

Before the Hearings Commissioners  
at Christchurch

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*in the matter of:* a submission on the proposed Canterbury Land and  
Water Regional Plan under the Resource Management  
Act 1991

*to:* **Environment Canterbury**

*submitter* **Hunter Downs Irrigation**

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Statement of evidence of Ian Greig Moore

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Dated: 2 April 2013

**STATEMENT OF EVIDENCE OF IAN GREIG MOORE**

- 1 My full name is Ian Greig Moore.
- 2 I have been a South Canterbury Irrigation Trust (SCIT) trustee and Chairman of the Hunter Downs Irrigation Committee (HDI) since their inception in 2005.
- 3 I have lived on our present property on Upper Hook Road, Waituna since 1966. This property has been farmed in conjunction with first my parents and wife Glenda, and now with Glenda and our two sons. We currently milk 1300 cows and have supporting stock, on two home farms under a semi irrigated dairy farm system. I am also a director of Maheno Farms Ltd, which has developed a major dairy unit milking 2500 cows centred around an earth dam for water storage. We also have an interest in another 1200 cow farm within the Hunter Downs Irrigation Scheme (HDI) footprint.
- 4 In addition to my farming life, I am a qualified real estate agent (AREINZ) and led a Real Estate company, Southern Wide Real Estate, operating in the South Canterbury and North Otago regions.
- 5 I am currently employed as a manager for CRT Real Estate, Waimate.
- 6 I am also currently an independent director of Access Home Health, the Rural Women's owned company that provides home help services to many thousands of clients throughout New Zealand. I am a former National President of New Zealand Young Farmers. I served nine years on the Waimate District Council from 1989 to 1995 and 1998 to 2001 and was a member of the South Canterbury District Health Board from 1999 to 2007. I was chairman of the Waihao North Irrigation Group from 2000 to 2001.
- 7 In preparing my evidence I have reviewed the HDI submission on the proposed Canterbury Land and Water Regional Plan.
- 8 I am authorised to give this evidence for Hunter Downs Irrigation (HDI) on behalf of South Canterbury Irrigation Trust (SCIT).

**SCOPE OF EVIDENCE**

- 9 I am providing evidence for HDI on the behalf of SCIT on the following:
  - 9.1 A brief outline of farming and irrigation in South Canterbury;
  - 9.2 Previous attempts to set up irrigation schemes (e.g. the Waihao North Irrigation Scheme);

9.3 Formation of SCIT and partnership with Meridian Energy Limited;

9.4 Attitudes and awareness to environmental sustainability.

### **OUTLINE OF FARMING AND IRRIGATION IN SOUTH CANTERBURY**

- 10 Anyone who has lived and farmed in the South Canterbury area over the last decade is aware that the economics of farming in South Canterbury have changed dramatically of late.
- 11 Farmers in South Canterbury were previously relatively secure with their farming operations and were prepared to cope with the stress and uncertainty of droughts. This was primarily in the belief that financially they could cope with a 1 in 5 year seasonal drought and a 1 in 10 year severe drought occurrence. In part this was due to the availability of cost effective local processing. For instance – single crops of barley or wheat with sheep stocked at 8 to 10 per hectare was the norm for most farmers.
- 12 The financial viability of these options is no longer secure, product prices have plateaued and intensification of land use is now required to sustain financially viable agriculture. Water on the land provides cost effective intensification opportunities.
- 13 In my experience, for several generations, farmers had undervalued the agricultural potential of South Canterbury. However, there is now a realisation that South Canterbury has some of the most highly productive soils in New Zealand. This has changed a lot of farmers’ thinking about the potential of their farms.
- 14 There is no doubt that there has been growth in dairy conversions within South Canterbury. However, the change has not been dramatic since 1999. In my opinion it is the lack of reliable irrigation water that is constraining this region’s dairying opportunities. Evidence presented on behalf of SCIT by Stuart Ford at the HDIS water consent hearings predicted there would be an approximate 40% change in land use to dairying if HDI proceeds<sup>1</sup>.
- 15 Farmers are realising the benefits of irrigation and many have set up their own irrigation infrastructure (or have attempted to) and are drilling for water. I will explain later in my evidence previous attempts at setting up irrigation schemes that I have been involved in.

