IN THE MATTER OF

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The hearing of submissions on the Proposed Canterbury Land and Water Regional Plan – Group 1 Hearings.

STATEMENT OF EVIDENCE OF JOHN WILLIAM PENNO

1. INTRODUCTION

1.1. My name is John William Penno. I am the CEO of Synlait. I co-founded the Synlait Group in 2000.

1.2. I have a PhD in animal science. Prior to setting up the Synlait Group, I worked in the dairy industry as a consulting officer for the New Zealand Dairy Board before joining Dexcel as a research scientist where I specialised in enabling New Zealand dairy farmers to increase productivity and profit. In 2000 I was appointed General Manager of the NZ National Dairy Industry Extension Program which serviced farm owners, workers and rural professionals.

1.3. I am also a past Director of Dairy Insight and was the inaugural Chairman of the Dairying and Environment Leadership Group. In 2009 I received an emerging leaders award from the Sir Peter Blake Trust and was also awarded the Federated Farmers inaugural agribusiness person of the year in recognition of my contribution to the New Zealand dairy industry.
1.4. I have read the Environment Court’s Code of Conduct for Expert Witnesses and agree to abide by its provisions. I have complied with these in preparing my evidence. This evidence is within my sphere of expertise and experience.

**Synlait Milk Ltd**

1.5. Synlait Milk is one of Canterbury’s largest companies which since its inception in 2008 has grown its revenue to $400 million and processes 500 million litres of milk a year.

1.6. Synlait Milk is largely supportive of the direction taken by the Proposed Canterbury Land and Water Regional Plan (“the Proposed Plan”) but note that a more generic focus on discharges rather than solely nitrogen from farming is warranted and may prevent future legal and logistical problems.

1.7. Synlait Milk is developing its own standards for incorporation by its farmer suppliers and welcomes the opportunity of sharing with the Selwyn-Waihora Zone Committee the very real challenges and difficulties in implementing these. Much of this commentary is contained in the evidence of Juliet Maclean for Synlait Farms.

2. **SCOPE OF EVIDENCE**

2.1 In my evidence I will comment on the issues arising from the Proposed Plan relating to water quality and water availability, with specific reference to the applicability and practicability of the Objectives, Policies, Rules and definitions contained therein. In particular my submission relates to the following principles, concerning:

(a) The first in time principles contained in the RMA;
(b) The requirements and treatment of over-allocation;
(c) The principles around sunk investments in infrastructure and productive capacity;
(d) The principles relating to efficiency and effectiveness (including dynamic efficiency) in various statutory requirements and the Proposed Plan;
(e) The principles around tradability and transferability relating to the Proposed Plan;
(f) The proposed consent bias against farming as an activity;
(g) Enhancement of good management and the adverse effects of prohibitory plan provisions;
(h) The principles around the collaborative approach to delivering water management objectives and their intersection with various statutory requirements.

3. **Recognition of existing consents holders and the principle of “first in time” under the RMA** [1.2.6; 4.48]

3.1 The Proposed Plan provides little in the way of policy recognition to existing consent holders and importantly the “first in time” principle that is the foundation upon which water allocation in New Zealand is typically built. There is a clear direction within the Proposed Plan to elevate biophysical values over the rights of existing consent holders and existing investments to the detriment of the regional and national economies.

3.2 The failure to acknowledge the importance of economic issues, as required under the RMA, at a time of international market and general economic contraction, is evidenced by the absence of, other than a cursory reference to, the economic impact of the Proposed Plan in the original s.32 report.

3.3 Section 124B(2) RMA provides that an existing consent holder, when applying to renew a consent is “entitled to priority over every” other application for specific processes when a resource is scarce. Section 124 acts to preserve the status quo and requires that all consents are processed in order in which they are received.

3.4 The inclusion recommended by the s42A report of reference to s.124 in Rule 5.101, condition 3, in relation to establishing the status of consent to take and use water, is supported.

3.5 The RMA provides the overall direction of freshwater management, particularly in relation to water quality management and water allocation, which is based on a process whereby applications for resource use are heard and decided upon in the order in which they are lodged, without consideration given to future applications.

