Submission on Proposed Canterbury Land and Water Regional Plan

Form 5: Submissions on a Publicly Notified Proposed Policy Statement or Regional Plan under Clause 6 of Schedule 1 of the Resource Management Act 1991

Return your signed submission by 5.00pm Friday 5 October 2012 to:
Freepost 1201 Proposed Canterbury Land and Water Regional Plan
Environment Canterbury
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Christchurch 8140

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Trade Competition

Pursuant to Clause 6 of Schedule 1 of the Resource Management Act 1991, a person who could gain an advantage in trade competition through the submission may make a submission only if directly affected by an effect of the proposed policy statement or plan that:

a) adversely affects the environment; and
b) does not relate to trade competition or the effects of trade competition.

Please tick the sentence that applies to you:

☑ I could not gain an advantage in trade competition through this submission; or
☐ I could gain an advantage in trade competition through this submission.

If you have ticked this box please select one of the following:

☑ I am directly affected by an effect of the subject matter of the submission that adversely affects the environment and does not relate to trade competition or the effects of trade competition.
☐ I am not directly affected by an effect of the subject matter of the submission that adversely affects the environment and does not relate to trade competition or the effects of trade competition.

Signature: [Signature]
Date: 2 October 2012

Please note:
(1) all information contained in a submission under the Resource Management Act 1991, including names and addresses for service, becomes public information.

☑ I do not wish to be heard in support of my submission; or
☑ I do wish to be heard in support of my submission; and if so,
☐ If others make a similar submission, I will consider presenting a joint case with them at the hearing.
**1.** The specific provisions of the Proposed Plan that my submission relates to are:

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<th>Section &amp; Page Number</th>
<th>Sub-section/Point</th>
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**2.** My submission is that (include whether you support or oppose the specific provisions or wish to have them amended and the reasons for your views.)

**3.** I seek the following decisions from Environment Canterbury: (Please give precise details for each provision. The more specific you can be the easier it will be for the Council to understand your concerns.)

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See Submission Pages 1–17 plus 3 attachments.

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Add further pages as required – please initial any additional pages.
Water yield from sensitive Catchments

Further comment from Commissioner Johnston.

Replace the narrative (page 6) from Dr Cowie with the following.

Commissioner Johnston is in general agreement with the decision reached by the panel where 50 catchments were removed from restrictions (leaving 9) and which is more focused and effects based than the per property restrictions in the plan as notified. He is in agreement with the general principle of maintaining low or environmental flows in the river systems. However, some questions still remain. Commissioner Johnston’s reservations with respect to the robustness of the science, models and trials used, remain. And even if the science is all it is purported to be, then it seems almost a contradiction to only focus on exotic forestry while leaving indigenous forest and its regeneration virtually out of contention. This has been further highlighted more recently by matters pertaining to the Kyoto protocol, ETS, and Carbon farming, none of which were on the radar screen when the plan was developed. Hill country farmers today are being encouraged, and paid, to allow their country to regenerate to native forest or just to plant more trees with not even a passing thought to water yield. A complete turnaround.

The other major conundrum was to balance the rights of existing users of the water with the rights of the property owners from whence the water comes and their ability to utilize their land. Commissioner Johnston believes this is tipped more in favour of current users and while afforestation opportunities are still there for those property owners in the 9 catchments, they will eventually be taken up. Meanwhile existing or new users may well increase their take, and reversion to indigenous forest may well continue.
Submission on Proposed Canterbury Land and Water Plan

My name is Robert Hugh Merrell Johnston

Address 519 Ashley Gorge Rd. Oxford

Occupation Retired Farmer / Commissioner / Councillor

Background After primary and secondary schooling in Christchurch, I went to Lincoln College, graduating with a Diploma of Valuation and Farm Management in 1961. After a comprehensive 4 month agricultural study tour of the eastern half of Australia in early 1962, I entered a farming partnership with my father in the middle of that year. Following his death in 1970, I assumed ownership and control of Ashley Gorge Station. From 1973 I was elected to and spent the next 10 years as a grower representative on various boards, bodies and committees in the Wool industry both in New Zealand and internationally.

