

MHVwater Scheme News

Message from the CEO

Our mission is to deliver sustainable solutions for our shareholders and the community and it underpins all of our decision making processes and strategic goals.

Recently we took the opportunity to review our Strategy, specifically relating to what Environmental and Catchment Leadership means to us.

As a co-operative it is important for us to be relevant and connected with our shareholders, accordingly I'd like to thank the shareholders who took the time to join us and provide feedback on the role that they would like to see MHV playing in this regard.

There were a number of common themes at the sessions with a very clear message that we should be focusing on actions, initiatives and research that will drive improved water quality outcomes. We have also been working collaboratively with community stakeholders to make sure we understand a wider perspective than just our own. I'd like to personally thank Karl Russell, Tewera King, Michael McMillian and Ally Crane from Arowhenua and AEC Limited for taking the time to work with us and share their insight and vision. Working with Arowhenua has been a hugely positive experience and I'm excited about the collaborative opportunities that are ahead which I know will drive mutually beneficial outcomes.

As 2019 draws to a close I would like to take this opportunity to recognise our team at MHV, the fantastic job they do and the way they do it. I'd also like to wish you and your whanau a very happy festive season and I look forward to the opportunities and challenges that 2020 hold.

Ngā mihi,
Mel



Melanie Brooks, Chief Executive

Key Dates

January/February 2020

Workshops

- Fertiliser Calibration
- Effective Irrigation Scheduling
- Irrigation Calibration and Maintenance

See page 10 for further details.



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Message from the Board

At the AGM in October, we farewelled Phillip Everest from the Board. Phill served on the board of MHIL and subsequently MHV from 2014-2019. We appreciate the input Phill provided, particularly in the environmental space. This year our constitution required that we reduce our *elected* directors to six. Vincent Lobb and Richard Wilson retired by rotation but were re-elected unopposed.

Following the AGM, as is our usual practice, we reviewed how we operate as a Board and the various roles assigned to individual directors. The Board reappointed John Nicholls as Chair and appointed Mark Saunders as his alternate. Richard Wilson and Vincent Lobb continue as our appointed directors to the RDRML Board and Vincent also continues as our director on Irrigo.

The Board continues into the new year with three subcommittees:

Environment and Sustainability – Ben Johnson (Chair), Evan Chisnall, Mark Saunders and Melanie Brooks;

Infrastructure and Health & Safety – Evan Chisnall (Chair), Ben Johnson, Richard Wilson, John Nicholls and Melanie Brooks;

Risk and Audit – Craig Osborne (Chair), Vincent Lobb, Mark Saunders, and Richard Wilson.

In November the board began the process of reviewing our strategy. We have retained our mission of “**Sustainable solutions for our shareholders and the community**” and our four key purposes; water for optimal growth, environmentally and economically sustainable, stay strong (our people, our culture and our values), and enable innovation. These purposes flow through into setting our priorities as a Board and our KPIs for management. We are continuing to seek feedback from our shareholders, including how you see MHV’s role in Catchment Leadership.

It is important to the board, to encourage a strong line of succession and we have recently appointed Cole Groves into an observer role for a period of seven months. We encourage shareholders to consider this as an opportunity to learn how the board works, and gain an understanding of our governance role.

The Board wishes you and your family a safe and happy festive season, and looks forward to working on your behalf in 2020.



From left to right:
Vincent Lobb, Richard Wilson, Mark Saunders, Ben Johnson, John Nicholls, Evan Chisnall, Craig Osborne.

Health and Safety

Water Safety

There have been 58 preventable toddler drownings in NZ in the last 10 years.

Many of those have been in rural settings. The risks of water races, ponds, streams, rivers and drains are real and many of them are not fenced. We are making a concerted effort to raise awareness.

Earlier in the year we teamed up with Water Safety NZ, Ashburton District Council and the other irrigation schemes to make a video targeted at the importance of toddler supervision and the risks to be aware of in our rural setting.



Please make sure that around houses you have all waterways and water bodies securely fenced. Many of our workers on farm may not have grown up around water, or understand the risks of water bodies, and it can take less than a minute for a child to drown.

Please review your health and safety procedures especially around communicating the risks and how you can mitigate them where possible.

