

**RAKAIA SELWYN CLUSTER GROUP 1 – TE PIRITA
NOTES FROM DISCUSSIONS –DUNSANDEL – 25/8/08**

WELCOME – ROSS KEELEY, CLUSTER REPRESENTATIVE

- The cluster group representatives met with David Hewson on 4th August to discuss questions that they had been getting from others in the group.
- Many were common questions, so proposed to have this meeting so that everybody in the cluster group got the same information.

WELCOME – CR MCKAY

WATER METERING & TELEMETRY – JOHN YOUNG, WATER METERING MANAGER (ECAN).

Please see ECan website for copy of presentation.

POINTS OF DISCUSSION

- Will the data collected through the telemetry be public knowledge?
 - Yes
- Will telemetry be put in place on ECan monitor wells and well data updated on ECan website more regularly?
 - Most of ECans wells are manually monitored monthly.
 - There are some wells which have automatic records, but this data is not telemetered.
 - Will put forward suggestion to ECan groundwater section.
- Can understand the reasoning for wanting data regularly telemetered for takes that have surface water effects, but what will the data be used for in relation to groundwater takes?
 - Data will be used for groundwater models, and the groundwater scientists would like this data monthly.
 - Those takes with hydraulic connection, scientists would like data ever 7 days for surface water management reasons.
 - The compliance team needs data 7-30 days, depending on consent.
 - For on-farm use – probably want daily data
 - The advantage of regular telemetry means less lost data (as shown in trials).
 - ECan is still working on the cost-models to look at the set-up costs versus the regular need for data. Tender group will be part of this work.
 - ECan realises that it needs to be practical with regards to limitation of technology.
 - Group would like to know these details before they sign off their proposed conditions.
 - ECan will get this information out ASAP
 - The condition may allow some flexibility as we don't know all the technological constraints yet. E.g. 'will require telemetry or some other system of data transfer as agreed to by the water metering manager'.

The consent review team is considering the wording of the current water metering conditions and there may be changes. The changes being considered are to allow flexibility when it is proven that telemetry is not possible at a particular location. Telemetry is still required along with the provision of data thru a third party provider. Anyone who signs agreement to affected conditions now will be offered any altered conditions and the opportunity to consider them. – Tania 5/9/08

- It is not clear what the value of gathering the data and/or telemetry is to the consent holder or the community?
 - Better data inputted in to groundwater models, will give a better idea of usage & recharge, which will allow better management decisions at both the farm level (individual wells) and the zone level (the whole aquifer)
 - Data will also be valuable for on farm water management.
- Why do we need to telemeter? Why can't we just send in data at end of the year?
 - Telemeter will allow for better management of the data, and less staffing requirements for ECan.
- Question referred to Chertsey Trial Table in powerpoint presentation – Do we know how the consented volumes in this table would be changed if WQN9v.3 was applied to them?
 - Don't know, as these consents are not part of this review.
- What volume is telemetry required on? And is it needed on all wells on a property?
 - Needs to be on takes greater than 357,000 cu m. This provides for 80% of the water take data in this zone being telemetred. Lifestyle blocks usually well under this.
 - Meters & data loggers need to be put on ever well, but it is possible to link these together so that all data can be telemetred from one place only.
- What is the value of the third party provider if ECan still has to look at the data to see if holder is compliant with conditions?
 - Third party can do some of the data management for ECan so that data comes in manageable format & sizes.
 - If ECan were to do this data management would require many more staff.
- How do we add telemetry to existing meters & dataloggers?
 - Depends on meter – needs pulse output to datalogger.
 - Current prices to get a new datalogger & telemetry system are \$1,000-\$1,500. But these are coming down with one recent quote from Australia at close to \$700.
- Who installs the telemetry equipment?
 - Many existing irrigation suppliers can install this, but do not have the capacity at present retro-fit existing wells.
 - Metering tender group will work on this by asking for expressions of interest from people and will review their experience, capacity and ability to service after installation.
- Given still lots of work to be done by ECan, when are we expected to have the meters in?
 - Initial goal is to have meters in by 2010 irrigation season
 - Have to be pragmatic and account for capacity of the industry to install.

