



June 2015

## WELCOME

It has been a while since our last newsletter and this is the first update to you all since we came out of the unprecedented dry summer conditions that, for the first time, saw the lake empty and irrigation cut-off in February. As I'm writing this, the winter storm and snow is just arriving, so I hope that doesn't cause any major problems for you all – it's water in the bank at least!

In this issue, I will update you on the lake storage situation and also on what we are doing to improve our ability to manage our limited storage should we be faced with another extreme dry summer. I will also update on a number of operational issues including the major maintenance work at the power station, introduce some of the policy development work we have underway and look ahead at our programme for Farm Environment Plans and some upcoming shareholder meetings.

It's quite a big publication this time – I hope you're able to see it through to the end!

## WATER STORAGE

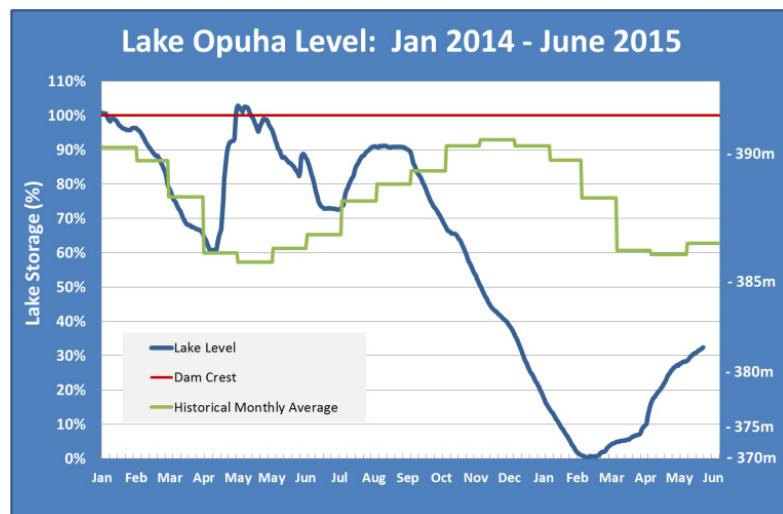
Our lake storage is currently 32% full compared with our average level for June of 63%. The chart below shows our progress back from empty in early March. There have been two other years (2001, 2008) where we have been at or lower than this at this time of the year.

We feel we are far from out-of-the-woods with the lake storage and we are continuing to make all efforts to get the storage back up so that we have the best chance of starting the next season with a full lake. In this regard, we are still getting very good support from OEFRAg and ECan and we are operating with a revised minimum flow in the river (3.5 cumecs instead of 4 cumecs) which is limiting the amount of water we need to release from the dam. In fact we have been able to operate for most of the last three months with a minimum release of 1.5 cumecs from the dam – with the exception of the brief 10 day period of irrigation in late April.

Our rainfall data for the upper catchment over the last three months suggest we have had about 75% of the amount we had over the same period last year, but we have seen nothing like the inflows to the lake that we experienced last year. I think this is a good indication of just how dry the catchment had become and how depleted the groundwater and shallow aquifers have been.

Even now (mid-June) the inflows to the lake and within the catchment overall are quite low and we are close to having to release extra water to maintain the 'discounted' minimum river flow at Saleyards Bridge.

My personal view at this stage is that if we get an 'average' winter, we should be able to fill the lake. If we get another below average, dry winter like we experienced last winter, we will be struggling to be full by the end of September.



## STORAGE MANAGEMENT FOR NEXT SEASON

As a result of our review of last season, there are a number of initiatives and changes we have agreed on at Board level and with OEFRAg.

### Snow Pack Assessment

We are undertaking some modelling work to get a better assessment of the amount of snow pack in the upper catchment in early Spring.

While it has been estimated that snow melt contributes only 14% of the total inflows to the lake, it is the critical period of October-November that this mostly occurs. We do not have a good historical record of meaningful snow measurements so

taking actual measurements up on the mountain will have limited value until we can build up a relevant history. Our initial approach will be to use a modelling method based on actual rainfall and temperature records to build a picture of historical snowfall in the catchment. We can then use this data to compare our current snow levels with historical and at least have a basis for deciding whether the contribution

from snow melt is likely to be significantly above or below average. This methodology has been used by the major hydro-generators since the mid-1990's.

