BEFORE THE CANTERBURY REGIONAL COUNCIL

IN THE MATTER OF the Resource Management Act 1991

AND

IN THE MATTER OF 35 applications (21 applicants) to take and use groundwater from the Waitaki River Catchment

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BRIEF OF EVIDENCE
MATTHEW FRASER ROSS
Draft

Introduction and Background:

1. My name is Matthew Fraser Ross. I am a farmer living at Duntroon in North Otago. Our property is located on the south bank of the Waitaki River and is fully irrigated.

2. I have appeared and given evidence in respect of the North Bank Tunnel Concept and the Hunter Downs Irrigation applications. I set out my background and relevant qualifications and experience in that evidence.

3. I will present evidence today in my capacity as chairman of the Maraewhenua District Water Resource Company (MDWRC). MDWRC has an application (CRC041004) to take and use water for the purpose of spray irrigation from a gallery adjacent to the main stem of the Waitaki River.

4. The MDWRC has existing consents (CRC021286.2, CRC062341, CRC062343, CRC001203) and operates a border dyke scheme with the same. The new application (if granted) was lodged in 2003 and will allow the company to supply water via spray irrigation to the rolling downlands adjacent to the land currently watered with the existing border dyke infrastructure.

5. The application will be more fully described in evidence provided at this hearing by Ms Keri Johnstone of Irricon Resource Solutions.

Reliability of Supply

6. Fundamentally irrigation needs to be highly reliable in order for investment to be made. In my evidence to the HDI hearing I went to considerable length to explain how and why investment is made in irrigation development. With certainty around reliability those investment decisions and the resulting infrastructure encourage efficient use of the water resource.

7. This has been clearly demonstrated by the recent irrigation development made by the North Otago Irrigation Company (NOIC) where system design capacity is low and use of water and technology is optimal. Of critical importance to this design and development process is reliability of supply.

8. Granted a scheme or system can predict or pre-empt a restriction environment and build in a design capacity to reduce or minimize the effect. This does not encourage the most efficient use of water. In most cases application rates are increased (as a function of a higher design capacity) in order to “catch up” after the restriction event resulting in over watering/ runoff and therefore wastage. This is generally a cheaper option and more practical than building significant storage facilities to self manage reduced levels of reliability.

9. The North Otago downlands are a unique environment in that contour and climate contribute to and are conducive to system design capacities that are generally low, for example 0.4-0.45l/s/ha. This is supported by regional council and existing schemes by way of conditions on the more recently issued consents like NOIC’s.

10. From an operational perspective reduced levels of reliability discourage the efficient use of water. In a zero restriction environment most individuals will irrigate for the right reasons. I acknowledge that with the adoption of developing technology this can be further improved. In an environment where the risk of restriction occurs, individuals generally try to pre-empt or reduce their exposure to the event by over watering, building excess design capacity or generally irrigating for the wrong reasons.

11. My point with this discussion is that reliability of supply is of as much importance to an applicant as it is for an existing irrigator. The applicant does have the ability to base their investment decision around the risk to the reliability of supply but poor or reduced reliability will only lead to the misuse of water and ongoing debate between the consent holder, regional authority and other resource users within the catchment.

12. For the North Otago downlands environment 100% reliability of supply with appropriate conditions would encourage the most efficient use of water for the purpose of irrigation. This would be the case for both the design and operation of future irrigation systems in the region.

Risk Management Around the Plan's Reliability of Supply for New Users

13. The Waitaki Allocation Board said that supply reliability could be reduced for new consent holders because investment decisions would then be made in full knowledge of the effects of such supply restrictions. The Board defined what the effect of the supply restriction was and said that reliability was 95% of the peak rate of taking at their point of taking.[1] Until Rob Potts suggested otherwise, I had understood this to mean that the restriction would apply to the peak rate of take with no qualification as to time period that the taking could occur. The Plan does not refer to a time period.

14. I can appreciate the position that I should have a reduced level of reliability and would be agreeable to that if I could measure the risk. While the intent of the policy is clear, its interpretation by Rob Potts has confused the issue. This is of critical importance to a potential irrigator's decision making process. From Mr Pott's evidence does 95% mean that I will have 9.5litres/sec of every consented 10litres/sec all of the time or does it mean I will have all of my water right for 95% of the time? And, if option two prevails,

[1] Policy 46

over what time period do we consider the same? If the 5% of the time when no water was available coincided with a critical period of irrigation requirement the effect could be complete or partial crop failure and resulting economic / cashflow loss. I do not think this was the Board's intention. The Board sets out its reason for its decision at page 37 of the Annex where it expressly recognises risk associated with supply reliability. That risk is a managed risk which is not what is proposed by Mr Potts.

