IN THE MATTER OF The Resource Management Act 1991

AND

IN THE MATTER OF resource consent applications by Rangitata Diversion Race Management Limited (**RDRML**) to the Canterbury Regional Council and Ashburton District Council for resource consents for the construction, operation and maintenance of the Klondyke Water Storage Facility, its associated water takes from and discharges to the Rangitata River, and all associated activities

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STATEMENT OF COMBINED EVIDENCE OF MARK MULLIGAN, HAYDEN MACKENZIE, NICHOLAS WARD FOR GERALDINE WATER SOLUTIONS

1st May 2018

Introduction (Mark Mulligan)

1. My name is Mark Edgar Mulligan and, with my wife and children, own a farm in the Orari River catchment, adjacent the Coopers Creek area. Our farm is a 200 ha irrigated dairy farm. I was part of the Orari Water Society, who was involved in the formation of the Orari River sub-catchment plan and a member of Geraldine Water Solutions (GWS).

2. With me today is Hayden David Mackenzie whose family has farmed at Stover, Geraldine for over 125 years, totalling 650 hectares. The original home farm irrigates 280 hectares of mixed cropping, store lambs, dairy and beef grazing. We also have further blocks irrigating 220 hectares for dairy and dairy support. Hayden in addition to farming has a contracting business that is continuing to expand into additional agricultural services and employing 35 to 40 staff permanently and seasonally. Mr Mackenzie is a member of GWS.

3. Also with me today is Nicholas George Ward, who farms with his wife near Temuka, and are fourth generation famers. They are irrigating 300 hectares of predominately intensive cropping and horticulture from the Ohapi catchment, which is within the Orari catchment. Mr Ward was a part of the Orari Water Society, whom was involved in the formation of the Orari River sub-catchment plan. He is also part of the Ohapi Water User Group and is the Chair of Geraldine Water Solutions (GWS).

4. Fundamentally the success of our businesses and other members of GWS, are a result of irrigation water. Reliable water throughout the irrigation season is key to obtaining growing contracts, sustainable crop yields and milk production. The changing of the planning framework on the Orari and Temuka catchments to meet the National Policy Statement for Freshwater Management ('NPSFM' or 'the National Policy Statement') means, in simple terms, that the available allocation to out of stream users / uses is being reduced and minimum flows increased. The outcome of this is decreased water reliability and the sustainability of our farming businesses whom are reliant on irrigation water. As a result, alternative water supply from alpine water resources must be sought for the Orari and Temuka catchments. Given this, we have a significant interest in how the water resources are managed and allocated within the Orari, Waihi and Temuka catchments and the ability to source alternative water supplies.

5. We are giving evidence for GWS in support of the proposed Klondyke Water Storage Facility ('the Klondyke Pond') and the associated additional 10 cumec take from the Rangitata River when it is in flood, both of which are being advanced by Rangitata Diversion Race Management Limited ('RDRML'). GWS supports this RDRML project and the associated activities. We also confirm that are authorised to give this evidence for GWS.

Geraldine Water Solutions (Nicholas Ward)

6. GWS is a farmer initiated group, which was formed by consent holders to investigate possible water supply options in the region in 2016. It is made up of farmers who are actively seeking various means to enhance or supplement current water supplies. The catchment areas involved are Orari and Temuka catchments. There is also a push from other farmers to take water further south to Timaru.

7. The purpose of GWS is to:

   (a) Increase awareness of farmer regulatory requirements;
   (b) Facilitate sharing of information to assist in understanding potential future water supply risks; and
   (c) Investigate bringing new water from the northern counterparts into South Canterbury (centred around the Geraldine area – Temuka, Waihi, Orari).

8. Following the Orari River sub-catchment plan (please refer to the Canterbury Land and Water Plan, Section 14 ('the Plan')) becoming operative plan in 2013, several members of the group who were involved in this process saw a need to go to the farmers within the catchment and explain the real threats to irrigation water. The main change the Plan imposes, is that all shallow bores less than 30 metres deep are to now be included on river minimum flow restrictions (it is assumed that such bores are hydraulically connected to the surface water resources). The minimum flow restrictions have been increased under the terms of the Plan from the current 200l/s during summer to 500 l/s in 2016, although I note that existing resource consents have not yet been reviewed in line with the plan. The Plan states that minimum flows shall then be increased to 900l/s by 2040. These increases in minimum flows are timed to coincide with reductions in the water that is or can be allocated to irrigators. In this regard, the allocation is set to reduce from 1524l/s currently, to 1400l/s in 2016 and 800l/s in 2040. The 2040 levels have significant consequence to the irrigators and a strong message that other sources of alternative reliable water must be found.

9. Throughout the LWRP plan process, the Temuka catchments plans are beginning to be developed. GWS has recently submitted on the Zone Committee Implementation Programme Addendum ('ZIPA') in relation to the Temuka Catchment. The minimum flows on this catchment is in the order of 700l/s with the ZIPA proposing to increase this to 1050l/s in 5 years and 1400l/s in 10 years, which will then be delivered into a formal plan over the next year. GWS submitted that this was economically unviable for consent holders and that the Zone Committee must give more time for GWS to find alternative solutions (such as from the Klondyke Pond) before such adverse measures are imposed. The effect economically is not only on farmers, but a substantial flow on effect to our local communities.

10. I understand that these catchments are all significantly over-allocated for irrigation and the minimum flows are far too low in terms of the National Policy Statement. The catchment plans being developed must give effect to the NPSFM, which suggests that unless alternative water supplies found outside of these catchment, significant social and economic impacts will be felt by the farming sector and families in this area, and on those businesses that service the rural sector. We believe alternative water will have a positive economic impact to the irrigators and positive environmental effect long term.

