does not allow us the opportunity to evaluate what the changes we have already done on farm, and changes we will continue to make in the short term are having on the nitrogen leaching levels in the catchment. This does not give us a feeling of certainty to make large scale investment and changes, if we are unable to have a profitable farming business beyond 2040.
- 37 We feel that it is grossly unfair to now fundamentally change the regime as proposed without a proven approach to nitrate reductions. We feel that it is essential that the Plan moves from a “methodology” to a “measured science” basis for determining the appropriate nitrate management process, and reductions if required.
- 38 I believe as farmers we have a role to play in promoting what is best for the environment and need to have our efforts to date recognised.
- 39 We are aware that changes need to be made. But these changes need to be sustainable and supported by science and technology. Accurate data must inform the district-wide and area-specific nitrate concentrations, demonstrating whether the projected targets are being met and the if there is a further need for reduction.
- 40 I understand that WIL has proposed an alternative rule framework and I support their submission and the outcomes sought.