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<sup>1</sup> Evidence of Mr Stuart Ford presented in support of the application to take and use water from the Lower Waitaki River (CRC071029)

- 16 South Canterbury has also experienced huge growth in factories and infrastructure. Fonterra have built a \$60 million expansion of the present dairy processing factory at Clandeboye and has built a mozzarella cheese plant at Clandeboye, this is in addition to the acquisition of what was formerly the Studholme factory owned by New Zealand Dairies.
- 17 As a rural real estate agent, I have experienced firsthand the increase in real estate values in the area. When I was chairman of Waihao North Irrigation Investigation Group in 2000 the typical price for quality dryland was approximately \$7,000 - \$8,000 per hectare. Waimate's population has had very low growth (approximately 1% p.a. for the last 10 years). Overall, the population of the district fell 8.3% from 7,743 in 1991 to 7,101 in 2001 but then grew a little to 7,206 in 2006<sup>2</sup>. That is now changing with the building and expansion growth occurring in the region. Today we are receiving offers on similar land for \$17,000 per hectare. I appreciate that this is a national trend, but South Canterbury has experienced a real catch up over the last 8 years. I believe the quality and contour of the land has a bearing on this, along with the realisation of our strategic location to infrastructure.
- 18 With higher land values comes a need to derive more productive uses from that land. Also, with higher values comes a greater need for farmers to maximise certainty of production. This creates a real desire for reliable water to ensure high yielding crops year on year, and even the ability to double crop, i.e. two crops in one year from the land.
- 19 I am supportive of irrigation in the Waimate area because I consider that it has advantages over other districts. Waimate utilises the already existing advantages that include:
- 19.1 Close proximity to an excellent Port at Timaru, namely Prime Port;
  - 19.2 Excellent processing and transport distance, close to Fonterra's Clandeboye and Studholme processing plants, and a proposed new dairy factory at Glenavy awaiting Overseas Investment Office approval;
  - 19.3 Meat processing works and vegetable processing;
  - 19.4 Temperate climate and quality soils with easy contour; and

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<sup>2</sup> Evidence of Nick Taylor presented in support of the application to take and use water from the Lower Waitaki River (CRC071029)

19.5 Location only 15kms from SH1 at any point of the command area and two hours driving time to Dunedin or Christchurch.

### **PREVIOUS ATTEMPTS TO SET UP IRRIGATION SCHEMES**

- 20 Farmers have realised that to unlock the region's agricultural potential requires a reliable water source. My commitment, and other farmers' commitment, to developing reliable irrigation schemes is evident in previous attempts that have been made to set up irrigation schemes.
- 21 I acknowledge that many people before today have seen the value in Waitaki River water. The Ministry of Works put together a very reliable Morven Glenavy Irrigation scheme of around 17,000ha some 40 years ago. Now locally owned by farmers this scheme has underpinned economic performance in the Waimate District for several decades. Over the years this company has driven efficiencies in the use of water to allow the command area to be extended to 26,000ha.

#### **Waihao North Irrigation Scheme**

- 22 In 1999 I was part of a group of farmers that unsuccessfully attempted to further develop irrigation in the area in what is now part of the HDIS. With farmer contributions, some seeding funds from the Sustainable Farming Fund (SFF) and lots of volunteer time from a small team consisting of myself and other farmers, we promoted the Waihao North Irrigation Scheme (WNIS). This scheme involved irrigating approximately 14,000ha by bringing water from Bell's Pond, via canals and gravity fed to Makikihi.
- 23 During 2000 to 2001, we worked voluntarily alongside experts to produce a plan that was ready to go to full feasibility stage. We held local hall meetings and field days to educate farmers in the community with respect to the changes that would occur. We had a price for the off-farm costs for the scheme, banking support was there, and community support was strong. With the benefit of hindsight, I am able to explain the reasons for this failure:
- 23.1 Firstly, we decided on a "peg in the ground" of 65% of farmer uptake i.e. for the land area of 14,000 hectares we required a commitment that 65% of that land in the area would be taken up before we started consenting. We were concerned that the balance (35%) could be a drag on resources if it took too long to sell to the farming community. We had some very encouraging discussions with the Minister of Agriculture and Fisheries at the time who indicated that that 35% could be underwritten for a period of around two years. The WNIS Committee were of the view at the time that the risk appeared too high, I note that this would now be viewed very differently as our appreciation of the value of water has