As well as this modelling work, we are also investigating options for actually measuring the build-up (and 'quality') of snow in the catchment on an on-going basis.

### Lake Storage Forecasting

Last summer we were running a model of the lake storage on a daily basis to assess how far the remaining volume could be expected to supply irrigation and environmental flow demands. In early-December, this was suggesting that, without restrictions, the lake would empty before the end of January but with a managed restriction regime, this might be able to be extended until late February. Of course any forecasting tool like this is only as good as the assumptions (such as rainfall,

inflows and irrigation demand) but the work did prove to be useful in assessing options and the likely impact and gave us confidence that we do have a very accurate model of actual lake storage (height/volume relationship).

We now intend to carry out this ‘forecasting’ at a much earlier stage of the season that will include future scenarios based on season conditions that are, for instance 100%, 75% and 50% of historical average.

As part of this forecasting work, we will also be using actual soil moisture conditions as part of our assessment of near term irrigation demand. We will be seeking this soil moisture information from shareholders across the scheme as we head into Spring.

### Adaptive Management and Decision Making

One of the few positive outcomes from the dry season has been the evolution within OEFRAg and ECan of, I believe, a very robust but nimble process of evaluating the changing situation, making decisions based on a variety of viewpoints and information available, and then implementing the changes very quickly.

OEFRAg held a ‘season review’ session this week to look at how the processes and decisions can be more effective. Some of the outcomes of that session are covered with what I have already presented (especially the outlook modelling of lake storage for different scenarios) but one of the main outcomes was the commitment to convene earlier, before the start of the season, and using the information available to decide if earlier intervention is necessary to reduce any likelihood of emptying the lake prior to the end of the season. There is more flexibility at the start of the season (October) to influence the storage volume than there is approaching and definitely after New Year.

### Downstream Weir

I’ve included a note on this here because the vulnerability of the downstream weir (DSW) in a high flow event has been a significant influence on our lake storage decisions. By maintaining the lake very full, we increase the risk of spilling at the dam if we get a significant rainfall event. This can increase the risk of the fusible embankment section of the DSW operating and washing out to pass the high flow and protect the rest of the weir structure.

We have been planning for some time to modify the DSW to increase the flood capacity without the fusible embankment overtopping. In the early part of last year we had had an unexpected and significant increase in the forecast cost of the project and decided to pull-up and review the project. We did continue with the resource consent process in the meantime. The experience of the drought has brought a different view as to the ‘value’ of the top metre or so of storage in the lake and has brought the focus back on the DSW project. We are currently assessing the options and business case for the project (the current budget is now around \$3m) with a view to implementing the upgrade over the next 12 months. None of the options we have will be able to be implemented before the start of the 2015/16 season.

## OPERATIONS

### Power Station Outage

We had a one-week, planned maintenance outage at the Power Station beginning 25<sup>th</sup> May. One of the major activities was to investigate a potential issue with the main transformer. The results from some routine oil sample analysis earlier in the year had shown indications of some early heating or insulation problems. The investigations quickly identified that the transformer required some repair and refurbishment work and the transformer was removed from the site to be stripped down and refurbished at Trustpower’s Highbank Power Station. One of the main problems appears to be moisture ingress through a deteriorated hatch seal. The transformer would typically have required a major refurbishment in the next five years so the opportunity has been taken during this outage to complete all the ‘mid-life refurbishment work’ which we expect will see the transformer right for the next 15-20 years.

The photo below shows the 18 tonne transformer being lifted on to a low-loader for transport to Highbank Power Station.



### Winter Maintenance

Steve, Richard and Chris are well underway with the preliminary winter maintenance programme. Steve will be meeting with representatives from each of the schemes to present the major works planned in their areas for the latter part of the winter. Most of this more major work is to address operational problems identified during the season.

### Water Policy Development

We have established a new Board sub-committee to tackle a number of issues that have been broadly grouped into ‘water policy’. Following the merger in July last year, there was an identified need to formalise some policy (rules?) around how water is utilised and to ensure that everyone was clear on these policies.

Areas being reviewed by the group include: on-farm storage; water metering; use of surplus water; charging for excess water use; water restrictions; small water users; phasing out of border dyke/flood irrigation.