- The telemetry seems to be very complicated. The recent installation of telemetry for power meters seemed much easier – can we learn from that?
 - ECan is meeting with Meridian next week.
 - The trials so far that there is different reliability with different systems of communication. So far it seems that cellphone technology is the most reliable.
- If the issues raised at today's meeting can't be given some certainty before we have to sign our proposed conditions, what effect does that have?
 - If waiting on information from ECan, than may consider an extension.
 - If you don't response, it is assumed you don't agree
- Backflow preventors – recently had a industry workshop. RPZ & Air gaps are going to become the only two acceptable methods. Fertigation must be downstream of water meter.

ANNUAL VOLUMES & STOCKWATER ALLOWANCES– JACQUI TODD, SENIOR PLANNER (GOLDER & ASSOCIATES)

Please see ECan website for copy of presentation.

POINTS OF DISCUSSION

- Current plans permit reasonable takes for domestic & stock water
 - If your take started pre-2004 – TRP rules for permitted takes are 100cu m/day for properties >20ha. 20cu m/day properties <20ha.
 - If your take started post-2004 – PNRRP rules for permitted takes are 10cu m/day.
 - These volumes are in addition to the Annual Volume consented for irrigation.
 - If your meter is measuring both takes, the permitted take will be subtracted from the metered volume to calculate the water taken for irrigation.
 - If your current consent provides for stock or domestic water on top of irrigation water you need to discuss this with ECan staff.
- WQN9 is a model used to determine the total seasonal water demand for plant growth, and aims to met this need 4 years out of 5 (80% of the time).
 - The model has no relation to current water allocation, but aims to determine what is needed based on crop needs, rainfall and soil data.
- Uses soil moisture data gathered over several sites in Canterbury.
 - Where were the soil moisture data probes used for WQN9? ECan to provide location map and report on website.
- Rainfall data used in WQN9 – taken from 30 years of data (73-03).
 - Only rainfall over the irrigation season was used (Oct 1-April 30 – 212 days).
 - Excluded rainfall of less than 5mm, and greater than 50mm.
- On the WQN9 calculation table sent to you with your consents check:
 - Area in ha
 - Landuse
 - Max volume, return period & pump rate if these are on your consent.

- GIS maps are available on line where you can check calculated rainfall & soil data for your property.
 - To use online GIS zoom in to your property
 - Select 'Soil moisture-Effective Rainfall by Landparcel' layer
 - Click on your property
 - Look at table at bottom of screen which will list the details for your property
 - If you are having trouble doing this, call ECan and they can print one and send it out for you.
- You are getting Total Annual Volume figure. Effective annual volume figure on worksheet is for administration.
- If you have more local rainfall or soil data please discuss this with ECan.
- How does the new annual volume effect our daily allowance? And why do we need both?
 - Daily allowance will not change. This is usually aimed at managing effects on neighbouring wells and stream depletion.
 - Annual volume – is for water management purposes
- WQN9 gives a different amount of water to arable and intensive landuses based on modelled water demands for these crops.
 - If you have both arable & intensive on your property need to make sure your landuse in your consent reflects the highest percentage you are likely to have in intensive in any given year. Discuss this with ECan staff to make sure it is correct.
 - Under the RMA we can only grant water for the needs of your current activities based on effective and efficient use. This will be based on what was applied for. We can not grant water in 'reserve' in case one day the landuse changes.
 - Water will not be taken off you if you don't use it in any given year.
 - The landuse used in WQN9 does not stop you from changing landuse, however if you are changing from arable to dairying you may need to apply for more water through the same process as all new consents. In some cases there may be a specific condition listed on your consent that does not allow dairying for other reasons.
 - Data is available about how the total seasonal demand for intensive and arable were calculated. This will be made available on the ECan website.

