

BEFORE THE

Canterbury Regional Council

IN THE MATTER OF:

the Environment Canterbury
(Temporary Commissioners and
Improved Water Management) Act
2010

AND

IN THE MATTER OF:

Proposed Canterbury Regional Policy
Statement (PSRPS)

Evidence of Andrew Curtis on behalf of Irrigation New Zealand Incorporated

1. Irrigation New Zealand (INZ) welcomes the opportunity to present this evidence on the Proposed Canterbury Regional Policy Statement (PCRPS). Overall INZ appreciates and supports the section 42A report, particularly with regard to Chapter 7: Freshwater. However, there are a few areas which are still of concern and some additional suggestions INZ would like to highlight to the hearings panel.

Introduction

2. My name is Andrew Curtis. and I am the Chief Executive of INZ. I hold a BSc(Hons) degree (Physical Geography and Environmental Biology) from Oxford Brookes University and a PGDip (Environmental Management) from the University of Surrey.
3. My previous New Zealand (NZ) work experience includes six years employment for Hawke's Bay Regional Council in the role of Strategic Advisor – Water, where I helped lead the initial development phases of the regional water strategy. This had a strong non-regulatory focus to compliment and better enable traditional regulatory pathways. For successful water resource management to occur, due to its complex and uncertain nature, such an approach is essential – regulation alone will not 'cut the mustard'.
4. INZ membership represents approximately 50% of NZ's irrigated area, and is dominated by the Canterbury irrigators. All the major irrigation service

industries are also members - suppliers, designers, installers, consultancies, financial and research institutions. This unique membership combination leads to a well balanced whole of industry approach to INZ's advocacy activities.

5. Approximately 70% of all irrigation in NZ occurs in Canterbury. Irrigation is therefore of regional and national significance. In 2002/03 based on 425,000ha irrigation contributed 11% of farm gate GDP (MAF 2004)¹ - approximately 1% of national GDP. The irrigated area has now increased by over 50% and INZ estimates an 18% contribution to farm gate GDP (approximately 2% of national GDP). Irrigation in Canterbury therefore represents a 1.5% contribution to national GDP. Note: these figures are farm gate based and do not take account of the flow-on community economic benefits (processing and related service industries) – which are considerable. Looking at the future potential, based on the NZIER report of 2010², increasing irrigable area by 350,000ha increases national GDP by 0.8%. It should be noted that Canterbury is forecasted to provide over 250,000ha of additional irrigable area.
6. All INZ members businesses are founded on secure, on-going access to reliable water supply – without this they, and the Canterbury economy, do not function. The national economy would also be significantly impacted upon. INZ actively engages with its members on planning issues, proactively facilitating a wider understanding of the relevant issues by all.
7. The evidence presented today will first talk to some generic principles which should be applied throughout the CRPS - it will then focus on chapter 7: Freshwater upon which INZ made specific submissions.

Relevant Legislation

8. INZ recognises the need to develop clear direction for the future of Canterbury through a Regional Policy statement, and asks that this be done in the context of Part II of the Resource Management Act 1991 (RMA) in its entirety, the National Policy Statement for Freshwater Management (NPSFM), and with particular regard to the vision and principles of the Canterbury Water Management Strategy (CWMS), as required by Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010.

¹ The Economic Value of Irrigation In New Zealand, MAF Technical Paper No: 04/01

² The Economic Impact of Increased Irrigation, MAF 2010

9. The process must be consistent with Part II of the RMA, requiring its statutory purpose to be applied in a broad sense, with the exercise of judgement and proportionality. Section 5 (which defines sustainable management) involves consideration of social, economic and environmental matters and then requires an overall broad judgement to be made based on the particular circumstances of a particular situation. Section 5 is the overriding provision and sections 6, 7 and 8, containing a hierarchy of 'matters of national importance' and 'other matters' that are subject to it. Thus, considerable weight is attached to provision for a community's economic, social and cultural wellbeing.
10. The process must also be consistent with the NPSFM. This sets out clear policies and objectives with regard to: water quality; water quantity; integrated management; Tangata whenua roles and interests; a progressive implementation programme.
11. The Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010 requires that particular regard must be had for the vision and principles of the CWMS. The CWMS focuses on the parallel development of rural water infrastructure to give increased reliability alongside environmental protection and restoration. The desired outcome of the strategy is expressed in its vision: *To enable present and future generations to gain the greatest social, economic, recreational and cultural benefits from our water resources within an environmentally sustainable framework* (contained in Schedule 1 of the Act). In the CWMS the vision is immediately followed by text (which is not reproduced in Schedule 1 of the Act) which gives a list of what should be evident within 10 years if the strategy is successful – essentially an overview of what success would look like. This includes but is not limited to: water users having access to reliable water which will be used productively and efficiently; increasing primary production and employment; increasing economic value added by irrigation; and improved viability of rural communities. The text provides relevant context and is crucial in determining the meaning of the core vision statement reproduced in Schedule 1.
12. It is widely recognised that the reading of an Act alone will not always be sufficient to arrive at a clear meaning, and that it is necessary to understand the context of the legislation so that it can be properly understood. INZ therefore highlights that the vision statement reproduced in Schedule 1 of the

Act must be considered in the context of its accompanying explanatory text, and in the context of the CWMS generally.