3.6 The NPS FM, Policy B7 (2) (required to be incorporated into Regional Plans by s 55 RMA) requires that where water resources are over-allocated these need to be “phased out” by a process which favours applying allocation limits preferentially to (a) any new consent (first lodged after 1 July 2011); and
(b) any change in the “character, intensity or scale of any established activity”.

4. Over-allocation – water takes

[Rules 5.96; 5.101; 5.104; 5.107]

4.1 Under the Water Metering regulations, takes of 20 l/s and more (“Big Takes”) were required to have a water measurement and reporting system installed by 10 November 2012. By 30 June 2012 - the end of the 2011/12 water season - for Big Takes, 58.3% of groundwater wells and 33.8% of surface water abstraction points were metered. These metered water takes accounted for 62.4% (1,137,545,776 cubic metres) of all allocated groundwater, and 20.5% (3,213,103,405 cubic metres) of all allocated surface water.

4.2 In, 2010/11 and 2011/2012, 52% and 39% respectively of allocated groundwater that was metered, was used and for surface water the respective figures were 49.5% and 43.4% respectively. Telemetering was only required to be installed for Big Takes as at November 2012, and many are still in the process of being installed. ECAn estimates that by June 2013, metering will cover Big Takes representing 97.35% of all daily allocated groundwater and 99.3% of all daily allocated surface water.

4.3 The percentage of water taken from the total allocated pool, depends entirely on rainfall during critical periods of the year (October to March). The 2011/12 season was described in the Water Use Report as “generally average” with the previous year having a drier period in February –March.

4.4 In determining methods for “phasing out existing over-allocation”, the obvious first step is to determine whether in fact the pool of available surface or groundwater is over-allocated by reference to theoretical maximum data from water permits and then to determine whether use is sufficient to “safeguard ecosystem processes” as required by Objective B1 NPS FM.

4.5 It is the latter step that requires further information from the on-going telemetering programme. The preamble to the NPS FM, which is described as assisting in the interpretation of the NPS, states that “the process for setting limits should be informed by the best available information and scientific and socio-economic knowledge”.

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1 ECAn Water Use Reports 2010/2011 and 2011/2012
4.6 If all water used amounts to only 50% of water consented in a relatively dry year (2010/2011), a more efficient approach (required by the NPS FM) than simply requiring 50% surrender of transferred water within the same zone under Rule 5.107 of the Proposed Plan, is to rely on the efficiency conditions (the conditions on which CRC proposes to restrict its discretion) in Rules 5.96 in relation to takes from surface water and 5.101 in relation to groundwater.

4.7 Any transfer of a water must be approved under s.136(2)(b)(ii) RMA which provides that a consent authority may approve any transfer within a catchment, and that the transfer is as if the transfer were an application for a new consent, enabling full consideration of all effects and appropriate information thereto. It is this consideration of the effects of activities, the focus on efficiency and provision of information related to the quantum of the pool and the allocation of that pool, that better meets the NPS FM test set out in 4.5 above, rather than mandatory surrender of a significant portion of a water permit, which does nothing to add to “the best available information and scientific and socio-economic knowledge”.

4.8 Any application for a take under Rules 5.96 in relation to surface water will need to be determined by inter alia consideration of effects on water quality, application of reasonable use and alternative use tests, irrigation water management and groundwater effects where the groundwater allocation zone is fully or over-allocated and for a take from groundwater (R.5.107), inter alia reasonable use and alternative use tests, the capacity of the bore, the effects on surface water and other takes will need to be considered.

4.9 If the tests for water transfer in Rule 5.107 were more focussed on assessment against an efficiency criterion, as required by the NPS FM, rather than utilising a claw-back mechanism that in all likelihood will simply eliminate transfers and hence water allocation claw-back, the net effects over time would be preferable.

5. The principles around sunk investments in productive capacity

[Rules 4.76]
5.1 The investment in Synlait Milk is in the order of $400 million and Synlait Farms is in the order of $100 million. The combined investment in dairy farms in the region is around $13.8 billion with the average dairy farm estimated to have invested around $8 million.

5.2 Section 104(2A) RMA requires that when considering a consent application made under s.124 RMA by an existing consent holder, “the consent authority must have regard to the value of the investment of the existing consent holder”. It is appreciated that this may not mean renewal on exactly the same term and conditions that applied previously.