In 1998 I was elected as a Regional Councillor (North Canterbury constituency) and retired after 3 terms in 2007 (deputy chair 2004/07) Appointed by the Council as a Commissioner for both panels in the Natural Resources Regional Plan (NRRP) “hearings” process, I remained in that capacity until that was completed in October 2010. So as a Councillor I had had a part to play in the formation and development of that plan from 2000/2001 through to notification in 2004 and then as a Commissioner from 2006/10. There were over 3500 submissions, 650 of which wanted to “be heard” It was a most comprehensive and detailed analysis of the plan and the various points of view expressed about it, which formed the determinations we collectively came to in the completed chapters as presented to the new Commissioners in Oct 2010, Some 7,000 decision points later.

As was my democratic right, I included by way of appendices to the plan, my own independent views on (a) afforestation in sensitive catchments and (b) nitrate levels in drinking water. These views I do not resile from and being absolutely relevant to this plan and these proceedings, I attach them also for your consideration.
In the New Year Honours of 2008/09 I was awarded a Member of the New Zealand Order of Merit (MNZM) for services to Agriculture, Local Government and the Community.

My submission covers the following topics.
(1) The essential ingredients needed in a plan or its revision.
(2) Some shortcomings of the plan and its proposals
(3) Flow Sensitive Catchments
(4) Overseer TM
(5) Allowable nutrient Limits
(6) Compliance Monitoring, Regulation and Enforcement.
(7) Enabling or Restrictive ??

1 **The essential ingredients needed in any plan.** These must include.
   (a) There must be sound reasons to ‘create’ or ‘revise’ a plan in the first place and its preparation must be sound and thorough.
   (b) The policies and strategies need to be factually based, scientifically sound and defendable, and be achievable by way of practical application and implementation with realistic objectives.
   (c) A wide and comprehensive consultation process must have been conducted both before and during the development and re-write of the plan to establish and ensure the maximum confidence of affected parties and the wider public of the ramifications and implications which will follow.
   (d) Rules, and other compliance criteria, need to be realistic, achievable and enforceable.
   (e) Planning maps need to be accurate and defendable.
   (f) National, regional and/or local consistency ---- Just how important is this and how can it be incorporated?

1 (a) The need for sound reasons---and its preparation. In this case the ink was hardly dry on the NRRP (indeed before its completion) before the critics, staff and new Commissioners were laying the foundations for a radical re-write / new plan development on the grounds the NRRP was constrained by pre 2004 thinking. -- things had ‘moved on’ and new concepts developed, the NRRP was ,quote ‘too long ,complex also contradictory----In fact they would have you believe there wasn’t much right about it, what was needed was something
simple easy to read and more 'enabling'. In my view the NRRP had not been given a chance before it was being dismembered. The only valid reason for any additions or supplements was to embody and link the CWMS and new Zone committee concepts together within the plan, and also give effect to the decrees from Wellington ministries and ministers, flowing out from the Land and Water Forum. Yes it was long and also complex ---no apologies--- and reflected the size, nature and complexity of Canterbury's Natural Resources, land and water. Having been a commissioner on both panels, I know the depth of examination we went to in crafting a plan that was credible, practical and had had regard for all the many and diverse views expressed in the submissions. The fact there were only 6 appeals speaks volumes for the integrity of the NRRP. Firstly praised, then it was roundly and publicly critizised. Thankfully those critics have now been silenced, with the error of their ways being pointed out, and acknowledgement now given that 80% to 85% of the 'new' Land and Water Plan having come across from the NRRP. But shortening and simplifying the text in itself does not make a better plan—It is what it contains that really counts and the practical application and ramifications that follow.

1 (b) Policies to be factually based and scientifically and strategically sound.------Most of course are ,but in my view others are not.-
Example (i)---- the issues relating to nitrate levels in drinking water human health are as much based on emotion as they are on science. As revealed in the NRRP hearing process and explained in my attached appendix, only one 'blue baby ' has reportedly died in New Zealand, and only those infants younger than 6 months and bottle fed could be at risk ----with effects able to be mitigated by breast feeding or the use of bottled water. The World Health Organization standard is 22.6 ppm . We are setting the limit at 50% of that ,11.3 ppm with the alarm bell ringing at half that again – 5.6 ppm. I am unclear of the (scientific ) linkage if any with this figure and the 20 kg per ha of leached nitrogen chosen as the threshold before excedences occur. See further discussion under 2 page 7
Example (ii)--- Flow sensitive catchments. The re-inclusion of 55 catchments or sub catchments as being flow sensitive defies belief and in my view is without foundation. The NRRP Commissioners had sound reasons to discard 50 plus ( leaving only 9 with planting restrictions) No one in Ecan has been
able to answer the simple question —why?— and all seem to be clearly avoiding discussion on the topic—commissioners and staff. I will further discuss this under Para 3 page 8