These policies will be clearly communicated to all shareholders as they are finalised. The group will be prioritising their work to ensure those policies that are considered more important for the operational season ahead are finalised prior to September.

One of the initial decisions by the group and endorsed by the Board was that all irrigators should have telemetered water meters at their off takes. This is mainly an issue for irrigators

within the schemes that operate under the main scheme off-take consent since all irrigators who have individual consents for more than 10 l/s are already required to have compliant water meters as part of their consent conditions and under the national Water Metering Regulations. The decision by the Board is essentially that all irrigators should be operating under these same conditions and that the water use information should be available to the Company to improve the overall operation of the scheme. Part of the new policy of water meters will include a programme for when the new water meters are to be in place and operational.

## SHARES FOR SALE OR LEASE

We are often approached with enquiries regarding shares for sale or lease – either through prospective buyers or vendors.

While we do hear from time to time of parcels of shares that may be available or of people seeking to acquire more, we do not think it appropriate that we are directly involved in the commercial aspects of any transactions. However, we do believe we can provide a valuable role through operating a 'noticeboard' of shares available or wanted. To this end we will include this information in our newsletters and we have also set up a page on our website where information on share availability can be posted. We will get a link to this page on to our Home Page.

If you want to post a notice offering or seeking shares, please contact Christine at the office and we will include the information in the newsletter and on our website.

Please note also that we do require all share sales and leases to be pre-approved by the Board. There are forms available for this on the website or from the office.

### SHARES AVAILABLE TO LEASE

#### 16 water shares and 20 T shares.

Lease for up to 5 years

Contact Tom Henderson (on behalf of the shareholder)

Ph 03 614 7575 or 021 744 616

#### 12 water shares and 16 T shares

Contact Mark Chamberlain

Ph 03 614 8224 or 022 124 6125.

## 2016 BUDGET AND WATER CHARGES

We are currently finalising our overall operating budget for 2015/16 and I would like to advise that the budget is based on all water charges remaining unchanged from the current levels. This will be the third year that our water charges have remained unchanged.

Our forecast revenue from electricity generation for next year is significantly below our historical average because of the current low lake level. This has also had a major impact on our revenue for this year with our generation income close to \$900k below our original budget. I expect our generation income for 2015/16 to be similar to our result this year.

We have recently restructured a portion of our major debt to take advantage of the lower long term rates available and this will realise approximately \$100k per annum saving.

## SCHEME SHAREHOLDER MEETINGS

As part of the company merger, we undertook to meet annually with the infrastructure shareholders to present them with a review of the scheme performance and an outlook of any major work planned. Our constitution also requires us to consult directly with each of these groups regarding any proposal that will significantly impact of their scheme charges. We have undertaken to maintain the scheme charges at current level and Steve will be working with the nominated scheme representatives to finalise the planned works programme to stay within the current budgets.

We intend to run these meetings before the end of July and will advise time and location accordingly. At this stage I envisage these meetings will be held at 1pm, midweek.

## ENVIRONMENTAL

### Scheme Nutrient Discharge Consent

Those of you who have been following the development of the Land & Water Regional Plan (LWRP) may be aware that it provides for an irrigation scheme such as OWL to apply for a nutrient discharge consent and then to 'manage' the nutrient allocation amongst its irrigators. Several other schemes in Canterbury have or are currently applying for such a consent.

OWL's management and Board have looked at this issue very carefully and believe, at this stage, it is not in the interest of the company or our shareholders for OWL to apply for such a consent.

The situation is an evolving one with the notification of updates to the LWRP expected in September. ECan recently hosted a public presentation in Washdyke on the Matrix of Good Management Project which gave some further information on the likely development in the nutrient management / limit setting space. At present the LWRP requires all landowners in an Orange Zone who have a nutrient discharge greater than 20kgN/ha/yr to have a consent by January 2016. ECan are suggesting this requirement may change with the update of the LWRP in September, however we believe that earlier advice on this specific matter is important because of the potential work and timeframes involved for those farmer affected by this.

We are continuing to monitor this evolving situation on behalf of our shareholders and will advise you accordingly. Regardless of our own efforts to keep up with the developments and consequences, we believe that all farmers need to be keeping a close eye on this very important piece of legislation.

### Farm Environment Plans

One of the outcomes of our review of the nutrient discharge consent issue I mentioned earlier has been an confirmation that our strategy of getting Farm Environment Plans (FEPs) in place for all our irrigators is still entirely valid.