11. The OTOP ZIPA and plan to be developed, also deals with water quality for all the catchments in this zone including the Orari. GWS have submitted on this as it is uncertain whether these levels being set are achievable for both ground and surface water. This is also key to ensuring alternative water can be used within the catchment and is enabled to be brought into this catchment plan. It is hoped that leaving more water in the catchment by sourcing alternative water, will improve water quality and therefore benefit our waterways and their ecosystems.

12. GWS has received funding from the Canterbury Regional Council and Crown Irrigation to investigate the feasibility study for alternative water to the catchment. So that is exactly what we are doing, pursuing feasibility of supply options, of which the Klondyke Ponds is a strong contender.

13. GWS is not a scheme yet, it is a group representing farmers who are using various sources of water and who you will now understand are all under significant threats with reducing allocation and increasing minimum flows. Our goal is to investigate reliable water supply options for existing irrigators under threat, with the long term aim of investigating the feasibility of bringing stored water south of the Rangitata River to our farmers. We have approximately 40 farmers in our group and I estimate there are potentially 7,000 to 9,000 ha of at risk land that will need alternative water brought into the catchments and communities.

Support of Klondyke Pond (Hayden Mackenzie)

14. For the reasons set out by Mr Ward, the main risks and threats that GWS sees for irrigators is reliability and security of supply, to sustain and enable future growth of our farming businesses, which support our local communities.

15. As Mr Ward has also noted, GWS has been concerned with policy and plan changes which continues to decrease allocation and increase minimum flows which affects the

reliability of supply for the Orari River and Temuka catchments. With such changes coming into force, it is essential existing water users have alternative water supplies.

16. Changes to water supply create significant profitability risks for our farming practises. Our farmers are left with very few options to maintain their current profitability and invest in high value land use such as high value crops. To obtain contracts to grow high value crops, many companies require security that the famers have access to such water to ensure high yields are delivered, whatever the climatic conditions. Without a secure supply of water, we are reduced to a narrow range of dry land farming options, which is not sustainable for our farming businesses.

17. Going forward, the modelling information received from Dr Brett Painter suggests that climate change will create risks to our farming practice as we will be getting less reliable rainfall in the east and heavier rainfall in the west in the Southern Alps region due to climate change. Because more water is stored in the Alps, the ability to store high flood flows in storage ponds becomes critical to protect us from low flow periods

18. The Klondyke Pond proposal, if constructed as a large storage pond could provide our farmers with more certainty in the option of investing in an irrigation scheme for our area. Our feasibility studies have shown that a scheme would be expensive, but the threat to our farming business means we will seek to purchase an allocation from the Pond to ensure that we have access to highly reliable water. It is important for me to reiterate that high reliability is critical to GWS, and thus its investment in the Klondyke Pond. We understand the evidence of Mr Bas Veendrick (witness for RDRML) to be that the addition of the 10 cumecs to the Klondye Pond will reduce the construction costs of the pond (a small pond can be constructed without impacting on the reliability of the available water). We therefore see that this flow is a very important component of the Proposal, and one that we support. Without such highly reliable water throughout the summer period and not going on restrictions during January to March as we often face, means the ability to have contracts for our specialised crops and to ensure higher yields. Our dairy farms need consistently reliable water right throughout the season to maintain consistent pasture for milk production and meet crop demands for high yields.

19. The ability for a scheme to access stored reliable water would give us more certainty in our decision making and investigations around deciding whether to proceed with the scheme. We have not agreed to anything yet but we simply must have more options available at this point to ensure our future farming viability and sustaining our local communities. Without such options as the Klondyke Pond and the ability to ensure pond's construction costs are minimised, we inevitably face less water allocation and unreliable water with our current water sources. This is already set in the Orari catchment plan and coming in the Temuka catchment. The Klondye Pond is a real solution that GWS is actively pursuing for its catchments.

20. Our farmers are currently working in an individual sense, in that water is taken from shallow ground water bores or individual surface water takes. While I acknowledge some of our farmers will need to improve their practices and that resource consents would be required, I do see the benefits that other schemes create in that our farmers using a scheme may be able to work together to better manage the water resource and application rates. The presence of a secure supply of water from a large scale storage pond would feed into our investigations about the feasibility of a scheme and

I can see this leading into our farmers realising the same benefits that other farmers have realised who are part of irrigation schemes.

21. For example, GWS sees reliability of water supply as having environmental benefits by reducing nutrient leaching and leaving more water within the local waterways by using alternative supplies. The most efficient irrigation systems is that which is the most reliable. If our farmers have a reliable supply of water they will not need to load the soil with water to cover low water availability periods which will mean there is less risk of nutrient leaching should that high loading of the soil coincide with the rainfall events.

22. Overall the key benefits are security of water supply, security of profitability and the ability of our farmers to have certainty of investment. Having the option to access from the stored Klondyke ponds would give us the option to have a scheme which could allow us to better manage the water resource collectively. I acknowledge that the GWS area is not under the existing RDR consents but if a scheme were to go ahead, the benefits of the pond could extend into our catchments and the wider Southern Canterbury area.

23. Given the significant economic consequences threatening our current irrigation and therefore farming businesses as outlined throughout this evidence, GWS supports new supply options for irrigators.

24. GWS supports the storage Klondyke ponds and the additional 10 cumecs which will ensure a highly reliable water source. We thank the hearing panel for your time.

Mark Mulligan, Hayden Mackenzie and Nicholas Ward

Date 1st May 2018