Example (iii) — The requirement to use “Overseer” to determine the nutrient loss and status across a farm is at best imprecise and fraught with problems. This will be discussed further under Para 4 page 9

1 (c) A comprehensive and wide consultation process needs to be undertaken to ensure input from affected parties and a high degree of understanding of the contents and ramifications of the proposed changes. Several points——

It would seem the development process and changes and additions were made quietly and almost under the radar. 99% of people, even the Zone committees, had very little, if any, idea of what was being prepared. The cut off date for public input was 7th May after which it defaulted to those on the First Schedule (RMA). I know of 3 meetings just prior to that date — Cheviot Lincoln and I think Timaru. I went to the Cheviot one on 2nd May—12 farmers and 12 Ecan. I commented to Commissioner Bedford that I hoped he didn’t regard this as proper consultation. I also asked questions about the forestry issues I had, which no one could answer then or since. I submitted a 4 page submission of my concerns on the 7th May to staff (cc to all commissioners) and never heard any more — I am since advised by 2 commissioners they never received it. Since notification on 11th August some public meetings have been held (I have been to 2 or 3) and other more ‘closed’ ones with interested parties, eg federated farmers. And I am sure a lot more I know nothing of.

But these cannot be construed by any means as being true ‘consultation’, rather they were passage of information and explanatory and while they were certainly welcome, they were a hurried and belated attempt to make good a serious shortcoming. The reality is that the whole consultation process was rushed and woefully inadequate and the vast majority of people just had no idea what was happening and still don’t. The consultation requirements for new Regional (or District) Plans as contained in the RMA default to those contained in the Local Government Act 2002 (Section 82) which are very precise and clearly Ecan was in breach of these — there is absolutely no question of doubt about that.

The notification process allowing for public submissions and this public hearing on those submissions is a small comfort, allowing you Mr chairman and your
panel of commissioners the opportunity to cure any breach that may have occurred through an inadequate consultation process.

1(d) Rules and other compliance criteria need to be realistic, achievable and enforceable. *There are provisions and guidelines in place up to 2017 after which tighter conditions will apply. This on the face of it might seem fair ---- allowing farmers for example a period of ‘grace’ to improve their practices or change their systems, but being lulled into a false sense of security after which compliance will tighten and enforcement action could well be taken. And no one actually knows exactly the degree of breach which will trigger enforcement action. The breadth and scope of some provisions is almost unenforceable----eg---- to expect all 17,000 land occupiers in Canterbury (9,000 of which are 4ha blocks) to submit a nutrient budget is quite unrealistic. Has the Council got the resources to monitor, manage and enforce that requirement?*

1(e) Planning maps. These need to be accurate and defensible. *The Nutrient allocation Zone map (page 4.8) is a case in point, for pretty much the whole of the plains and reaching back into the foothills is included in RED ZONE. It is explained that these maps came straight across from the NRRP. Their credibility could be questioned then, but even more so now given the use they are now being put, ie to form the basis for boundaries for nutrient limits and the strategies developed for the future within those zones. Some of the land included extends back into the foothill country. Some of this I am very familiar with----much of it is in indigenous scrub or forest cover, some in gorse and broom, some in exotic forestry with the balance being grazed in an extensive low stocking rate, hill country grazing regime. The water run off from these areas would be as pure as you would get and it defies all levels of understanding to try and figure out how they could be improved (because the standards are not being met) The only explanation I have been given is that because the Plains areas were deemed to be RED, therefore the catchments should be included too. Also to have 75% of that huge area south of the Rangitata coded as at “risk”, much of it mountainous areas going back to the main divide, just cannot be correct. This particularly so when moving north up the alpine chain the zone is coded green (meets the water quality outcomes)
My view is and I submit that, given the purpose for which these maps are NOW being used, ie implementation of nutrient levels and budgets etc, they should be reviewed so they are credible, defendable and ‘fit for purpose’.

