

AUTUMN 2015

Newsletter

Welcome to the Autumn newsletter. We have a lot of information to communicate and as always, we are keen for any feedback about any of the content.

As you know the Land and Water Regional Plan (LWRP) will have a significant impact on our scheme and our shareholders. We will need to make a number of decisions regarding the new compliance requirements. Please be assured these decisions are being made with the best interests of shareholders in mind.

In this newsletter we will discuss the Nitrogen Discharge Consent application, provide an update on the Wright's Road storage project and the Farm Environmental Plan process. We will also cover the issues we have had this season and in the past delivering water to the end of the scheme.

Alan Buckland has announced that he will be resigning from his role as Operations Manager in early April. On behalf of the Board I would like to thank Alan for his contribution to the organisation over the past nine years and in particular his role as Operations Manager for the past two years.

Alan's job has been demanding and recently he has overseen the repairs caused by the September 2013 windstorm, the upgrade of the main race from the intake to the buffer pond and the liaison of the irrigation race developments at Ngai Tahu Farming. We would like to wish Alan all the best for his future endeavours and we hope from time to time, to call upon his expertise and knowledge of the scheme to help with future developments.

The vacancy of Operations Manager has been advertised and we expect to make an appointment in late April.

As you are aware the irrigation industry is facing constant challenges and opportunities; this has a direct impact on shareholders and the scheme. We welcome any feedback on the issues raised in this newsletter or in general. We encourage shareholders to participate in discussions and get involved.

Brent Walton
General Manager



BRENT WALTON

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Irrigation Season

The region has been in a virtual drought since early January with soil moisture levels as low as we have seen for a number of years. The scheme has experienced record irrigation demand with average flows at the intake exceeding 15 cumecs post restrictions being lifted.

The main race was upgraded last winter and paid for by Ngai Tahu to take a maximum demand of 21 cumecs from the Intake to Thongcaster Road and 17.5 cumecs from Thongcaster Road to the buffer pond. The section of the canal to the buffer pond has been monitored for seepage over the summer and our engineers report minimal losses.

Despite the upgrade and record flows through the intake, we continue to have issues providing shareholders at the lower end of the scheme with reliable and equitable irrigation flows. Of the 15 cumec supply at the intake, 2.1 cumecs is for stock water, just below 2 cumecs for Ngai Tahu and the remaining 10.7 cumecs is WIL's full allocation. The 2.1 cumec stock water demand has remained unchanged since 2007, and the Ngai Tahu demand of 2 cumecs is 2/3rds of their 3 cumec consented allocation. Ngai Tahu takes its water from race 2 which is fed out of the buffer pond so this does not impact on the rest of the scheme.

The only real change is the increase in irrigation demand from WIL shareholders, and there are a number of contributing factors to this. Many on farm systems have been upgraded in recent years from rotorainers to pivots, this creates a more even demand for water. It is likely that the 1.5 cumecs of Eyre River recharge water is now being fully utilised as systems are upgraded. There has been a gradual increase in on-farm storage, and during periods post restriction these shareholders are taking 100% of their allocation. The prolific expansion of lifestyle blocks in the region must be putting pressure on the stockwater flow, and it is quite feasible that demand now exceeds the 2.1 cumec supply and this is being supplemented by WIL water. Finally, WIL shares overtime have been bought and sold and moved around the scheme, so there are zones within the scheme that require greater flows than originally designed for. Combining all of these factors, the scheme for the first time is experiencing maximum demand and is operating right on the limits of its design.

There are three sets of culverts on the main race between the buffer pond and the Eyre River siphon that are on the verge of over topping when there is full irrigation demand and this is causing a bottle neck. Currently the scheme is short about 500 l/s at the lower end during peak demand and even if the water was available, the culverts on the main race cannot take the additional flows. We will undertake an extensive race cleaning program this winter. This will have the effect of lowering the water levels in the race and this might take some of the pressure off the culverts. MWH are pricing the upgrade of the culverts and this may be considered as an option for this winter. A site has been identified where a second scheme buffer pond could be located and the various options are being worked through. It is feasible that this work could be completed over the winter.

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In addition to the above initiatives the scheme will continue to add automation, flow gauging and monitoring to ensure shareholders are receiving their entitled volumes of water. More work will be done with WDC to identify if stockwater demand is exceeding supply.