5.3 The regard for high-value investment in productive capacity, has resulted, generally, in other catchments in conditions on consents relating to improving the efficiency, and reducing the environmental effects, of taking and using the water and improving water quality, along with conditions requiring the provision of information to support the requirements for efficiency and reduced or minimised environmental effects, but with durations for farming in conflicted catchments of 15 years, not 5 years as here proposed.

5.4 Rule 4.76 as amended by the s.42A report provides:

Resource consents for the use of land for farming activities and the associated discharge of nutrients in catchments that are within a Nutrient Allocation Zone in which water quality outcomes are at risk (areas coloured red on the Series A Planning Maps) and resource consents for water take and use in catchments or groundwater allocation zones that are over-allocated will generally be subject to a 5 year duration if the land use and associated nutrient discharges or water take and use may impede the ability of the community to find an integrated solution to manage water quality and the over allocation of water.

5.5 In order for large-scale investment in productive capacity to be bankable and provide for down-stream future employment, duration of consents must reflect the value of the investment plus ensuring water quality outcomes can be met over time. Limiting the exercise of the consent to 5 years, while maintaining the ability to require the consent applicant to demonstrate, under Rule 4.34, that “the effects of the land uses or
discharges will not prevent the water quality outcomes of Policy 4.1 being achieved” is excessive.

5.6 The section 42A reports states that 5 years is the “presumptive” or base duration for resource consents under s.123 RMA. 5 years is the default position where no duration is provided for in the consent, not the presumptive position. The s.42A report then acknowledges that in the case of Variation 6 to the Waikato Regional Plan, that consent duration was set by the Environment Court at 15 years with the provision of longer exceptions, including “for large scale, capital intensive industrial facilities such as ..., dairy factories”.

5.7 The Proposed Plan makes no references to, and no provisions for, “capital intensive industrial facilities” apart from energy, telecommunications or water networks or public good infrastructure.

5.8 Section 128(1) of the RMA allows for the review of conditions at any time, provided that the purpose for the review is specified in the consent. Given the current dearth of information in relation to some takes that are in the process of being metered and the questions concerning the overall pool of available water, the ability to review consents will allow on-going review of consent conditions, without the commercial, economic, social and informational limitations caused by Rule 4.76 and the proposed 5 year consent duration.

6 The principles relating to efficiency and effectiveness (including dynamic efficiency) in various statutory requirements and the proposed plan.

6.1 The NPS FM, in relation to water availability, Objective B3, requires regional councils “to improve and maximise the efficient allocation and efficient use of water”.

6.2 The definition of “efficient allocation includes economic, technical and dynamic efficiency” under the definition contained in the NPS FM.

6.3 The S42A report (pp.214 and 253) rejects the inclusion of dynamic efficiency on the basis that “that the term is not defined or widely understood” and it is implied
that allocative efficiency is the same thing. Allocative efficiency is defined as economic efficiency whereby economy/producers produce only those types of goods and services that are more desirable in the society and also in high demand. The Land and Water Forum define dynamic efficiency as “patterns of resource use need to be able to adjust efficiently to meet changing demands.”

6.4 Dynamic efficiency can be defined as resource allocation over time and takes into account both current and future costs of use. In 1987, the Brundtland Commission report ‘Our Common Future’ defined sustainability as based on dynamic efficiency. The Commission defined ‘development [as] sustainable when it meets the needs of the present without compromising the ability of future generations to meet theirs’. Dynamic efficiency is the fundamental purpose of the RMA.

6.3 The ability of future generations to provide for their economic well-being in the Canterbury region, while meeting bio-physical bottom lines is not adequately provided for in the plan, nor is it considered in any meaningful way in the s32 report.

6.4 The importance of dynamic efficiency is that it requires consideration of the importance of individuals and economic activity as well as technical (bio-physical) and allocative efficiency. The Proposed Plan’s main delivery mechanism is the community, expressed as a collaborative approach to water management, without sufficient regard for overall present and future economic activity.

6.5 The definition of sustainable management in the RMA requires consideration of “people and communities” (emphasis added). Case law holds that people’s interests are not to be subsumed in the interests of the community, without good reason.

6.6 Canterbury has an estimated 2.62 million hectares of land in agricultural or horticultural production. The social and economic costs of rapid response to change to individuals and to future generations in lost economic opportunities were not discussed in the s.32 report.