We have engaged two people locally to assist Julia in the accelerated roll out of our FEP programme. Nicole Lang will be working initially with our irrigators in the Ashwick area above the dam and James Pearce will be concentrating on the Totara Valley area. As well as coordinating the programme overall, Julia will be working initially with Te Ngawai irrigators and then with Levels and Waitohi irrigators.

Please refer to the article below for a reminder of the 'what and why' of Farm Environment Plans, and how we have an approved system and a proven approach to assist you in preparing a compliant FEP.

## FUEL PURCHASE CONTRACT

We have recently shifted our fuel purchasing across for an excellent deal with NPD. On the back of that move, Area Manager Nick Clarkson is offering very competitive rates and service to any of our shareholders.

I would recommend that you give Nick a call to see what he can do for you.

Regards



Tony McCormick  
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[tony@opuha.co.nz](mailto:tony@opuha.co.nz)

### OPUHA WATER LTD – SPECIAL FUEL OFFER

## For The Best Prices on Fuel Call NPD

NPD is now the approved fuel supplier for Opuha Water Ltd so we want to extend our service to all Opuha Water Ltd Shareholders and Contractors.

For the best price on fuel call NPD Area Manager Nick Clarkson on **027 288 0018**.



## FARM PLANS

The term 'Farm Environment Plan' should not be new to you. In a nutshell, Farm Environment Plans (FEPs) help you identify the environmental risks on your property and the actions that need to be taken to minimise these risks. There are a number of reasons for, or benefits of, these plans at both a farm and scheme level.

For farmers, FEPs are a tool by which you can demonstrate that you are implementing good management practice on-farm – which is important both in a market and regulatory sense. FEPs will help you manage to any limits set and respond to any changes required as a result of the upcoming sub-regional plan, increasing the resilience of the scheme and the farming community. There are also opportunities for business improvement and cost savings through more efficient water, nutrient and fertiliser use, and better effluent application, which can all be highlighted through the FEP process.

At a scheme level, firstly and fundamentally, we are fully aware that our resource consents are our greatest asset. We know that if we want to retain the privilege of having access to water we need to demonstrate responsible use and be proactive in our management – we see FEPs as a good way of being able to prove this. Secondly there is a huge amount of valuable information stored within one FEP let alone 250 FEPs across the scheme. This information is important for us as a scheme – to understand where we are now, where we are going, what the hotspots are, where to target our efforts, and where we can work with other industry bodies. From a scheme perspective it is also crucial that we have robust information about what is happening within the scheme so we can enter and engage in the sub-regional process, on your behalf, with up to date and relevant information.

Under the Land & Water Regional Plan (LWRP), a FEP will need to be produced in any circumstances where an application for resource consent to farm is required. For those in the Orange Zone the current rules require those who have a nitrogen loss (calculated with OVERSEER) greater than 20kgN/ha/yr to hold a resource consent and FEP by 1 Jan 2016. For those in the Red Zone, this date is 1 Jan 2017. We understand that these rules are set to change later this year to include consent triggers for irrigated area and winter grazing. However, whatever the triggers, FEPs will continue to be a key requirement of the LWRP.

In response to these challenges, OWL have developed an ECan approved FEP template – this approval is important as it means that shareholders will be able to meet their requirements under the LWRP as well as meet OWL's environmental objectives. The FEP covers five farm management areas, where relevant: Irrigation Management, Nutrient Management, Soils Management, Collected Effluent Management, and Riparian, Wetland and Biodiversity Management. OWL has set objectives for each of these topics however, importantly, farmers will retain flexibility as to how they achieve these.

OWL are assisting shareholders to develop FEP's specific to each property, funded already through the annual water charges. OWL is using an online application to develop the FEPs as this enables efficient recording, reporting and updating of information. It also allows shareholders to log on and complete or update their plans from any computer. We have recently brought on-board some additional resources to help with the roll-out, in the hope we can get FEPs developed for the majority of our larger irrigators over the next 6 month. As part of this, Julia will be contacting shareholders on a catchment basis over the next few months to develop their FEP. We encourage you all to make the most of this service and consider getting on-board early and take advantage of the resources available from within the company to complete this process.