Watch the video at https://www.youtube.com/watch?v=4RxU2Ua_obg

SUPPORTING FARMER WELL BEING



Rural Support Trusts
0800 787 254

(Calls are answered by your local Rural Support Trust)

www.rural-support.org.nz



RuralSupport

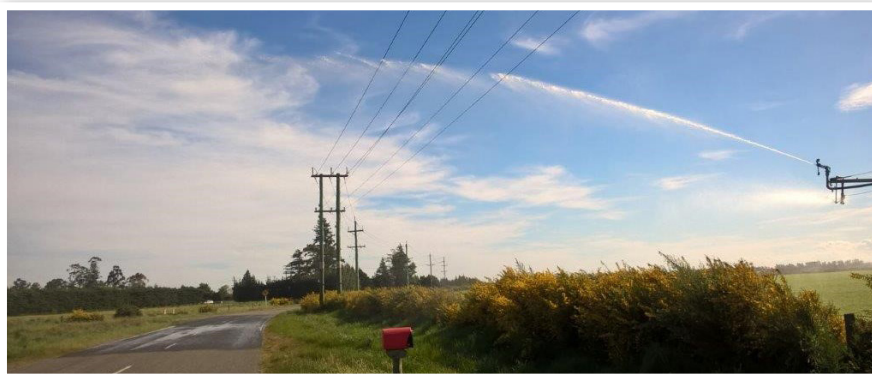
Mind That Spray!

With irrigation season well underway it is an opportune time to remind all irrigators to be aware of where their water is going and irrigate the grass, not the road.

ECan officers will respond to complaints received within the Ashburton area and will issue spot fines.

Irrigation spray on roads is a breach of our resource consent, can create significant safety issues and damage to the road surface and creates negative impressions across the wider community.

Our team will call if they see any instances and please let us know how else we can support you to avoid watering the road.



Backflow Prevention

If you are mainlining effluent, on our piped network, it is your responsibility to ensure that the non-return valve in your line is working to ensure there is no backflow into our system.

Please ensure you check your device as per manufacturer's recommendation.

Remove Nitrate from drinking water

- Sue Kelly Water Systems Ltd was established in Ashburton and now operating in Christchurch, have specialised in water treatment for over 25 years.
- A simple inexpensive test can be arranged for any water sample.
- Most water filters do not remove Nitrate.
- The correct technology in an under bench water purifier is extremely effective in dramatically reducing Nitrate levels to safeguard water, with a separate dispensing tap for all water used for food preparation, cooking, drinking and especially babies' formula.
- Approx. 80+% rejection rate along with other agricultural chemicals
- No power required – only resting water pressure to the kitchen above 40psi / 2.75Bar / 275Kpa.

ASK US ABOUT DISCOUNT FOR MULTIPLE PURCHASES

Sue Kelly
Water Systems Ltd

0800 177 000

PO Box 41 048
Ferrymead 4321
Christchurch

www.suekelly.co.nz



American unit (4 pass) tested and validated with a Water Quality Monitor incorporated so you can check the rejection rate with the press of a button.



Shanghai unit (5 pass) larger with an extra preliminary filter.

Water Ordering Tips and Tricks



How do I log in?

Go to www.mhvwater.nz and click on the water ordering icon or go directly to <https://orders.irrigo.co.nz/waterline/Login>

Your **user number** is your first and last name with no spaces ie **JoeBloggs**

Your **password** will be a **4 digit PIN**.

PIN's have been sent but please call us if you can't find it or need it reset.



Login to WaterLine Online

User Number:

Password:

☒ Login

How do I order online?

Start Time: : (HH:MM)

Start Date: / / (DD/MM/YYYY)

Duration: days hours

Finish Time: : (HH:MM)

Finish Date: / / (DD/MM/YYYY)

Flow Rate: L/s

Stored Rate: L/s

MINIMUM: 0 L/s, MAXIMUM: 74.0 L/s

Enter the **start date** for your order. The start time will be set by default.

Set the **duration** to **1 day**. The finish time will auto fill.

Set your **flow rate**.

Order **excess water** in the 'stored rate' tab.

Up to 20% excess water is available to M shareholders without charge, subject to availability and will be proportionally allocated between those that order it.

Setting repeat orders

Start Time: : (HH:MM)

Start Date: / / (DD/MM/YYYY)

Duration: days hours

Finish Time: : (HH:MM)

Finish Date: / / (DD/MM/YYYY)

Flow Rate: L/s

Stored Rate: L/s

MINIMUM: 0 L/s, MAXIMUM: 74.0 L/s

Repeating Order? ☒

Repeat Count:

Repeat Interval: Days

Set your order for a 1 day duration and then set **repeats**.

This will enable you to cancel one or more **pending orders** if necessary, rather than the entire order. This is useful if there is an unexpected heavy rain fall, or if you have a maintenance issue with your irrigator.

