

**BEFORE THE CANTERBURY REGIONAL COUNCIL
AND THE ASHBURTON DISTRICT COUNCIL**

In the matter of the Resource Management Act 1991

And

In the matter of resource consent applications by Rangitata Diversion Race Management Ltd 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

**STATEMENT OF EVIDENCE OF PAUL MILLS FOR
THE EARLY FAMILY TRUST**

DATED 11 APRIL 2018

STATEMENT OF EVIDENCE OF PAUL MILLS

INTRODUCTION

1. My name is Paul Thomas Mills and I am a Registered Valuer and director of Property Advisory Limited.
2. I have extensive expertise in the valuation of farm property's and primary sector assets. I have also undertaken compensation assessments and valuation analysis for a number for infrastructure development entities, irrigation companies and private landowners.
3. In addition to being a Registered Valuer, my qualifications include a Bachelor of Commerce Degree Majoring in Valuation and Farm Management and a Post Graduate Diploma in Commerce.
4. I am a member of the Property Institute of New Zealand and hold an annual Practicing Certificate.
5. I confirm that I have read the Environment Court Practice Note (December 2014) relating to the code of conduct for expert witnesses (Section 7).

INSTRUCTIONS (SCOPE OF EVIDENCE) AND INFORMATION PROVIDED

6. I have been instructed by Prudence Steven on behalf of Grant & Jan Early (EFT) to provide my professional opinion on the potential impacts of the proposed Rangitata Diversion Race Management Limited (RDRML) water storage dam on EFT's rural farm business.
7. I have not inspected the EFT land, nor undertaken any detailed compensation valuations for EFT's farm property or business.
8. My evidence is limited to a desktop commentary on the impacts that RDRML's proposed infrastructure development project will have on the value of EFT's property and business.
9. As part of preparing this evidence I have been provided with the following information;
 - MWH – Report - Klondyke Storage Proposal Dam Break Assessment – 11 July 2016,
 - MWH – Report – RDR Klondyke Storage – S92 Response – 1 September 2016, and
 - Tonkin & Taylor – Memorandum - Review of resource consent application – 7 March 2018

10. I have also been provided with a number of other impact assessment and technical reports relating to the (RDRML) proposed Klondyke water storage dam plus background information pertaining to the EFT's farm business.
11. Our review of information provided indicates that RDRML's proposed infrastructure development project will require the acquisition of approximately 40 hectares of land from within the EFT's farm property.
12. I have been asked to consider the potential impact of RDRML's proposed Klondyke water storage dam on EFT's farm property under the following scenarios:
 - **Scenario A** – RDRML Klondyke Water Storage Dam (53M m³) as per resource consent application (Approx. 40ha of Early farm land acquired), and
 - **Scenario B** – Smaller scale RDRML Klondyke Water Storage Dam (no Early farm land acquired).

RDRML – KLONDYKE WATER STORAGE PROPOSAL (OVERVIEW)

13. RDRML's resource consent application relates to the construction and operation of a High Potential Impact Category (PIC) dam adjacent to the Rangitata Diversion Race (RDR) and the Rangitata River. The project also involves construction works to upgrade the RDR canal from the existing scheme intake to the proposed dam to provide additional capacity to convey water flows from the Rangitata River to the storage reservoir.
14. The proposed water storage dam will be located downstream of the RDRML scheme intake in the Klondyke area, have a water storage capacity of 53M m³, and will be formed by a ring of elevated embankments up to 30m above existing ground level and will have a footprint of approx.. 286 hectares. The proposed dam includes an engineered flexible membrane liner.
15. The proposed RDRML dam will extend onto EFT's farm property and will occupy approx. 40 hectares of land. The balance of the Early's farm property will lie to the south and southeast of the proposed water storage dam.
16. Physical data relating to a number of other water storage reservoirs in the Canterbury Region are summarised below to provide comparative data and context as to the nature and scale of the proposed RDRML infrastructure development project:

- Opuha Water Limited – Opuha Dam – 74M m³,
- **RDRML – Proposed Klondyke Water Storage Dam – 53M m³,**
- Rangitata South Irrigation Limited – Existing Water Storage Facility – 16.5M m³,
- Waimakariri Irrigation Limited – Proposed Water Storage Dam – 8.2M m³,
- Barhill Chertsey Irrigation Limited – Proposed Water Storage Dam – 1.6M m³.