Using the on-line calculator tool you can alter the field for intensive and arable and see the total annual volume difference. How the difference is determined is detailed in the WQN9 report U05/15/1 which can be found at http://www.ecan.govt.nz/NR/rdonlyres/3B9FC6A3-ECC6-44C5-A33C-DF93160ED64D/0/ReportU05_15_1.pdf - Tania 5/9/08

- Confirmed that irrigation season used in WQN9 is 212 days (Oct 1 to April 31).
 - This does not confine you to irrigating only during this period.
- The proposed annual volume is only proposed,
 - If you have metered data which can show your need than discuss this with ECan staff

- ECan is aware that there are some arable crops which are not modelled well in WQN9. Please discuss this with ECan staff.
- Currently consent holders are nervous because the majority don't have metering data, and so can't assess what the proposed annual volume actually means for them.
 - Feel like they are being asked to give up water which currently 'belongs to them'.
 - Is there a possibility of allowing flexibility in the proposed conditions, that if water meter and soil moisture data gathered after the new annual volume is imposed can justify that needs are more that we have a chance to apply for a review of conditions?

▪ Will consider with review team.

This is being discussed at the moment but there has been no decision made yet. Again, if there are wording changes made to conditions that parties have signed off agreement to, then the amended conditions will be offered to them for consideration.

– Tania 5/9/08

- Through this cluster group forum we are aiming to help you understand the different variables used in the WQN9v.3 calculations so that you can understand and respond to your proposed consent conditions.
 - This cluster group can not change the formula or background data used in WQN9. This is currently being debated through the Canterbury wide NRRP planning process and many of the same concerns raised at this meeting have been put forward to the plan hearings.
 - Irrigation NZ and Federated Farmers, amongst others, are involved in the submissions process and the best way to get your thoughts put forward in a way which can influence the final outcome of WQN9 is to voice your concerns to your local reps.
 - Flexibility if being allowed in the proposed consent conditions to allow this group to have any changes to WQN9 which occur due to the submissions applied to their consents.
- If you transfer a consent which is currently under review the new consent holder will have to agree that the consent will remain in the review process.
- The 'banking' of unused allocation from year to year is still being discussed at the ECan staff level. No reports have been taken to the council table. But this concept is also part of the NRRP discussions.
- Cr McKay asked Geoff Stevenson what he needed to satisfy his concerns regarding the proposed conditions. Geoff put forward:
 - The group has been presented with lots of information, and there is far more behind it. They need to have confidence in this information.
 - There are too many ifs, buts and maybes involved at present for him to be comfortable.
 - Was glad that these meetings were being held as the target audience would much rather people, than paper. Wanted those present to know that concerns put forward were aimed at the system not the staff present.

- Suggested that an independent expert present to the group. Someone that could explain to those present what the proposed conditions mean for them in practical terms that they can understand.
 - ECan will work to organise a further meeting.
 - There is a meeting coming up were Vince Bidwell, Lincoln Ventures, will discuss the surface water connectivity model. Invitations will be sent out soon.

GENERAL REVIEW QUESTIONS - TANIA HARRIS, CONSENT REVIEWS MANAGER (ECAN)

- If there is out of date or incorrect data on your proposed conditions please let us know. Where possible changes can be made as part of the review process.
 - In a few cases if changes are major and there is the possibility of adverse effects not considered in the original application these changes may have to be done outside the review process.
- If we do not hear from you regarding the proposed conditions, we will assume that you do not agree with the proposed conditions. Your consent will continue through the process to the hearing with the independent commissioners. Ecan staff will prepare a report containing a recommendation to the commissioners based on the proposed conditions we have sent you.
- If you do sign off on your conditions and there is a major change in one of the conditions through the process (e.g. telemetry requirements) then this change will be advised of the change and it can be applied to your consent.