Social and Economic Context

13. Canterbury has significant freshwater resources. However, due to the climate and geography of the region, water is not always available in the required places at the required time. Reliability of supply is therefore a key issue for irrigation in the region. Harvesting and storage of water during periods of high flow and the development of associated distribution systems is the only way to address the issues that eventuate as a result of unreliable 'run of river' abstraction during periods of low flow. Climate change predictions mean the current scenario will become more challenging over time.
14. Improving the reliability of existing irrigation combined with its further expansion is the key to achieving both the economic growth and social well-being expectations of the Canterbury community, particularly post earthquake. These growth targets and expectations are not considered by the PCRPS. They must be to ensure it is a balanced document. It should be noted that to maintain the status quo with regard to social well-being continued economic growth is essential.
15. Fortunately reliability is also the key driver to reduce the direct and indirect environmental pressures on both surface and groundwater systems from irrigation. It enables a move from just in case to just in time irrigation management practice which uses less water per hectare, has less losses per hectare and therefore has a reduced impact on water quantity and quality. Therefore with smart planning and investment it is possible for the Canterbury region to achieve win-win outcomes for all stakeholders.
16. The CRPS must contain specific recognition of the social well-being expectations and economic growth needs of the regions communities. One suggestion is that a chapter should be added, to reflect and highlight the importance of these key components. Alternatively greater specificity as to these could be included in the CRPS Introduction.

Chapter 7: Freshwater

Priority

17. Placing priority around the allocation of water creates significant challenges. INZ is in complete agreement that safeguarding the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of freshwater, need be considered in order to sustainably manage the take use of water – as per the NPSFM. This is not a priority rather a necessary first step or bottom-line. However, it is not the place of policy to further define priority as the framework is not flexible enough to cope with the dynamic world in which we live. We kid ourselves if we think we can successfully ‘play god’ without hindering future innovative solutions or creating perverse outcomes. Variation 6 in the Waikato is a very good example of why the priority route is not sound!
18. In this case the logical solution to the priority conundrum is a non-regulatory one - the better enabling of water transfer. Allowing a new entrant to more easily and transparently acquire water from incumbents. However, it is noted there are considerable challenges in this space with regard to clearly and consistently defining permits and resolving treaty claims. It should be noted the Land & Water Forum has a work stream under way to identify the ‘best way forward’ for water allocation in NZ.
19. The theory behind providing drinking water and stock water supply as a priority is laudable, (and is obviously given effect to under section 14(b) of the RMA) however, in practice it is nonsensical. For example in a catchment at full allocation giving priority to increased drinking and stock water requirements at the expense of other economic activities is illogical. In some instances it may even create perverse outcomes - jeopardising the original drivers for the increased water requirement! Such an approach also removes two significant players from the equation when it comes to developing and implementing whole of catchment solutions, for example, water storage and reticulation. At the very least if priority is given it has to be capped to avoid the impacts of long-term creep, and these uses then compelled to become part of future solutions.
20. We accept INZ’s original submission was unclear as to why it wished to add in “investigate opportunities for water storage and harvesting schemes”. However, we were unsuccessfully(!) attempting to include provision for the

issues outlined above if 7.3.4(1)(d) is to remain in the CRPS. INZ suggests an addition is made to (d), and its subsequent methods, that infers a cap need be placed on foreseeable drinking water or stock water needs, and that once the cap and/or allocation limits are reached a whole of catchment approach must be followed.

Transfer

21. 7.3.4(2)(a) needs to recognise it is the actual use in relation to the limit that is important, and not the site-to-site transfer of allocated but unused water per se. There is a marked difference between the consequences of temporary and permanent site-to-site transfer. Permanent transfers of unused water to new users will almost always increase long-term actual use. INZ holds a principle that water is a community owned asset – it is not a property right. Therefore, for the minority that chose to ‘play the system for financial gain’, i.e. have no intention of giving effect to their permit, the ‘use it or lose it clause’ needs to be better implemented (on-selling should not class as having given effect to the permit). INZ therefore agrees with preventing permanent site-to-site transfer with the caveat that the proposed 42A report addition is accepted. This takes into account the CWMS infrastructure framework will require a ‘water permit swap’ if the optimal regional water supply outcome is to be implemented. However temporary transfers in the main do not impact upon long-term use, for example; water sharing arrangements are commonly used in over allocated surface water catchments to manage within the limit (for example Ashburton River Users Group). INZ therefore suggests the word permanent is added before site-to-site transfer to make the CRPS a more enabling framework. Canterbury needs to develop policy for the majority not the minority.