15. There would obviously be the subsequent negative effect on the irrigation investment as a direct result of that crop/production failure. On the other hand access to 95% of the peak rate of take all of the time can be managed. On farm infrastructure, management systems and enterprise selection can spread risk and ensure a positive result / cashflow which underpins and encourages the irrigation investment.

16. The method of the interpretation of this point is of critical importance to the applicant especially when anything less than 100% reliability of supply is being contemplated.

HDI Flow Regime

17. The basis on which I want you to consider these applications is set out by my legal counsel. I have not, and do not, propose the consent conditions outlined at the Hunter Downs hearing.

18. As described in the evidence of Mrs Cameron (paragraph 10,11) the HDI flow regime delivers a level of reliability that is not acceptable to me and does not encourage the efficient use of water for the purpose intended.

Min Flow Condition

19. The applicant seeks a minimum flow condition of 100 cubic metres per second from the dam to the sea. This position has the full support of existing shareholders from within the scheme on the proposed flow regime outlined by Mr Stewart in his evidence to this hearing.

20. The basis on which to apply for a non-complying min flow condition has not been easy to establish.

21. As already stated in this brief of evidence reliability of supply is fundamental and is of critical importance to any investment in irrigation development. I cannot emphasis this enough.

22. It would therefore serve no purpose to apply for a minimum flow that is unable to deliver an acceptable level of reliability.

23. The plan stipulates a minimum flow of 150 cubic metres (cumecs) per second and an environmental flow of 230 cubic metres per second. Rule 7 of the plan being the activator of the 80 cumec block assigned for abstractive use. If you agree with the Meridian interpretation of Rule 7 then the Plan does not contain provisions protecting existing consent holder's current reliability of supply. In effect Meridian says irrigators have no certainty of supply until 2025. By which time the plan will have been subject of two statutory reviews. This leaves abstractive users in a precarious situation.

24. Obviously the integrity of the intent of the plan is reliant on the correct assessment of what that minimum flow should be.

25. Meridian presented evidence to the WAB for a flow regime based on a 100 cumec minimum flow between Black Point and the Sea. Above Black Point Meridian proposed a variable flow regime of between 110-150 cumecs. It contemplated in this reach abstraction of water occurring in relation to hydro-electricity generation.

26. Andrew Robertson, Meridian's Commercial Development Manager, gave evidence to the WAB. At paragraph 21 of his evidence he stated:

"*The work by Meridian in relation to it's proposed flow regime identified that compromises typical of a water short catchment need not be experienced in the Lower Waitaki. The provision of flows for sustaining in-river environmental values, recreational values, general amenity values, protection value of existing energy production and irrigation systems, and preservation of significant future development opportunity can all be provided for in the Lower Waitaki.*"

27. Paragraph 26 states,

"*The Proposed Flow Regime, and in particular, the minimum flows included within the regime, would maintain the current flow distribution characteristics of the Lower Waitaki River which have historically delivered extremely high reliability to existing abstractive*

users, making it possible for Meridian to enter into water supply agreements with existing downstream abstractive users to provide an extra level of assurance that the current reliability would continue. At the allocation cap proposed, future abstractive users would also experience high levels of reliability. This would effectively enable abstractive users of water to benefit during any inflow sequences from the reliable supply created by upper catchment storage whilst still sustaining the flows needed for in river environmental and recreational values."

28. The flow regime presented to the board is almost identical to that before the Commissioners considering the NBTC and HDI application, except that here Meridian also proposes flow sharing between consent holders.

29. Mr Robertson goes on to state in paragraph 28.5

" *Meridian has determined from the modeling of it's operations described by Mr Sargent in his evidence that the highest minimum flow that would allow the Waitaki Hydro Scheme to continue to provide current electricity generation flexibility and irrigation reliability values is 100m3/s. This is 20m3/s higher than the current minimum of 80m3/s at which abstraction must cease."*

30. At minimum flow conditions higher than this either reliability of supply is compromised from the irrigation perspective or current generating practice will have to be altered. This is an unacceptable position for either water user.

31. His evidence was that reliability of supply for existing users would be being 99%+ for existing users and for new users 95%+.[2]Moreover Meridian would undertake to provide contracted protection of the above mentioned levels of reliability.[3]

32. The MDWRC along with other existing users has been involved in discussions on the minimum flow conditions being sought by Meridians own application for NBTC and their joint application for HDI since early 2007.