Repeat Count = how many days you want the order to repeat for. You can set a maximum of 6 repeats.

Repeat Interval = at what interval do you want the repeats to occur? This will generally be set at an interval of 1.

Interval of 1 means every day, interval of 2 means every second day.

Please keep an eye on your pond level to ensure it can hold the ordered volume.

Please note that you are not able to cancel an order that is currently being delivered (**operating orders**). To do this, contact your operator on the duty phone.

We welcome your feedback

Our job is to deliver water to you, our shareholders, as cost effectively and efficiently as possible.

With automation we will know far more about leaky races, losses and supply/demand. It will be a 2 year process to fully understand the water demand, supply and infrastructure.

We welcome your feedback and commentary to help shape our direction.

WHAT DO YOU THINK?

For more water ordering instructions, visit <https://mhvwater.nz/our-scheme/river-flow-information>

Our Scheme

2019 - 20 Water Charges

Environmental charges have historically been included in the shared overheads however this year a decision was made to split these out and allocate the costs based on the number of hectares in your Farm Environmental Plan (FEP).

This more fairly reflects the value you are getting as the FEP covers the full area of your farm, not just the shared area.

The 2019-20 water charges are as follows:

Line	Charge per share
MH Open Race*	\$1.83 plus an environmental charge of \$8.50 per hectare of FEP area.
Valetta	\$2.97 plus an environmental charge of \$8.50 per hectare of FEP area.
Ruapuna	\$8.25 plus an environmental charge of \$8.50 per hectare of FEP area.

For the MH Open Race, this equates to approximately \$83 per hectare based on a 3.5mm application rate.

* Harris Drain has additional infrastructure charges.

Recent Share Sales and Latest Share Values

A Share Tender was advertised in September in respect to 1,274 M Class Shares being sold on behalf of a shareholder.

Following the October tender closing date, the Board reviewed the tenders and provisionally accepted the highest tender pending environmental, operational and legal criteria.

We are pleased to advise that all criteria was resolved and the sale of shares was confirmed.

Below are details of the latest share values in respect of each share class.

Class	Latest Share Value
M Shares	\$170.00
V Shares	\$350.00
MG Shares	\$90.00

As with any transfer of shares, all share sales are dependent on meeting administrative, environmental and operational criteria.

Leasing Water

If you are interested in leasing out or leasing in water, please contact Jo on 03 928 8041 or jo@mhvwater.nz and confirm you are comfortable for us to share your details with the wider shareholder base.

Please note:

- M and MG water must remain in the MH or Ruapuna infrastructure, and Valetta water within Valetta infrastructure;
- All leasing is subject to approval by MHV and there must be no net increase in nutrient leaching as a result;
- Any financial arrangements around the leasing of water shall be the responsibility of the lessor and lessee to determine and enforce.

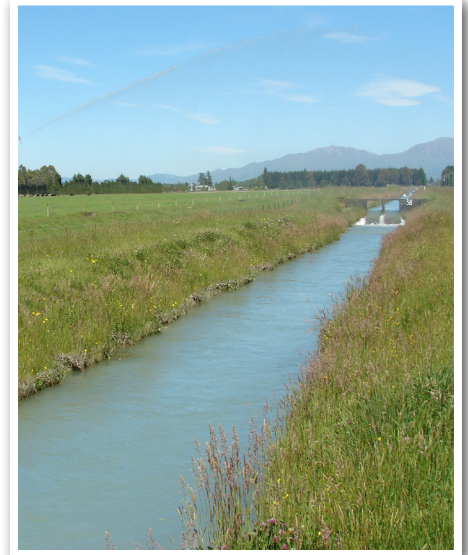
Our Scheme

Maintaining Banks of Open Races

To ensure the efficient delivery of water, it is essential that the integrity of our open races be upheld.

Damage to race banks can have repercussions on the effectiveness of the race system and we remind shareholders that:

- Banks may be grazed as long as there is no pugging and there is no feeding out of supplement feed within the easement. At all times, the operations team has final decision and it is expected that stock will be removed or numbers reduced, should staff request this;
- Any works within the easement are to be approved;
- If fencing, please consult your scheme operator and ensure that access to the easement is maintained at all times for spraying and maintenance;
- All tree trimmings are to be removed from the easement to avoid entering the water way.
- Please mow roadsides regularly or bail following mowing to avoid grass entering the water way.



Vehicles in Races

With approx. 320km of open races we remind you to please be careful around the races.