changed. In addition to this, after visits to all the farmers in the command area there was only 55% commitment and the WNIS Committee decided not to proceed on that basis, in hindsight, to not proceed because of this 10% shortfall was a flawed decision.

- 23.2 Secondly, we gave farmers a set price, the total scheme cost being in the order of \$39 million subject to final pricing. Today of course that sounds pretty reasonable. The Ministry of Agriculture and Fisheries recommended the scheme as the best value of any schemes proposed at the time but I believe that our mistake was effectively asking only one generation of farmers to pay for the scheme. The scheme would have been debt free in 20 years. On reflection this was really too shorter timeframe and it would have been better if we had structured it so that the scheme was paid for over two generations or longer.
- 23.3 Thirdly, we simply ran out of energy and available cash. It was time for another injection of farmer capital to match the second tranche of SFF money that was permitted and approved. However, this did not happen due to our volunteers running on empty coupled with insufficient farmer commitment. We folded, and packed up the project into the archives of Waimate District Council.
- 24 It is my belief from conversations I have had since then that the failure of the WNIS has created a lack of confidence amongst the region's farmers in establishing effective irrigation schemes. Farmers seem to have become even more reluctant to invest and overcapitalise when there is doubt over the reliability of water supply. Now there is also rising doubt over water quality and uncertainty of new consenting process for the use of land. **Mr Ellwood** and **Mr Gimblett** discuss this in their evidence.
- 25 Historically farmers, such as myself and my immediate peers, have been a "risk averse" group. I say that more from an off-farm point of view as the "farmers' farm" has always taken first call on investment. It is not easy to convince a group of farmers to stump up with the relatively large amounts of money that are required in the form of development money unless there is real certainty that the scheme is going to be forthcoming. In some respects this necessary upfront cash is in the realm of venture capital and when there are pressing needs for that same cash "on-farm", the decision to invest or not is difficult.
- 26 Morven Glenavy Ikawai is a very good scheme and with a very cheap annual cost. It has taken the new North Otago Irrigation Company scheme near Oamaru to put a realisation into farmers' lives that there is no cheap water left. In 2001, WNIS was regarded

as too expensive. Now, nearly thirteen years later it is regarded as very cost effective (and would be adding value right now). Today the capital required makes it imperative to ensure there certainty in the water availability and the ability to combine that with the land to create a productive and sustainable unit.

- 27 With the WNIS experience so recent, I know that from talking to many of the farmers it is worth noting that the work on the WNIS was not in vain. Out of the 14,000ha, there is approximately 3000ha that is now irrigated (this is named the Waihao extension and was commissioned in 2006). Although they struggled to get over 2,500ha signed up initially, there is now a waiting list. Realistically though, I am unsure how a waiting list could be resolved given that it is unlikely farmers will simply hand back their water or the demand for irrigation will decrease.
- 28 During consultation with farmers it became clear that if the certainty is there then the confidence to proceed (in spite of cost factors) grows.