17. RDRML's Klondyke water storage dam is a 'regionally' significant project in terms of the scale and nature of the proposed infrastructure.

KLONDYKE STORAGE PROPOSAL – MWH DAM BREAK ASSESSMENT

18. The MWH dam break assessment identifies three parameters to select the Potential Impact Classification (PIC) for the proposed dam, outline emergency action planning and identify potential effects on the environment. These parameters include:
 - Population at Risk (PAR),
 - Potential Loss of Life (PLL), and
 - Assessed Damage Level.
19. The MWH Dam Breach Assessment estimates the potential range of effects based on three different hypothetical breach scenarios. These scenarios are summarised below:
 - **Breach Scenario 1** – Perimeter embankment breaches on the south east side of the storage pond (near the natural terrace and Ealing Montalto Road),
 - **Breach Scenario 2** - Perimeter embankment breaches at the outlet structures on the western embankment of the storage pond adjacent to the Rangitata River; and
 - **Breach Scenario 3** – Perimeter embankment breaches on the east side of the storage pond adjacent to property east of Montalto Road.
20. A **High** PIC classification was determined by MWH for all three breach scenarios.
21. Our review of the MWH Hydraulic Model Results indicates that the Early's farm property would be heavily impacted under Breach Scenarios 1 and 3, and there would be no water inundation on the EFT farm property under Breach Scenario 2.
22. The table below provides a summary of the key output from the PIC Classification for Breach Scenarios 1 and 3.

Breach Scenarios 1 and 3	Population at Risk (PAR)	Potential Loss of Life (PLL)	Assessed Damage Level
Output Details:	11 – 100 (based on 30 dwellings & 2.5 people per dwelling)	Not specified / assessed	More than 4 houses destroyed, Extensive damage to more than one major infrastructure component, Time to restore operation of critical infrastructure – up to 12 months, Heavy damage, extensive / widespread damage to natural environment, Community recovery time could be years to many years.
Assessed Damage level:	Major - Catastrophic	Not specified / assessed	Major - Catastrophic
PIC classification:	High	High	High

23. The Tonkin and Taylor resource consent application review indicates that the MWH dam breach assessment does not consider the itinerant population at risk. In context of EFT's farm business, itinerant population at risk would potentially include farm staff and primary industry service providers working on the land that is identified as potentially being inundated with water in the event of a dam breach.

POTENTIAL IMPACTS ON EFT PROPERTY VALUE

INTRODUCTION / COMPENSATION ASSESSMENT METHODOLOGY

24. We note that a number of irrigation companies in New Zealand (Incl. RDRML) are recognised as a Requiring Authority under Section 167 of the Resource Management Act 1991. RDRML are recognised as a Requiring Authority.
25. Requiring Authority status grants approved entities the ability to compulsorily acquire land and pay compensation to affected parties in accordance with the Public Works Act 1981(PWA).
26. We understand that, to date, RDRML have not formally notified the EFT of their intention to acquire land / property rights in accordance with the PWA, While the proposed acquisition of EFT farm land has not, to date, been pursued by RDRML in accordance with the PWA, this legislation does however provide the guiding principles for loss assessments for compulsorily acquired assets or property rights.

27. Compensation would be assessed by valuing the EFT property without the proposed RDRML water storage facility in existence, and then valuing the EFT property assuming the resource consents have been granted and the water storage facility has been constructed. The difference between the valuations represents the loss in value due to the granting of the RDRML land use consents and construction of the water storage facility.
28. This valuation method is known as the “before” and “after”, and in line with standard valuation practice considers compensation on the basis of:
- **Land / Land Use Rights Acquired** - Compensation payable for the unencumbered market value of land or property rights within the acquisition area.
 - **Injurious Affection / Loss in Value to Adjoining Land** - Compensation for the loss in value to balance land.
 - **Disturbance** - Compensation for disturbance is assessed where the proposed works permanently or temporarily impact on the financial performance and / or management of the affected property, and
 - **Damages** - Compensation for damages to Land which are not remedied by the acquiring authority during the construction process.