If you see a vehicle in a race please call your Scheme Operator (once everyone is safe) to manage any possible spills, water flow levels, to aid safe recovery and ensure we are aware of any damage.

Pond Sensor Update

We are progressing well with the installation, however some pond sensors have been damaged during recent lightning strikes.

We are working through repair / replacement with Rubicon and our insurer.

Because of this issue, the full completion of the project has been delayed and we will know more on the timeframes once the damage is fully assessed.



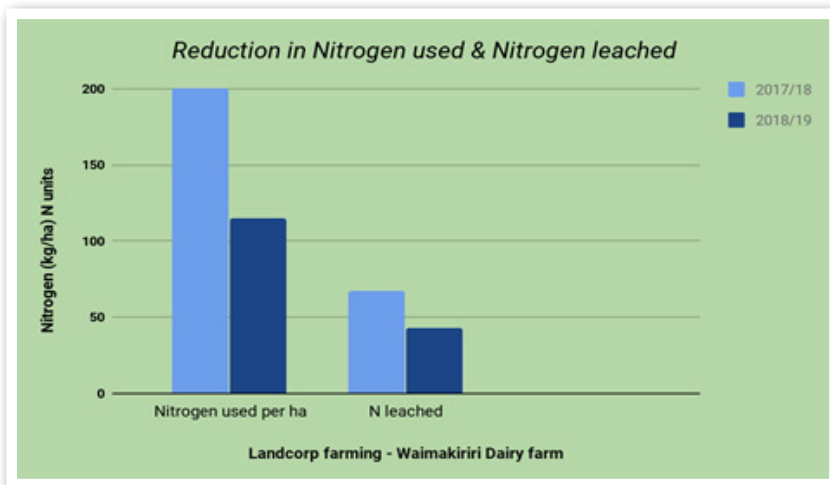
Fertigation Trial - initial results

We would like to take this opportunity to share some positive initial outcomes from a fertigation trial in North Canterbury. Fertigation is the application of small quantities of fertiliser through an irrigation system and the initial results indicate it is a good tool to have in the arsenal in the battle against N leaching into our aquifers.

Fertigation is quite common overseas, and whilst we have a small handful of MHV farmers successfully using their pivots to apply nutrient, it isn't common in NZ.

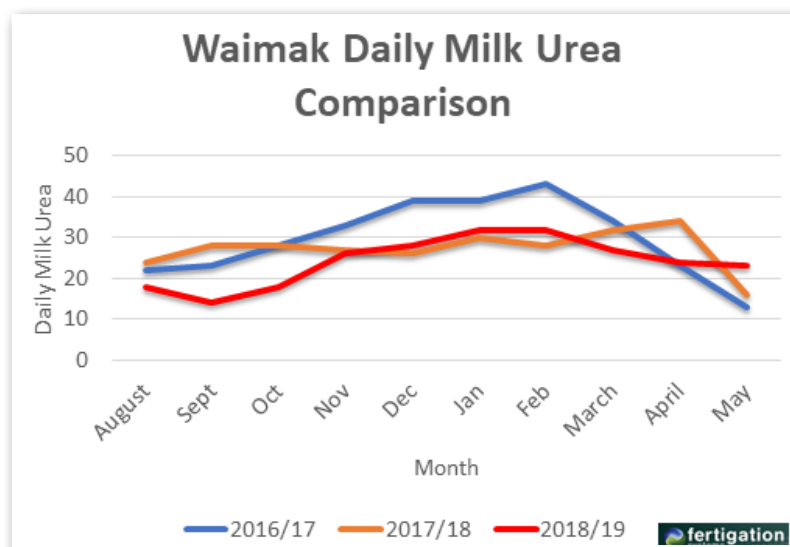
A new project to trial the use of fertigation and the outputs - which could help reduce nitrogen leaching on farms - is now underway. Pāmu is working with Irrigation NZ, Ballance Agri-Nutrients and Fertigation Systems on the trial which has received funding from the Sustainable Farming Fund.

The initial Pāmu results are compelling, recognising that we are very early in the trial, cow numbers, supplements & milk production have remained constant, Nitrogen applied reduced by 42.5% and a 28% reduction in Overseer number.



Another noticeable output is a reduction in the Milk Urea Nitrogen (MUN) over the 3 last seasons.

There is a linear relationship between MUN and Urine N, therefore, lower MUN relates directly to low Urine N. The trial is continuing to explore different hypothesis and we will follow it with interest.