6.7 Nor is rapid change required by the NPS FM which permits implementation up to full implementation by 31 December 2030. (NPS FM, Policy E1(c).

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6.8 The NPS FM requires that in order to achieve the water quality objectives of improving freshwater quality by *inter alia* managing the discharges of contaminants, Regional Councils under Policy A3 are to achieve the water quality objectives by “where permissible making rules requiring the adoption of the best practicable option to prevent or minimise any likely adverse effect …”.

6.9 The best practicable option is defined in relation to a discharge as:

*the best method for preventing or minimising the adverse effects on the environment having regard, among other things, to—*

(a) *The nature of the discharge or emission and the sensitivity of the receiving environment to adverse effects; and*

(b) *The financial implications, and the effects on the environment, of that option when compared with other options; and*

(c) *The current state of technical knowledge and the likelihood that the option can be successfully applied.*

6.10 Best practicable option requires a three stage process in determining regional rules:

(a) an analysis of the emission and the environment to which it will be discharged;

(b) an analysis of the various options in terms of cost and environmental effects;

(c) an analysis of whether the options are technically feasible.

6.11 The inclusion of dynamic efficiency, pre-supposed by the NPS FM, requires a greater focus on the costs to future generations and the inclusion of the use of the best practicable option as a management tool rather than punitive and prohibitory provisions relating to consent activity status or water claw-back provisions.

7 **The principles around tradability and transferability** [Rules: 4.71; 4.73; 4.74]

7.1 In relation to water permits, the s.42A report suggests that “Limiting the transfer of water in fully allocated catchments ensures that the environment also benefits from efficiency gains.”

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McNamara v Tasman DC WO72/99.

7.3 There is a requirement that the effects of the take are the same or less and in association with Rules 5.107 and 5.108, that a significant percentage of the water transferred is surrendered.

7.4 Rules 5.107 and 5.108 require that in over-allocated catchments, between 25-50% of surface or groundwater is surrendered on a permanent or temporary basis, apart from where the surrender is to an irrigation scheme which includes a storage component. This means that temporary transfers to another party, which are then transferred back to the original holders, can result in the loss of up to 75% of the water allocation.

7.5 Where a potential transferee wishes to transfer a portion of a water take allocation, unless there are exceptional grounds, required by the non-complying consent test, it is probable that the water will not be transferred or traded.

7.6 There are no provisions enabling a 100% transfer where the transfer is of surface water and there is increased efficiency as a result of the transfer.

7.7 Under the NPS FM, a market for transference of water permits is to be encouraged:

“Once limits are set, freshwater resources need to be allocated to users, while providing the ability to transfer entitlements between users so that we maximise quality and quantity”.4

7.8 It is noted that up to 60% of water allocations are not currently being used.5 It is not clear the deemed over-allocation, for example in Selwyn-Waihora relates to the currently consented total volumes as the telemetering required by the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 (“the Regulations”), for Big Takes, have only started to take effect (from 20 November 2012) and the requirements of Policy 4.51 in the Proposed Plan as to telemetering for new, replacement, transferred or reviewed water permits, is not yet operative. The Regulations only require full telemetering for all water permits by November 2016.

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4. NPS FM P.3
7.9 The conditions in relation to determining its discretion require ECAN to apply the reasonable use test which will permit the consideration of such matters as technical efficiency of water use, water requirements for the land use activity and information from OVERSEER™ or similar.

7.10 The limitations of OVERSEER™ are discussed extensively elsewhere, but in the case of large-scale, capital intensive industrial facilities, such as dairy factories and large farming enterprises, water take and discharge consent monitoring provisions, provide better and accurate information, as discussed herein at 8.5 below.

7.11 These conditions will enable considered decision-making as to the merits of water allocations without the unintended consequence of preventing the creation of a market to transfer entitlements.

8. The bias against farming as an activity.

8.1 The Proposed Plan and its s.32 analysis contains virtually no substantive analysis of the economic effects of the Proposed Plan on farming as the major industry in the Canterbury region; that an additional s.32 report on economic and social issues had to be commissioned, and is still not available, as required by the RMA, is perhaps indicative of the approach taken in this Proposed Plan.