1(f) National, regional and/or local consistency. My understanding is that all Regional Councils and Unitary Authorities (17 in all) are required to produce their own water plans addressing the core issues of water quantity and water quality by such and such a date. This flows out from the Land and Water Forum. But other than all complying with the standards set in the National Environmental Standards (NES), really set by central Government through its Ministries, all these bodies have the autonomy to prepare their own plans in their own way for their own region. Hence Southland is different from Otago, different from Canterbury etc. Same in the North Island. Sounds fine in theory, but just how defendable or good is it to have major differences emerging (as they are) between neighbouring regions. We won’t change that. But turning to the local scene, and the new concept and structures of the Zone Committees and over arching Regional Committee. Again the concept is that local conditions and differences can be reflected and incorporated and indeed local aspirations and status levels for nutrient levels and water quality. And this, through “community collaborative participation” giving “empowerment” to those local communities.-------- I am extremely concerned. A few points----- None of the members of the 10 zone committees or the Regional Committee are elected -------they are all appointed, and while purported to be ‘representative’ they are arguably not. The selection/appointment process ensures that it is Ecan driven with a bit of help from the local District Council ensuring only people Ecan want, make the cut. To be truely representative and a proper democratic process, some at least of the membership should be elected. I know of several very good people who didn’t even get an interview Also with 10 Zones with an all up membership of about 10, that means we now have 100 people to be brought up to speed on all the issues. The only body able to do that is Ecan itself so the staff support required to make the Zones run smoothly is considerable. Add to that the Regional committee with a membership of around 24 (half from the local zones) and the task gets even bigger. NOTE. I understand from the minutes of my local Zone, that the large Regional committee very often can’t even manage a quorum and is considering ways of restructuring.-----
that has to be a worry at this early stage of the life of these new initiatives. So the reality is we now have new structures in place whose membership, agenda and information base is Ecan dominated, and the outcomes will be almost pre-determined as being what Ecan wants. So much for ‘community empowerment’—I believe that will be more imaginary than real. Notwithstanding they are public meetings, very few go, and the reality is only a handful of the ‘community’ know what is going on—less than 1% at best. As it is now, and with no disrespect, it is a charade, notwithstanding the ideals and good intent.

I submit that you should examine these structures, their membership, the appointment process, their role and devise a better way, if true ‘community empowerment’ is the objective. And determine whether the real possibility for different levels and standards in neighbouring areas is acceptable or even desirable.

2. Shortcomings
Nitrate Levels in ground water
Further examination following on from 1b example (i) on page 3

The fundamental basis for the policies and rules concerning nitrate levels and leeching into ground water are based on the premise that nitrates in drinking water are harmful to human health. That may be partially true (with qualifications) but is also flawed. In and by themselves they are NOT harmful and can only have a detrimental effect when associated with microbial contamination—(That evidence emerged from the NRRP hearing process and was the basis of my independent view attached to the final NRRP documents in 2010) My contention therefore is quite simply that all atmospheric ‘N’ fixed by legumes of whatever sort should be removed from consideration. The ‘N’ fixing capability of legumes, principally clovers and lucerne, which in turn is then utilized by grass plants and grain crops is at the very foundation of Plant Science and New Zealand’s agricultural economy The principles of the ‘Nitrogen Cycle’ is one of the first things agricultural students are taught. That atmospheric Nitrogen is free and has been captured by farmers for hundreds of years. Winter fallow was the traditional way of allowing the breakdown of plant material and the release of ‘N’ for subsequent uptake by
following crops. That practice is now discouraged'.—bad for the environment!

Mr chairman, I would challenge and question, and I submit that you and your commissioners also challenge and question, the legitimacy of the claims that nitrates in any water are necessarily detrimental to human health. I would further submit that you discard from consideration all naturally produced Nitrates that cannot be associated with microbial contamination.

Note As explained in a David Attenborough documentary on the annual migration of whales, Nitrates particularly as well as other nutrients in the water, are the key elements necessary for the whole marine food chain and life cycle to flourish.—without 'N' there would be no plankton—then no krill—and then no food source for the whales. 

We should not be regarding them as a poison but quite the contrary, a huge asset. For all life on this planet is dependant on them.

Note also There are only two small areas in Canterbury where high N levels have been measured——they are very small plumes, down slope from two freezing works where waste water from those plants was irrigated on to their holding paddocks for decades. NOTE this has relevance for the section on accuracy of the planning maps. Refer 1 e page 5