#### **FORMATION OF SCIT AND PARTNERSHIP WITH MERIDIAN ENERGY LIMITED**

- 29 SCIT, to be renamed HDIST, was instigated in 2005 by the Mayors of Timaru, McKenzie, Waimate and Waitaki District Councils. It is a charitable trust charged with the responsibility of identifying and promoting sustainable irrigation development as a means of supporting agricultural production and downstream economic growth within South Canterbury. Its primary interest is large scale irrigation infrastructure utilising water from the Waitaki River. The HDIST Sub Committee comprises farmers and local businessmen with irrigation experience, and is the day to day interface with HDIST.
- 30 Meridian and HDIST have an agreement to see the formation of Hunter Downs Irrigation Limited (HDIL), and the renaming of SCIT to Hunter Downs Irrigation Scheme Trust (HDIST).
- 31 A large amount of work has been undertaken on the HDIS to date. The process of securing resource consents has involved working closely with numerous stakeholders and interested parties. Scheme implementation also involves, and in some cases requires through formal agreements, continued working relationships and collaboration. Examples include the ongoing relationship with Te Runanga o Ngai Tahu and the three kaitiaki runanga (Te Runanga o Arowhenua, Te Runanga o Waihao and Te Runanga o Moeraki) whose takiwa includes the HDIS command area. In this case numerous hui and discussions have resulted in an agreement to work together on a range of initiatives including governance of the

HDI Scheme, ongoing monitoring roles and seek consent for the augmentation of Wainono lagoon, a significant mahinga kai site.

- 32 The consenting phase of the project also involved other potential and existing South Canterbury irrigation schemes, providing opportunities for design efficiencies, sharing technical information and investigations for joint infrastructure. Iterative processes with local government have also been instrumental in ensuring community aspirations are incorporated into the HDIS. More recently, the HDIS has been working with the relevant Canterbury Water Management Strategy committees, and members of the HDIS are represented on the Lower Waitaki South Coastal Canterbury, Orari-Opihi-Pareora and the Regional Committees. This ensures an in-depth understanding of, and alignment with, community aspirations in relation to the use and management of water in South Canterbury.

### **ATTITUDES AND AWARENESS TO ENVIRONMENTAL SUSTAINABILITY**

- 33 In my experience, farmers' attitudes and awareness to environmental sustainability has changed over recent years. Farmers have always recognised the need to manage the land well, protect the environment and minimise any environmental impacts. What perhaps has changed is the realisation that as a community we have a better opportunity to achieve the best outcomes if we plan and consult together, along with the heightened public awareness of our requirement to be good custodians.
- 34 Farmers like myself and the ones I talk to on a daily basis are increasingly proving themselves to be careful custodians of the land. I believe that farmers' livelihoods depend on the sustainability of irrigation and farmers have deeply held values to leave the land better than we found it. We are nearly eight years into the *Dairy Industry Strategy for Sustainable Environmental Management*. It has clear goals around efficient use of water and minimising nitrogen run off into streams. I note a revised version of this is now to be implemented with buy in from across the agricultural sector.
- 35 Further to Fonterra's Dairying and Clean Streams Accord, we personally invested over \$100,000 fencing off our intermittent and flowing streams. On the wider farming front, water and effluent storage has become recognised as a practical form of environmental protection. Use of Environment Canterbury's best practices and other similar methods is growing quite rapidly. Effluent spreading in line with Environment Canterbury's rules has become the minimum and farmers are moving beyond the requirements of *the Dairying and Clean Streams Accord*.



- 36 As an example on my family's dairy farm, we have implemented some strategies that include:
- 36.1 2 storage ponds with an effluent separator as the intermediary followed by K-line application of squeezed water.
  - 36.2 A slurry tanker to move liquid solids to further afield and paddocks suitable for distribution.
  - 36.3 Working with Environment Canterbury and the Department of Conservation to develop a native planting regime for our fenced off area. It is my understanding that we have the most streams of any farm in the Wainono / Hook catchments and accordingly our responsibility / liability levels are high.
  - 36.4 For the past 5 years we have been operating a 500 cow cubicle stable on our dairy farm which is proving of great value to our environmental farm management plan.

#### **HDI's Farm Management Plans**

- 37 I was involved in the review and development of the HDIS Scheme Management Plan and Farm Management Plans. At the time these were developed, I was not always comfortable with and agreeable to some of the management proposed because HDIS does provide a new level of management plans.
- 38 The management plans for HDIS are different to those plans for previous irrigation schemes. This is because the plans include the following factors that encourage and assist farmer compliance:
- 38.1 The development of the plans has been on a "no surprises" basis. From our information meetings throughout the command area, in all our consultation meetings with all those affected groups and from newsletters sent out, we have told the farmers this will be an integral part of the requirements for HDIS. The response from farmers has been positive.
  - 38.2 HDIS has the benefits of learning from and developing the work done for other schemes.
  - 38.3 HDIS will provide the farmers with the tools to carry out the required monitoring so that water users can schedule their irrigation according to evapotranspiration, rainfall and soil monitoring status. For example, farmers will have access to climate station data providing daily conditions during the irrigation season.
  - 38.4 The Environmental levy is a relatively new concept to ensure essential or new initiatives are undertaken and that

environmental initiatives are not sacrificed because of lack of financial resources. This encourages buy in by farmers.