8.2 The RMA proposes a regime which is predicated on analysis of effects. The effect that should be addressed in the heading to Rules 5.39 to 5.51 is the effect of Nutrient Discharges not the effect of “Farming” per se, as currently titled. This nomenclature, could create future problems for ECAN in relation to applications for non-farming related nutrient discharges.

8.3 This section addresses the issues around nitrogen loss but is virtually silent on issues around other nutrients such as phosphorus, which in the Selwyn-Waihora zone is potentially a more significant issue in relation to the health of Lake Ellesmere – Te Waihora, as discussed in the evidence of Dr McCabe.

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5 Alisatair Pickens “Q & A Land and Water Plan” ECAN.
The plan proposes that water permits or discharge consents in over-allocated catchments or catchments with impaired water quality, will be limited to 5 years. These short duration consents will constrain the ability of young farmers to develop long-term environmentally robust plans sustained by bank support and is dealt with in section 5 above.

8.5 The use of OVERSEER™, while subject to limitations as to the precision of its results, will demonstrate estimated trends over time. However, the use of actual data, where available, should be preferred. The use of actual data is predicated on (a) consent applications, (b) monitoring consent conditions and (c) most importantly, permitting applications for consent on other than a non-complying or prohibited basis, as discussed herein in section 9.

8.6 The focus on nitrogen rather than on nutrients including phosphorus may lead to gross inefficiencies as discussed in the evidence of Dr McCabe.

8.7 Limiting the consideration of the effects of trade activities to farming in Schedule 8 (Industry Derived Nutrient Discharges –) referenced solely through Rules 5.46 and 5.48, may cause ECan some significant semantic and logistical problems in relation to non-farming consent applications where the activity will discharge nitrogen and other nutrients.

8.8 It is unclear on what basis, ECan has notified and received submissions on this Proposed Plan where this key Schedule 8 is missing and hence on which no submissions, neither s.32 nor s.42A analysis could be received. Unlike the ZIPs which stand independently, apart from the default or reserve status of the Proposed Plan once it is operative, Schedule 8 is key to the Proposed Plan.

8.9 Every dairy factory in New Zealand discharges clean condensate to land or in some cases it may also be re-used in other processes, such as pre-heating incoming milk or as cleaning water subject to treatment by reverse osmosis followed by disinfection. In rules 5.69 and 5.70, the volume of condensate and the requirement for no nitrogen content in an orange or red zone, would preclude it being treated as a permitted or controlled activity. This is properly a farming specific provision which should have its own rule as a controlled activity.
9 Enhancement of good management and the unintended effects of prohibitory plan provisions.

[Rules: 4.1; 4.32; 4.75; 5.70; 5.104; 5.107]

9.1 The NPS FM provides a general focus on reducing any over-allocation of water in the most efficient manner possible and requires determining resource consents by having regard “to the extent that it is feasible and dependable that any effect on the life-supporting capacity of freshwater and any associated ecosystem is avoided”.

The NPS FM does this by requiring Councils to improve and maximise the efficient allocation and efficient use of water “to safeguard and improve water quality by:

“a) **imposing conditions on discharge permits** to ensure the limits and targets pursuant to Policy A1 and Policy A2 can be met and

b) where permissible, making rules requiring the adoption of the best practicable option…

9.2 The general framework of the RMA and more particularly the NPS FM is enabling i.e. only seeks to intervene where activities are likely to result in unacceptable impacts based on sound science which is developed through a raft of information relevant to the subject matter and the relevant location.

9.3 The general advice concerning the formation of ZIPs is that they are the best able to deliver the relevant information from which to develop specific sub-regional plans. Much of the relevant location specific data is developed and provided to the relevant consent authority during the consent application process at the cost of the applicant.

9.4 Where activities are prohibited, such specific information, provided by the relevant consent applicant, cannot be developed. For example, in relation to Rule 5.104, all new applications to take and use groundwater within a Groundwater Allocation Zone are a prohibited activity.

9.5 The Groundwater Allocation Zones were lifted from the former plan, the NRRP, and as such do not constitute the best and most currently available information.

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\(^6\) Policy B7 is a mandatory requirement incorporated by the NPS under direction by virtue of s.55 RMA

\(^7\) NPS FM Policy B7

\(^8\) NPS FM Objective B3
9.6 Determining a Groundwater Allocation Zone from information available some considerable time ago for the NRRP, and including them in the Proposed Plan, does not allow for the development of knowledge gained from ECAn’s on-going work programmes and from consent applications to take and use groundwater and from irrigation developed after the NRRP was notified. These irrigation developments in some of the Zones have altered the land-based recharge. These alterations are not reflected in the proposed Zones.