3 Flow Sensitive Catchments.

Further examination following on from 1 b example (ii) on page 3

Much of the Canterbury foothills and catchments were forest in both pre and post European settlement times. Evidence shows that much was cleared by fire, by both Maori and more recently by European. Banks Peninsula is one whole block of hill country that was pretty much all in bush at the time of European settlement, so to restrict afforestation to 15% of a title in 8 catchments in this area defies logic. ( NRRP left only 2 ) Similarly with the Ashley catchment——one of the highest rainfall areas in the region. Note——our family rainfall records for the past 90 years at Ashley Gorge, show an average rainfall of 1250 mm (50 inches). Hardly a sensitive catchment from a water yield point of view !!!!. The NRRP as notified contained 60 plus catchments. We, NRRP Commissioners, examined and discarded all but 9. These are included by way of an attachment. To those remaining 9 we applied some exhaustive science and analysis to establish the 7 day MALF (mean annual low flow) producing areas of each catchment and then applied
the planting restriction percentages accordingly. We did not, because we could not, consider any other matter other than water yield—such were the constraints of the proposals in that plan. On balance our panel could find justification, on water yield grounds alone, for only 9 catchments to have restrictions. Not totally agreeing, I provided my independent opinion. Additionally we thoroughly examined the questions of restrictions by ‘catchment’, by ‘property’ or by ‘title’ and the clear answer was by catchment. As not all farmers are foresters and likewise not all foresters are farmers, having by ‘catchment’ allows a skilled and enthusiastic farmer to plant at his discretion, while his neighbour plants nothing (at his discretion) The per ‘property’ option precludes a farmer selling off a corner to a forestry concern who may wish to put it all into trees, as only 15% would be allowable. Likewise the same restrictive result when it is per ‘title’ You would, under the present rules, finish up with the nonsensical situation of 15% of 15% or just 2 and 1/4 % of a property. Now that can’t be good planning.

WHERE ELSE IN THE WORLD IS A LAND OCCUPIER NOT ALLOWED TO MAKE USE OF THE RAINFALL THAT FALLS ON HIS LAND BY THE GROWING OF PLANTS CROPS OR IN THIS CASE TREES??

---------To be having regard for environmental flows is one thing and supportable, but to restrict planting to protect the rights and use of future authorised takes and use and allocation status, is not. Quite apart of accepting that the science surrounding the effect of forestry on water yield is sound, (which it is not), that is quite simply denying one land occupier a land use and economic opportunity to protect the same (opportunity) of another occupier downstream. There is a well established principle in Canada whereby the downstream user (beneficiary) of a resource, actually pays a fee or compensation if you like, to the person so denied upstream.

---------The Science—Just how sound is or was it on which the whole issue of forestry restrictions is based? Let me explain-----The main case was built around a 12 or 15 year trial in the Upper Moutere,, where half a small (1ha) catchment was planted in pine trees and the other half was left in pasture. Water yield measurements were taken and small water flow loss was measured. Then that has been extrapolated to Canterbury catchments, not of 1 ha, but 1000 ha or 200,000ha and everything in between. That is not good science and does not stand scrutiny. Let me just say, from my own
observations and experience on my own property, in the two worst droughts we have experienced certainly in my lifetime, (autumn 1998 and autumn 2001) the streams which continued a steady flow right through three, then four months of drought, were those coming from heavily forested (native) catchments. This in contrast to streams from clear tussock country which ceased flowing after 6-7 weeks. I can only surmise that the forested catchment had the capacity to ‘store’ water and then allow its slow and steady release. Again I would challenge the whole basis on which these policies are founded.

Also this plan should have, and could have, given consideration to two other important matters -----(a)-Carbon and the ETS provisions and objectives and (b), the declining economic contribution some of this hill country can make through low wool and sheep meat prices.

Firstly (a) Carbon, Central Government has been encouraging the planting of new forests all over the country with the objective of increasing carbon sequestration to better position the country to meet its Kyoto Protocol commitments with tens of thousands of hectares being planted in the past 3 years. (Some of this by way of subsidy money administered through regional councils including the CRC.) Farmers with forests have been encouraged (or even required) to register and partake in the scheme. As well, others on marginal, reverting hill country can voluntarily either plant for a carbon production (rather than timber) perspective OR if it meets certain criteria put their country into a permanent forest sink (PFS) So the great irony is we have central govt encouraging forestry on the one hand while this Land and Water Plan is busy trying to restrict it. Remember it is a LAND plan as well (b) economic contribution---- Much of this land either has or is reverting to indigenous scrub and the economic return from sheep particularly is such that it is uneconomic to attempt to arrest this change. Forestry offers another opportunity and while the door is not shut, neither should it be restricted to 15% of a title and 2mtrs +80% canopy (rule 5.110 page 5.26) without then defaulting to 5.111 (page5.26) and with it falling into the restrictive discretionary activity which will then require a consent to plant I presume. The control that this leaves with the council is huge and the hurdles required to leap by an applicant are almost impossible to attain. Conditions 1 and 2 could only be a subjective assessment at best -----no private person would
have the resources to provide an objective assessment of conditions 1&2---
and I doubt it could be done anyway even by a forestry corporate . Conditions
3&4 are acceptable (just) but condition 5 leaves the council free to decline an
application , again on the basis of their subjective assessment.