We will be in contact with property owners prior to the race maintenance program commencing. Given the scale of the program we will need shareholders to co-operate, in particular allowing the race cleaning material to be deposited adjacent to the race to enable it to dry out so it can be spread and worked into the paddocks at a later date.

Storage Project

As previously reported we were issued with a Resource Consent for the Wrights Road storage project in October, and this was subsequently appealed by ECESS. Their appeal was so broad that we felt there was little benefit in entering into mediation; instead we applied to be heard in front of the Environment Court. We are still open to mediation but the scope of the appeal would need to be narrowed.

One of the conditions of the Resource Consent required a peer review of the dam design by three independent dam engineers. We felt that WIL's position would be best represented if the peer review was completed and any recommended changes to the design actioned. The peer review started in late January and this is scheduled to be completed in early April with the results being provided to the Environment Court on 15 April 2015. The feedback we have received from Damwatch is that the review panel has asked for clarity on some of the design aspects and in addition has made several recommendations. In summary Damwatch consider that the recommended changes to the design are minor and should not impact on the Building Consent that was granted in 2013.

The other significant condition outlined in the Resource Consent was the requirement to obtain comprehensive public liability insurance. We considered the conditions to be quite onerous, but again, and in the best interests of the community, we decided not to appeal this condition, and instead just 'get on' with obtaining cover.

Our advisors suggest that by meeting the peer review and insurance requirements our position is strong. This whole process has been long and tenuous, despite this there are few remaining hurdles and we are confident we will be in a position to seek shareholder approval later in the year.





Scheme Area Enlargement / Nitrogen Discharge Consent Application

It is worthwhile providing shareholders with some background information. In 2012 the Board identified several opportunities whereby efficiency water could be used to expand the scheme beyond 18,000ha. Efficiency water is generally described as water saved from increased technology i.e., variable rate irrigation; improved scheduling through better forecasting; an increase in scheme reliability which in turn reduces the overall volume of water used; and finally systematic repairs to the race network that reduces losses. It was envisaged that the net gain in water could then be on sold as shares. The company subsequently lodged an application with ECan to extend the irrigated area.

The initial response from ECan officers is that they did not think the WIL irrigated area could be extended beyond 18,000ha without going to a publicly notified application. However, with the release of decisions on the Proposed Land and Water Regional Plan the constraint on 18,000ha could be replaced if a nitrogen leaching load was adopted by the scheme enabling irrigation to occur over an area greater than 18,000ha.

To allow future land use changes to occur within the scheme, WIL must therefore obtain consent to discharge nutrients under Rule 5.62. This consent will specify the maximum annual amount of nitrate-nitrogen that may be discharged or leached from the scheme. Public notification of the consent application will be avoided if one of the following criteria is met:

- a) Either, the nutrient loss applied for is equal to or less than that currently authorised through conditions on a water permit to take and use water i.e. WIL's 18,000ha plus the possible addition of other properties if they agree to be combined with WIL's N load (e.g. properties that use WIL water in conjunction with groundwater takes); or
- b) The nutrient loss is no greater than the average loss that occurred from the scheme between 1 July 2009 and 30 June 2013 as modelled by the latest version of Overseer.

Until WIL obtains the nutrient discharge consent under Rule 5.62, the following farming activities can occur without the need for consent:

- Properties less than 5ha or of any size where the N loss is less than 10 kg/ha/year (Rule 5.41).
- N loss between 10 and 20 kg/ha/yr provided the N loss does not exceed the average loss from the property between 1 July 2009 and 30 June 2013 as modelled by Overseer (Rule 5.43).
- Until 1 January 2017, N loss greater than 20kg/ha/yr provided the N loss does not exceed the average loss from the property between 1 July 2009 and 30 June 2013 as modelled by Overseer (Rule 5.44).

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Any other land use change (i.e. any increase in N loss above the 2009 -2013 baseline) will require resource consent. This means that if WIL does not obtain a nitrogen discharge consent by 1 January 2017 then all farming activities with losses greater than 20 kg/ha/yr will have to apply for their own individual N discharge consents.