Fertigation Systems have agreed to do a field day in the New Year for any MHV shareholders interested in learning more about the trial and applications in the Hekeao/Hinds Plains.

Our Environment

MHV's Environmental Programme

Shareholders are charged an environmental charge to cover our environmental programme. Do you know what our environmental programme covers?

MHV is a shareholder of Irrigo and the Irrigo Environmental Team leads our environmental programme on our behalf. Eva Harris leads the team filled with great people, a range of skills and a depth of experience that would otherwise cost considerably more.

The programme includes:

- Shareholder education - workshops, field days
- FEP updates
- Audit co-ordination and support
- Robustness checking of Nutrient Budgets
- Groundwater Monitoring
- Subsidising the cost of bucket testing
- Stakeholder engagement and education
- Consent application and policy development
- Consent compliance
- Managed Aquifer Recharge

The team are available to talk with you about any environmental questions or concerns and are happy to brainstorm different options with you. The team also tailor education sessions that best fit with the current demand.

If there is an area you would like the team to arrange training on, at no cost to you, please contact them on 03 307 8389.



Upcoming Workshops

Fertiliser Calibration Event

When did you last calibrate your fert spreader?

Travis from Spread Test NZ will calibrate your fert spreader and to talk through how to identify and troubleshoot problems.

Just bring your spreader to our nearest event and sort it out once and for all. AND.... we have negotiated this for you at half the normal price!

10th January 2020 - Methven Area

17th January 2020 - Carew Area



Effective Irrigation Scheduling

Using an irrigation scheduling tool? Want to know how to get the most out of it?

Your industry soil moisture monitoring provider will show you how to use their product most effectively.

They will:

- Show you all features of their data displays
- How to utilise their information to its maximum value
- Identify and troubleshoot common issues
- Discuss with other users how they get the most out of soil moisture monitoring.

AgriOptics - Thursday 30 January 2020: 10.30am - 12:30pm

WaterForce - Thursday 30 January 2020: 1pm - 3pm

HydroServices - Friday 31 January 2020: 10:30am - 12:30pm

Aquaflex (OnFarm Data) - Tuesday 4 February 2020: 9am - 11am



Irrigation Calibration and Maintenance - Bucket Testing Workshops

Bucket testing is a simple and cost effective way to ensure your irrigator is working efficiently.

Irrigation expert, Paul Reese, will show you how to get the most out of your irrigation water.

This hands-on workshop covers irrigation maintenance and demonstrates how you can bucket test your irrigator to maximise efficiency. Owners, managers & staff welcome.

Thursday, 20 February 2020: 9am – 12pm: South of Ashburton

Thursday, 20 February 2020: 1.30pm – 4.30pm: North of Ashburton



**For further information on any of the workshops, or to secure your place,
contact Sarah on 03 975 8547 or sarah@irrigo.co.nz**

Miscellaneous

Dairy Effluent Storage Calculator and Gold Star Standard

How much dairy effluent storage do you need?

The consent conditions set when your dairy effluent storage system was put in may not be sufficient to meet today's GMP and this may put you at risk of receiving a C audit grade.

Dairy NZ's Dairy Effluent Storage Calculator will help you understand your requirements. The Irrigo Environmental team are also trained and available to help you.

Do you have a plan?

If you will be away at any time over irrigation season, please ensure your scheme operator has contact details for the person managing the farm in your absence.



Board Meetings

The Board will meet on the following dates in 2020*:

- Tuesday 28 January
- Tuesday 10 March
- Tuesday 28 April
- Tuesday 9 June
- Tuesday 28 July
- Tuesday 1 September
- Tuesday 13 October
- Tuesday 24 November

If you would like anything to be considered by the Board, this should be lodged a minimum of 10 working days prior to the meeting date.

** Dates may be subject to change.*



FEP Audit Update

The FEP Audit season has started with five audits completed to date, and four of those achieving A grades.

Shareholders will receive a reminder and support call from a member of the Environmental team, one month in advance of their audits.

If you have any concerns or queries about an upcoming audit, please give the Environmental Team a call.

Christmas and New Year Office Hours



The Irrigo Office at 326 Burnett St will be closed from Monday 23 December 2019 and will re-open on Monday 6 January 2020.

The Operations team will be on skeleton staff, running water over the Christmas and New Year period.

For Valetta and Ruapuna, please phone 027 239 5199.

For Laterals 1 & 2, please phone 027 435 6256.

For Main Race and Laterals 3, 4 & 5, please phone 027 435 6252.

We would like to wish you and your family a safe and happy festive season.