I submit that the following

A  the name of this section “flow sensitive catchments” be changed to
“catchment forestation”

B  that all but the 9 catchments remaining and contained in the final copy
of the NRRP be removed. (List of the 9 catchments attached.)

C  Conditions 1 and 2 of 5.111 be amended to make them achievable or
else deleted.

D  that the ‘restricted discretionary activity’ , status accorded to those areas
covered in 5.111 (or those remaining 9 ) be changed to ‘discretionary’ ie
with thresh-holds which can be met and hurdles not impossible to leap.

E  due and full consideration be given to the Carbon and ETS benefits of
forestation in the hill country.

F  That any restrictions on remaining catchments be just that ---on the
catchment-----not on the property or the titles within.

G  In the event the panel decides to make no change and confirms the
provisions of the plan as proposed , then a compensatory scheme be devised
to recompense those upstream land owners /occupiers for the land use and
economic opportunities being denied them by downstream takes and users.

H  The panel re-examine the science (so called) on which this whole
philosophy is based. I would contend that it is flawed.

4 Overseer TM-----Is it defendable ?

As you will know ‘Overseer TM is the computer programme developed over
several years to measure nutrient losses from the soil profile . It is owned by
Ag Research the Fertilizer Industry and the Government . It is under constant
development we are told and version 6 has just been released .( Each version
better than the one before). Its use is a requirement under the plan to
measure the nutrient losses from a property or part of a property and its
status, more particularly nitrogen at this stage, but it has the capability for many other elements eg phosphorous and magnesium. **Many concerns are being expressed**

With the N level threshold being set at 20 kg per ha and exceedances above this figure requiring a plan and/or a consent,(which will be declined in all RED zone areas) in reality pretty much the whole of the Canterbury plains, the accuracy and credibility of the results coming from the programme are crucial. Crucial because the results will form the basis of what avenue of production, or changes thereto, can be employed above the ground and therefore what fertilizer input can be applied.

**Variability and Accuracy** The problem, concern and criticism is the variability of results and credibility of accuracy. Both licensed practitioners and farmers familiar with its use, all say that it has a range of variability of + or – 20% to 30% that is potentially up to 60% variation! That is huge. Even if was only half that, it would still be too high to accept as an ‘objective’ measurement. Apparently its inaccuracy increases with complex operations eg dairy, dairy support and arable, all on the one property and also the difficulty with trying to factor in the benefits of the use of Nitrogen inhibitors like Eco N. The results and variability don’t stand scrutiny. In reality, is it much better than a ‘back of the envelope-look out the window approach’? I would hope so. The dependence on its use needs to be re-evaluated.

Important also, it is or will be a requirement for every rural property (including 4 ha blocks) in Canterbury to have their nutrient status assessed by ‘Overseer’ and submit those reports to Ecan on request. **Note** that is around 17,000 properties, including 9,000 small (4ha) blocks. There will be huge non compliance –Is it quite an unrealistic requirement and expectation? So at best Overseer TM is a very imprecise tool which this plan insists being used to provide unreliable information. Even staff acknowledge that it is only the ‘best they have got’.

**Note** Around 40 years ago wool scientists and physicists developed ‘Objective Measurement’ as the means to measure the important parameters affecting wools processing capabilities and hence its value (fibre diameter, yield, vegetable matter, staple strength, colour and length) This was to replace the old hand and eye appraisal that had operated for hundreds of years. It took well 10 -15 years from conception through to
introduction as the basis for the sale of wool. ------“Objective measurement and Sale by Sample” arrived in 1975/76------ and only then after exhaustive trials and much refinement to gain the credibility and confidence of all sectors of the wool trade --- from growers and right through the processing chain all over the world. I was very involved in the industry during the final development stage and through to its introduction. It took a huge leap of faith------every one in the industry had to have confidence that the measurements were accurate. And they were accurate, with variability in measurements and therefore tolerances ,of only a fraction of a micron ,or a fraction of a per cent of yield or vegetable matter.