SCENARIO A – PROPOSED DAM (53M M³ BUILT) – EFT FARM LAND ACQUIRED

29. The potential loss factors relating to the EFT’s farm business are summarised as follows;

LAND / LAND USE RIGHTS ACQUIRED

30. The loss of value relates to the unencumbered market value of the EFT farm land to be acquired (approx. 40 ha) by RDRML to construct the proposed water storage dam. The value of the land to be acquired would be assessed by applying market value benchmarks (\$/Ha) from recent sales of comparable farm land.

INJURIOUS AFFECTION / LOSS IN VALUE TO ADJOINING LAND,

31. The assessment of the potential loss of value to the balance of the EFT’s farm property would most likely require consideration of the following factors (not limited to);
- Reduced irrigation system operating efficiency,
 - Disturbance resulting from potential dam water seepage,

- Loss of utility from improvements and infrastructure as a result of reduced farm area (over capacity / capitalization of improvements on reduced land area etc),
- Reduced future land subdivision potential and / or restrictions on future land use,
- Reduced farm operating efficiency and profitability due to reduced scale of farming operation, and
- Reduction in value (“blighting”) of land and improvements due to the potential risk of a catastrophic dam breach.

DISTURBANCE

32. Temporary disturbance factors affecting business operations during construction (dust, noise, vibration).

DAMAGES

33. It is assumed that any damage caused to the EFT property as a result of the proposed works would be reinstated by RDRML.
34. In the event of a dam breach it is envisaged that RDRML would reinstate all damaged EFT assets. In addition RDRML would be required to pay for all farm business losses suffered by EFT as a result of a dam breach.

SCENARIO B – SMALLER SCALE DAM BUILT - NO EFT FARM LAND ACQUIRED

35. The potential loss factors relating to the EFT’s farm business as result of RDRML’s proposed works are summarised as follows;

LAND / LAND USE RIGHTS ACQUIRED

36. Under this Scenario it’s assumed that no EFT land or property rights are acquired by RDRML.

INJURIOUS AFFECTION / LOSS IN VALUE TO ADJOINING LAND

37. The assessment of the potential loss of value to EFT’s farm property would most likely require consideration of the following factors (not limited to);
 - Disturbance resulting from potential dam water seepage,
 - Reduced future land subdivision potential and / or restrictions on future land use,

- Loss of utility from improvements and infrastructure as result of restrictions on future land use,
- Reduction in value ('blighting') of land and improvements due to the increased future potential risk of a catastrophic dam breach ("blighting").

DISTURBANCE

38. Temporary disturbance factors affecting business operations during construction (dust, noise, vibration).

DAMAGES

39. It is assumed that any damage caused to the EFT property as a result of the proposed works would be reinstated by RDRML.
40. In the event of a dam breach it is envisaged that RDRML would reinstate all damaged EFT assets. In addition RDRML would be required to pay for all farm business losses suffered by EFT as a result of a dam breach.

SUMMARY CONCLUSIONS

41. I summarise the key conclusions from this brief of evidence below;
 - It is my opinion that RDRML's proposed infrastructure development project will have a material negative impact on the value of EFT's farm property.
 - This blighting impact reflects the relative loss in value to the EFT property due to the potential negative impacts of RDRML's proposal, compared to the previously unaffected property. This loss in value is cumulative and is crystallised in the market; when the following project milestone are reached;
 - Prospect of the work (public awareness of project),
 - Resource consents granted to RDRML for the infrastructure development project,
 - Physical construction and commissioning of the infrastructure.
 - Based on my professional experience and general market knowledge, it is my opinion that the market value of EFT's farm property will be materially reduced once the resource consents to construct the RDRML water storage dam are granted and the physical construction of the dam under either Scenario A or B is completed.

42. On a side note I am aware of numerous irrigation infrastructure development projects in Canterbury where affected parties have been compensated for the impact that the various projects had on surrounding properties and businesses. In almost all of these projects the irrigation companies commissioned compensation valuation assessments and provided these to the affected parties. Final settlement for losses as result of these infrastructure development projects have typically been negotiated between the parties in good faith.

A handwritten signature in black ink, appearing to read 'Paul Mills', with a stylized, cursive script.

Paul Mills

11 April 2018