9.7 The figures arrived at from the NRRP have been over-turned on several occasions in the Environment Court and by ECAn appointed commissioners in relation to applications to take and use groundwater by Synlait. The results of the work streams developed by Synlait and provided to ECAn for these consent applications, should have both been (a) incorporated into the Zones and (b) provide a caution to the prohibitory approach, which would not ensure that these information flows became available in the first place.

9.8 It is recommended that the Groundwater Allocation Zones are defined within the ZIPs, the most important of which are due to be notified early this year, and that information produced through consent applications and validated in various hearings, be incorporated into these Zones.

10 Collaborative Management - CWMS

10.1 Particular regard must be had to the CWMS, on the same basis that decision makers must have “particular regard” to section 7 RMA matters. Case law in respect of “particular regard” makes clear that this is not an implied obligation as contained in s5 RMA; it requires that a council give particular regard to the express matters which are referred to but are not constrained to implement it slavishly.

10.2 Decision makers must have particular regard to the vision and principles of the CWMS which potentially conflict with the collaborative provisions, such as Zone Implementation Plans (ZIPs), on which much of the structure of decision making within the Canterbury region rests.
For example, the CWMS provides “the Principles seek a consistent [regulatory] approach to water across the region” is applied throughout the Canterbury region.

It is anticipated that each ZIP will adhere to the objectives of the Proposed Plan and that the ZIPS will be notified and submissions received in respect of each ZIP, as if it were a regional plan under the RMA but that the s42A report states that in relation to the general rules, the sub-regional sections will have priority.

Zone Implementation Programmes and Zone Committees

Zone Committees enable the separation of a large and geographically diverse region into manageable sub-catchment units and provides opportunities for focussed community-scale action. I generally support this approach, but would point out that there are flaws in the process.

The legal framework under which the Zone Committees operate is hazy. Section 34A(2) RMA permits the transfer of functions, except the approval of a policy statement or plan and the power of delegation itself. However s34A is clearly identified as being the transfer of functions to a single “employee or hearings commissioner” or “any other person”. All other transfers of functions powers or duties to committees (s34 RMA) require that the transfer to a committee or community board is “established in accordance with the Local Government Act 2002”, which requires a democratic process including election of its members. It is noted that the members of the Zone Committees are appointed community, tangata whenua and ECan non-elected representatives.

One of the duties under the RMA is the preparation of regional plans. The CWMS sets out a vision for the management of water in Canterbury. The CWMS is to be implemented at a local (zone) level by a zone committee who are charged with preparing a ZIP. The ZIPS are are also forwarded to the Regional Water Management Committee of ECan and incorporated into Regional Implementation Programmes. The committee, which is a committee of Environment Canterbury,
includes representatives of Canterbury district councils, Christchurch City Council, Ngai Tahu, runanga, the zone water committees, as well as the six community appointees.

10.8 The legal framework, given the number of interlocking committees, and the relationship between them and their legal basis is not expressed clearly in the Proposed Plan.

10.9 It is acknowledged that the ZIPs which are to be formulated by the Zone Committees are intended to guide each sub-zone section of the Proposed Plan at some point, following input from ECan Staff and Commissioners and then follow the normal notification and submission process required by the RMA; however it is not clear that this addresses the defect in transferring the bulk of the conceptual thinking behind the preparation of the sub-zone regional plan to a group which has not been established under the LGA (as required by the RMA and the Environment Canterbury Act).

10.10 The Proposed Plan does not deal specifically with the process by which “community” or “collaborative” decisions might be made, except by reference to various “white papers” which “will be carried out” as determined by 2.9 of the Proposed Plan. It is also not clear as to how and on what basis, once a plan is notified, that a decision on the plan might be made. In other words it is not self-evident what “collaborative” means and how this impacts on processes.

10.11 It is recommended that these process issues be addressed formally, which otherwise may lead to misunderstandings as to future processes and outcomes and may result in unnecessary clarification on questions of law to the High Court.

Dr John Penno
Monday 4 February 2013