By contrast, the variability that is freely acknowledged that is flowing from ‘Overseer TM’ is just not acceptable----as mentioned earlier---- plus or minus 20%---30% (a 60% possible variability) cannot be countenanced. Particularly when as proposed, it will form the base line for allowable limits, compliance or non- compliance for nutrient discharges, a Nutrient Discharge Allowances (NDA) and farm environment plans.

How the architects of nutrient management requirements (MfE and the Land and Water Forum ) could conceive such plans and controls and approve methods with such imprecise tools and science is almost beyond comprehension.

So---Is the use of and reliance on ‘Overseer TM’ defendable? The short answer is NO---- and the argument that has been proffered that by 2017 , (when the transition period ends ) it will be much improved is not acceptable. The ramifications and effects on production systems is too great and too far reaching to be controlled or set by inaccurate technology with a huge co-efficient of variation.

I submit Mr Chairman that
A------ You suspend reliance on ‘Overseer TM’ as the basis for nutrient status, and discharge compliance until its accuracy can be improved and independently verified as no more than plus or minus 2 ½ % (a variability of 5%)
B------You encourage the owners of ‘Overseer TM’ to speed up the development of a much more accurate and less variable version.
In the meantime you revert to input based guidelines to influence nutrient status.

5 Allowable Nutrient levels

Unless I am mistaken the only nutrient status parameter that has been included for future adherence is for Nitrogen or Nitrates and the maximum retained allowable levels are, or will be 20 kg per ha. Levels above that will trigger non compliance in a red Zone or inland lake area or necessitate a consent or farm nutrient plan. And then there is the issue of the 10% latitude allowed before a change of use is declared.----How appropriate are these thresholds? No-one I have spoken to, or presentation I have been at, has explained either. Where did the 20kg per ha come from? Is there science behind that figure and if so what is it? Earlier I asked whether there was a linkage with 20kg per ha and the 5.6ppm of nitrate in drinking water. A cynic would say that on the face of it, the figure has been conveniently ‘arrived at’ which will suit the purpose of satisfying critics but also stifling production and constraining agriculture at the same time----similarly with the 10%----where did that figure get plucked from?? And where is the rationale behind it? Why not 20%? Even a change in winter feed crop type and a couple of good seasons could trip the 10% trigger. And if you are in a red zone you would be in trouble. It is not good enough for the Council /Plan to say that during each of the Zone discussions with their “community” those figures could be changed to what the ‘community’ want ----That is no comfort. Remember that none of this was widely canvassed with the wider community by way of a proper consultation process. So these two figures have not been widely discussed or agreed and nobody really understands the science behind them or if there is any.

I therefore submit that

A The panel seek from Council officials the rationale and justification for choosing those two figures (20 kg per ha and 10 %) and directs the Council to publicize that rationale

B Given the absence of any definitive science substantiating both those figures, they be raised to 25 kg per ha and 20% respectively.----this to provide some latitude for adjustment to production systems.
Note I have already submitted that all the naturally produced ‘N’ be taken out of contention.

6 Compliance Monitoring Regulation and Enforcement.
Throughout the plan, on the various components discussed there are permitted activities, discretionary activities, restricted discretionary activities, and of course some prohibited ones.
Some require the land occupier to obtain information and supply it on request—eg--nutrient losses from 17,000 land occupiers.
Some are less clear --- eg-- the rolling average figure on nutrient loss and the 10% exceedence latitude which would trigger a consent or a farm environment plan or what ever. that implies those nutrient levels be measured each year
Also-- eg--In the forestry restriction section, base line data will have to be assembled for every property in 55 catchments or sub-catchments.

Ecan deputy chair David Caygill told an audience at Lincoln on Wed 26th Sept that the council weren’t in the business of prosecuting people ---rather they were there to help people comply—certainly reassuring remarks.

Several points In answer to one of my questions at Cheviot 2nd May. I was told that the council didn’t have the staff resources to gather the baseline data on forest plantings for the 9 catchments remaining after the NRRP process.. A fair question would be therefore ----How ,if it lacked the capability to gather information for 9 catchments, could it possibly do it for 55?? And how long will it take? and how many staff will be needed?
And how will all the nutrient status compliance regimes be administered by the council ? And how many staff will be needed. Even with a lead in time until 2017, I fear there will be a huge issue with non participation of what is expected of land owners ----therefore non compliance. Or will there be no compliance monitoring (of nutrients ) until after each Zone has completed its own thresholds and parameters.?