The intention of the hearing Commissioners decision is that in areas where water quality outcomes are not being met, i.e. the nutrient red zone (such as most of the WIL area) there should be no increase above the leaching that was occurring between 2009–2013. It is worth noting that in paragraph 234 of their decision the Commissioners state that the “nitrogen baseline” incorporates dairy farms undergoing conversion prior to June 2013, so they will be allowed to complete their conversions (although that sentiment is not explicitly expressed in the rules of the plan). Any future intensification of land use is ideally achieved by improved practices that create N leaching headroom below the N limit defined by the 2009-2013 baselines. It is possible that some modifications to this approach could be achieved when the sub-regional chapter for Waimakariri is prepared by the Zone Committee, in particular a reconsideration of what level of leaching is appropriate within the zone. This sub-regional chapter is timetabled for notification during 2017/2018.

Moving Forward

Primarily, the rules have changed. Simply put we have some rivers, lakes and waterways in our region that we do not want to see deteriorate from their current state. In fact the opposite needs to apply. We need to see an improvement in water quality outcomes while at the same time expanding the irrigated area and intensifying farming operations. These outcomes sit under the umbrella of the Canterbury Water Management Strategy and the Waimakariri Zone Implementation Programme.

Recently the Board held a series of planning meetings involving advisors and ECan representatives to get a better understanding of the issues facing shareholders, and the scheme as the overall holder of the water take consent. Two questions were posed; does the company remain with the status quo, do nothing and let the individual shareholder choose their own destiny with the knowledge that they will need to apply for an individual discharge consent by 2017? Or does the company obtain a nitrogen discharge consent which will provide opportunities not readily available to individual irrigators located in a Red Zone?

Adopting the status quo will likely result in the costs to individuals being significantly greater than at scheme level, as the compliance requirements for an individual would be the same as for the scheme, but without management support. There would be no ability for WIL to monitor or control nutrient management; however

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it would still be 'accountable' for water quality as far as the water consent was concerned. A non-compliant individual would have the potential to jeopardise the main WIL consent and this would impact all shareholders. Regardless, through the sub-regional planning process all irrigators will be given a limit they need to farm to and this might be considerably lower than the 2009-2013 baseline for each farm. Additionally the sub-regional plan might impose a short period of time for the individual to become compliant and move to best practice.

Conversely, if the scheme holds the discharge consent then the requirement for individuals to hold an individual consent is lifted. The distribution of nutrients across the catchment could be enabled as long as the scheme baseline is not exceeded as determined by the 2009-2013 scheme baseline. There still needs to be a discussion about how nutrients will be allocated and re-allocated among shareholders but the opportunity exists, where it is very limited at individual level. Farm Environmental Plans (FEP) will become a requirement, but they will become mandatory in 2017 regardless.

Considering all of the above factors the Board has decided to proceed with the application to apply for a Discharge Consent. The scheme nitrogen baseline has been determined using a representation of farming and soil types. This 'high level' approach was taken by other schemes, and typically the aggregate total using this method is greater than the sum obtained from all individual Overseer runs. The consent conditions will allow changes to the N loss number as more detailed information is gathered from the FEP process and individual Overseer results.

The company will need to discuss, develop and implement a framework for the management of nutrients within the scheme. We will involve shareholders in this process to ensure we are finding a solution and method that best works for the farmer while considering the compliance requirements of the scheme. ECan are in the process of releasing the Matrix of Good Management which benchmarks farming type, soil and climate to provide a guideline for where farming practices should be sitting.

There has been a lot of talk around the reliability of Overseer and variation of results. This has served as a huge distraction for farmers who by default become more concerned about a 'number' rather than looking at basic on farm practices to help reduce N losses. There are three very simple approaches that can make as much as 30% saving in water usage and N losses.

- Make sure water is being applied when required by using better scheduling information such as soil moisture monitoring and forecasting.
- Make sure your irrigation system is working efficiently and within its design parameters, and
- Manage effluent efficiently.

It is a worthwhile time to remind shareholders that it is going to be very difficult to consistently and effectively manage to a 'limit' without increasing the scheme's reliability, therefore it is critical for the future of farming in the area that the Wright's Road storage project goes ahead.



Water Supply Agreement

As mentioned earlier in this report the rules for schemes have changed. Our compliance requirements have increased exponentially, particularly around the gathering of detailed information about farm activities in order to provide accurate summary reports to ECan. Previously, participation in the annual survey and adhoc requests for information have been provided on a voluntary basis, those days have unfortunately come to an end! If information is requested, it will be for a specific reason and will normally be compliance driven; therefore opting out of providing it is not an option as it will ultimately make the scheme/individual non-compliant.