- 38.5 Best practice and skills training will be a key part of the adaptive management process.
- 38.6 Reporting requirements are community focused. HDIS will report annually to water users, the Scheme's community liaison group, Ngai Tahu liaison group and Canterbury Regional Council.
- 39 We propose that the Farm Management Plans should encourage strong buy-in by users and allow them to take ownership of their personalised plan. Accredited designers will design personal farm management plans and ensure farmers do not invest in a system that does not meet their needs. It is important for plans to be tailored to suit each local environment and situation, providing local solutions for local issues.
- 40 In particular, we have broadened the range of people within our community who will contribute to the sustainability policy and the implementation of that policy. Our Farm Management Plans intend to cover six main areas relevant to irrigation:
- 40.1 efficient water use;
- 40.2 soil management;
- 40.3 nutrient management;
- 40.4 collected animal effluent;
- 40.5 water quality and water way management; and
- 40.6 riparian and biodiversity management.
- 41 **Mr Brian Ellwood** discusses the HDIS Scheme Management Plan and Farm Management Plans in more detail.

#### **Reviews and audits of farm management plans**

- 42 I believe that the review and audit process will give confidence to me as a farmer and other interested stakeholders that together we can achieve more. I understand they will be reviewed regularly by the water user and HDIS. As a water user, I believe we are best to adopt a team approach rather than act as a group of individuals. I want to be part of the solution and enjoy the journey towards a better farm. A group scheme gives opportunity to co-ordinate and improve the environment. For example, on our dairy farm we have implemented an open farm policy with Environment Canterbury, the Department of Conservation and the QEII National Trust (to whom

we have gifted in excess of 120ha). Our intentions in doing this are to preserve this area for the future and aid the enhancement of water sources in the hill areas of our farm. We have spent in excess of \$25,000 over the past 2 years on this project.

- 43 There are prescriptive timeframes for submitting information that is recorded by farmers. Since I have been part of the development/review I feel that these timeframes are not overly rigorous and will not unduly affect farmers' day-to-day job. An independent assessor will audit plans.
- 44 An annual written report for each water user is required containing a number of matters including, for example, a summary of the operation of the water take and use and river flows over the preceding 12 months (and any changes from the previous Report), monitoring results, and off-farm mitigation, monitoring and reporting intended over the following 12 months. When I was first introduced to this I thought it may have been too onerous, but we have set up templates and processes to ensure simplicity and ease for the farmers. We will work with the farmers from day one and since they will be a part of the process we can anticipate a seamless process. Furthermore, with a scheme of this scale we have plenty of time to educate farmers.
- 45 I believe the HDIS plans provide the "next generation" of management plans. We intend to go for a wider reporting regime and strict code of practice to ensure non-compliance means *no water* (noting Environment Canterbury can also require the consent holder to restrict water supply to an individual farm/s in some circumstances). I believe we have put a strong emphasis on plan content and process and this should make the way forward for HDI smoother and transparent.

### **CONCLUSION**

- 46 The high demand for reliable water in South Canterbury is evident in the previous attempts the community has made to set up irrigation schemes.
- 47 Our learning from WNIS and partnership with Meridian has enabled us to develop a scheme that has gained confidence and support in the farming community. The current drought conditions have further highlighted the need for the HDIS.
- 48 The proposed HDIS Farm Management Plan concept has endeavoured to move ahead of the pack, of what has been accepted in the past, and be cutting edge without raising the bar so high that farmers will struggle to buy into our future path forward.

Dated: 2 April 2013

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Ian Moore