These are important issues ,for given Ecan’s record in the regulatory department can be quite unforgiving at times, there are 17,000 land occupiers ,large and small who need to know where they stand.
I submit that
A The panel clarify for land occupiers what the regulatory expectations will be for the various compliance regimes, rules and time-lines, interspersed throughout the plan
B Instruct the council to adopt a ‘helping hand’ approach to regulation rather than an ‘iron fist’

NOTE The modus operandi and tough stance (in some cases quite unnecessarily) taken in the past did not serve previous councils well in the good will stakes. In fact in some cases any respect just disappeared all together.

7 ‘Enabling or Restrictive’ ??
The way the plan is constructed would at first glance give the impression that it is very ‘enabling’. That is the word Commissioner Skelton has used in public statements. As well Commissioners Williams and Caygill have both said “we don’t want to control what people do on top of the ground –only to make sure what comes through it is acceptable”, or words to that effect. “and we told staff to prepare the plan around those two principles”. Sounds great. BUT

On closer reading of the plan, many of the activities allowed or ‘enabled’ have qualifications attached to them which would be well nigh impossible to achieve, supply, adhere to, comply with, or whatever, as the case may be. In which case the ‘enabling’ philosophy becomes ‘restrictive’

Some examples
(a) Nutrient zones-----4.34-----page 4.9 for an applicant to demonstrate that would be an almost impossible task to accomplish-----perhaps it was meant to be. I submit you more closely examine it to make it achievable
(b) Flow sensitive catchments 4.64 page 4.12 I submit this overarching policy should also include carbon and ETS considerations and economic opportunity considerations.
(c) Farming 5.39 through to 5.49 I submit all these rules need to be placed on hold and re-evaluated for they rely on what I contend is imprecise science (nitrate harm to human health) and variable and inaccurate tools (Overseer TM ) as discussed earlier.
Summary

I support fully the ‘higher level’ work being done by the Regional Zone Committee on future water storage options and possibilities.

I believe the Zones, if not fully elected, should at least have a fair measure of elected representation—say 75% for local and 25% for regional (as 50% of regional are reps from the local zones.)

The plan is not as enabling as is claimed and relies on imprecise science, flawed data and (at this stage) not properly developed and imprecise technology.

In over turning some sections of the NRRP (re-inclusion of 45 catchments for water yield) it has failed to understand /comprehend some of the wisdom behind the NRRP determinations and confined its considerations to too a narrow base.

The council was too hasty and most neglectful in not conducting a full and proper consultation process with affected parties, particularly the rural community who are the most affected, before and during the development stages and before notification.

Under the RMA full consideration has to be given to all 4 pillars—cultural, environmental, social and economic. The first two have clearly been considered—social never easy,-- but completely missing is any analysis of the economic ramifications particularly if opportunities are shut down or compromised on the RED Zone plains areas.

I am fearful the CRC does not have the staff resources, by numbers or skills, to properly implement, monitor and guide this plan into reality.

Thank you for the opportunity to present.

Robert Johnston. MNZM Dip VFM
Commissioner Johnstone has another view. The New Zealand economy is heavily reliant on its agricultural production and exports, which centres around efficient pasture production, the key element of which is the nitrogen fixing capacity of the legume component within that pasture. This “free N” is worth literally billions of dollars to New Zealand.

Commissioner Johnstone’s understanding is that elevated nitrate nitrogen levels in themselves are unlikely to be harmful to human health, but are more likely to become so when associated with microbial contamination in the same water. In those instances, the use can be avoided. Further, the WHO has determined that a level above 22.6 is unacceptable, our health authorities have halved that to 11.3 MAV (as a precautionary approach) and we are halving it again (5.6) when we ring the bell, which in turn impacts on our agriculture—the country’s very lifeblood.

We know the at risk portion of the population are the very young bottle fed infants, and the known instances of “blue baby syndrome” are around one per year nationwide. This risk can be avoided by breast feeding or the use of bottled water.

The question then arises as to whether the ultra precautionary approach as adopted is in balance with the associated risks, and the impact on the national economy. Commissioner Johnstone does not believe so.

Sept 2010
Appendix 3

Water Yield from Sensitive Catchments

Catchments Retained in chapter 5 of the NRRP  Schedule WQL 15

/ Waipara
/ Waitohi
/ Okuku
/ Te Oka (Banks Peninsula)
/ French Farm Stream (Banks Peninsula)
/ Hororata
/ Selwyn (Upper)
/ Opihi

Waihao