33. The MDWRC has applied for a non-complying minimum flow condition on the basis that the statistics demonstrate our best opportunity to secure reliable water for the purpose of irrigation while working with other users in the catchment.

[2] Robertson Brief paragraphs 36.2 and 37.3
[3] Robertson Brief para 41 & 42

34. The Meridian evidence to the WAB and at HDI demonstrates that the exposure of the river to the 100m3/s minimum flow will happen infrequently and for a small percentage of time (up to 4% if HDI is commissioned). The Lower Waitaki has a large annual flow (362 m3/s) and this will not change. As Mr Robertson states "*Compared to other areas of New Zealand the Waitaki Catchment has an abundance of water and is clearly not water short".*

Alternative min flow condition

35. If the Commissioners decide there is no evidential basis to support a minimum flow in the River of 100m3/s from the Dam to the Sea then I ask that you consider the application in light of the evidence presented by Meridian at its application for NBTC.

36. The minimum flow is the variable minimum flow condition of 110-150m3/s as set out in the NBTC hearing. The minimum flow conditions for this application are the same. For the reasons set out in Mr David Stewart's evidence no banding is proposed.

WAB Intent/Plan Change

37. I did not participate in submissions to the WAB as I was not farming or residing in the area at the time. Since moving to our current property and establishing our farming operations in 2005 I have been active in the consenting and hearing process.

38. I cannot comment on proceedings relating to the inception of the WAB and resulting WAP other than to say it would be my assumption that the Board was commissioned to develop a plan that brought certainty and provided clarity to a complex consenting environment where numerous applications and competing interests were getting difficult to administer. We are now in 2008 with a plan that has been operative for two years as of 3rd July 2008. We still find ourselves with a plethora of complexity and no certainty about the current environment.

39. I find it difficult to comprehend that the fundamental intent of the plan was to provide for certainty and clarity within the Waitaki Catchment and yet some of the key policies and

objectives in this plan cannot be given effect too. I'm sure this cannot have been the intention of the board or even the result of the plan.

40. The MDWRC and MRNAG entities of which I chair both have gained significant support over the past 18 months as we have worked toward this hearing process. During this time we have presented numerous times to the Regional Council's senior staff, its chief executive and the councilors on the issues we have encountered with the plan as we have prepared for the hearing process. The most recent appearance was at a councilor workshop where the implications of plan change were discussed. The conclusion of that workshop was that this hearing process is the most feasible and timely option to address some of the issues within the plan. This is a view supported by the chief executive, Dr Bryan Jenkins. I agree with other attendants to that workshop that a plan change running in tandem to this hearing process would be counterproductive and probably unnecessary.

41. I do appreciate that the process is constrained by its own procedure and part of that is complicated by the scope and terms the WAB was set up on by the government. The limited rights of appeal may be why we find ourselves in our current predicament of applications being assessed as non-complying activities despite surface water allocation being available. It could also be the interpretation and/or implementation of the Plan by Regional Council and others which is at fault.

42. But I struggle with the concept that it is our role as applicants to provide the evidence and pay to participate in the process that may right potential mistakes. By mistakes I am referring to the annual allocation block of 150 million cu metres/annum for the mid reach applicants which appears to have been made on erroneous information. In addition a rule (rule 7) which Meridian says cannot be activated until 2025 and which the Regional Council appears also to be saying that it will not review the Waitaki Dam consents. Their joint position leaves the Commissioners in a difficult position. However, I come back to my fundamental proposition; why would the Board make provision for a highly reliable supply of water for both existing and new users only to have supply undermined by the new minimum flow?

43. In short I am insufficiently qualified to comment on the detail of the RMA processes at work. I am simply stating my observations as a participant in what seems a vastly complex issue that very few have a sound grasp of.

44. In my view some certainty around the issues we have raised in submissions to NBTC and HDI will be well received. We have presented evidence in conjunction with our experts to applications and renewals that date back as far as 1998. In that time we have encountered government intervention, a new plan, an abandoned hydro project, an application process that has altered significantly, prior notifications and challenges to priority all of which have taken a significant toll on the communities physical, financial and social resources.

45. I ask that you give the MDWRC application and all those encompassed by the MRNAG entity your highest consideration and have due regard to the intent of the policies and objectives of the Waitaki Allocation Plan.

46. These decisions are pivotal to the future of the Lower Waitaki Valley and the resources within.

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Matthew Fraser Ross

July 2008