Audited Self Management

22. The role of Audited Self Management (ASM) for achieving more sophisticated has been better given effect to in the section 42A report. ASM is a term used to describe a process whereby certain responsibilities of regional authorities under the RMA can be delegated to water users under agreed terms (self management) and subject to an audit of processes and outcomes by the regional authority. ASM is an ever evolving management system, a moving

point along a continuum, with individual regulatory based management being at one end of the spectrum (the status quo) and community based adaptive management being at the other. The irrigation industry has embraced the ASM concept and its potential and is currently embarking along the continuum in many parts of Canterbury. Its importance as a tool for successfully managing within limits has also been recognised by the Land & Water Forum.

23. There are five key attributes to a successful ASM system –
 - Data used for system management and decision making needs to be robust to ensure wider community confidence is gained and maintained
 - Data and derived information must be transparent and accessible to all stakeholders at the appropriate level
 - An open and regular communication process must be maintained between those responsible for management and those affected by the resulting decisions
 - The governance arrangements must reflect democratic values and be protected from capture by interest groups
24. It is essential the roles and responsibilities of all entities within the ASM system be clearly defined and agreed at the outset. Particularly the responsibilities of the entities with delegated or core statutory responsibilities.
25. ASM and the adaptive management framework it offers will ultimately deliver far better outcomes, for all stakeholders, than any plan. It is therefore important that weight is given to ASM in the CRPS. Any subsequent changes made by the hearings panel need to be evaluated to ensure they do not detract from ASM and preferably enable its future implementation.

Irrigation & HydroPower

26. Issue 7.1.3 need's to better recognise and state that irrigation in Canterbury is a nationally significant use of water and that future irrigation development provides a nationally significant opportunity for economic growth - as outlined in the NZIER 2010 report which accompanied the Irrigation Acceleration Fund establishment. Irrigation drives Canterbury's economy and the social well-being of its communities. It also contributes significantly to NZ's GDP (INZ estimates approximately 1.5%). Studies undertaken by MAF, Canterbury Development Corporation and Irrigation Schemes (Rangitata Diversion Race, Opuha and North Otago Irrigation Company) clearly provide evidence for this.

In the case of the Waitaki catchment the irrigated area is currently around 120,000ha and will soon grow to 175,000+ha (in terms of current and future potential this represents approximately 20% of the irrigated area). For the Waitaki - irrigation is therefore of equal national significance as electricity generation.

27. The NPS for Renewable Electricity Generation needs to be put in context. This is a national document with national goals which unfortunately has not yet developed into a national plan – the vital missing ingredient! It also clearly states in the NPS preamble that it “does not apply to the allocation and prioritisation of freshwater”.
28. Options for renewable electricity include, wind, water, and solar. Current developments overseas (such as the UK) demonstrate solar generation’s potential - particularly at the domestic scale. Such options should not be overlooked. It may be in future that better value is derived from using water for irrigation, and the renewable targets are met through alternative generation options.
29. Irrigation and hydropower should be viewed as complimentary activities. Irrigation storage and distribution infrastructure has vast potential for electricity generation. Therefore they should be treated as such and one not given greater standing over the other through the CRPS.
30. Lastly water used for hydro generation is consumptive. Whilst hydro generation might not directly consume water, it removes the opportunity for others to use water whilst it passes through the generation system. It is therefore consumptive and should be treated as such.

Other

31. Objective 7.2.XX Protection of intrinsic value of water bodies and their riparian zones. INZ is not in agreement with the addition of this objective. In part it is a repetition of objective 7.2.1(1) & (2), to better reflect the NPSFM the text from the NPS “life supporting capacity.....” should be added to objective 7.2.1 and objective 7.2.XX removed.
32. 7.3.4 (1) (f) the addition is not necessary as it is already captured.
33. Definitions – INZ feels greater clarity is needed for the efficiency definitions in the CRPS. There are multiple efficiency definitions in use (particularly with regard to technical). If they were better defined in the policy this would avoid future confusion and likely dispute.
34. On behalf of INZ, I thank you for the opportunity to present this evidence.

Andrew Curtis

Chief Executive

Irrigation New Zealand

12th March 2012