There is no requirement in the current version of the Water Supply Agreement (WSA) enforcing shareholders to complete the FEP's, or to provide information if requested from time to time. The WSA was recently updated to ensure compliance conditions are met for the latest sale of shares in 2014. We are reluctant to make an interim change to the WSA in order to action the FEP, only to make further changes midyear when the nitrogen discharge consent is granted.

The Constitution authorises the Board to make changes to the WSA from time to time, but in this instance we would like to call upon the co-operation of shareholders to complete the FEP's without the need to legislate for it in the short term.

Farm Environmental Plans

As part of the consent conditions for CRC000585.9, 20% of the WIL shareholders are surveyed annually and a summary of these results are presented as a Management Report to ECan in July of each year.

All of the information required in the annual survey is required in the FEP. To avoid duplication and cost, ECan have authorised that the FEP can replace the survey requirement. Essentially the same outcome is achieved, only the FEP's provide more detail.

It will be a requirement that FEP's are completed for all shareholders by September 2016, however to meet our consent requirements during this transition period, 20% of shareholders will have to have completed their FEP's by the end of April. Pattle Delamore Partners (PDP) is assisting us with this process. Those shareholders last surveyed in 2009 will be required to complete their FEP by April. Continuity is needed in order to complete the FEP's and nitrogen baselines. It is important that this information is made available and is consistent. It is therefore our intention to assist everyone to understand what information is needed and then help to complete them. PDP will be in contact with you and are there to assist farmers through this process.

Opuha Water shareholders are using the same online FEP and for 90% of those shareholders who have completed their FEP's to date they were able to do so unaided.

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If you are having trouble it is important that you ask for help as it will be readily available.

The FEP is a web based application; shareholders will need an internet connection and an email address. Considerable effort has been made to the design of the FEP to make it easy for farmers to complete. There are a very small number of shareholders who do not have an internet connection and these plans will need to be completed manually, and then uploaded onto the electronic FEP using administration support. To ensure that all shareholders are fairly treated an administration cost will apply to those shareholders who do not have internet access.

News in Brief

 **WIL**
Waimakariri Irrigation Limited
www.wil.co.nz

- The company is still actively pursuing the option of purchasing a further 300l/s of Waimakariri River consented water and we expect to provide shareholders with a further update in April.
- The ReGen irrigation scheduling trials are about to start taking place in the next few weeks. The hardware is currently being installed on four properties. We will start sharing these results with shareholders on a monthly basis and look at adding additional pages to the website to monitor the trial. NIWA are looking at expanding their trials for next year and updates will also be provided on the website.
- Once again, a huge thanks to Neville Thompson, Beau Hill and Geoff Spark who generously volunteered to stop filling their on farm storage ponds to enable additional water to reach shareholders at the end of the scheme.
- We are investigating options to improve the water ordering process. Opuha Water Ltd has started to use an online ordering system, and feedback from their shareholders is that it provides them with more flexibility. From an operational perspective it simplifies the process which will allow duty racemen to share the water ordering responsibilities, which currently sits with one person. In addition we are also looking at ways in which we might be able to improve our service to shareholders, so any ideas or comments are encouraged.
- It has come to our attention that there are non-WIL shareholders irrigating from the water races using portable pumps. This is unacceptable and must be stopped. We understand that people have been reluctant to report this activity for fear of exposure. We assure anonymity, and will actively pursue to prosecute anyone found breaching stockwater rules or illegally taking WIL water.
- The statutory management of ECan by Commissioners will soon end. The government is proposing a mixed governance structure for ECan, and are calling for submissions which close on 1 May 2015. MFE has released a discussion document and this can be found using the following link. <http://www.mfe.govt.nz/publications/rma/environment-canterbury-review-discussion-document>
- The current commissioners have 'front footed' many of the issues surrounding water and irrigation that past administrations failed to tackle. Some of the decisions that have been made will directly impact on how irrigators will need to behave in the future – but at least there is a future. Sure, some of the rules are tough, but if managed correctly they still allow current farming practices in general to continue, and furthermore enable expansion.
- It does not take too much imagination to consider the alternative, therefore we encourage shareholders to support the mixed governance structure and make submissions accordingly.