

What happens to all that water-use information?

Greater Wellington Regional Council (GWRC) collects information on how much water is being used in our region from nearly six hundred water-take consent holders. We use this information to monitor and plan water usage in the region.

We collect this information in a number of ways:

- Telemetered or logged data – information is recorded by a water meter and sent automatically either each day, or, at the end of a water-use year (around July).
- WATER USE website – consent holders supply their water meter readings through our website <http://wateruse.gw.govt.nz>
- Other records – this includes providing paper, e mail or other electronic records.

Nearly half of all water-use records provided to GWRC are telemetered or logged records.

“Since 2012 we’ve had a big increase in

water-take consent holders installing water meters with telemetry systems. For many users, this can be a cost-effective way of providing good quality water-use information to GWRC. If consent holders use accredited telemetry system providers, they can be confident that they can meet their consent requirements,” says Stephen Thawley, GWRC Project Leader.

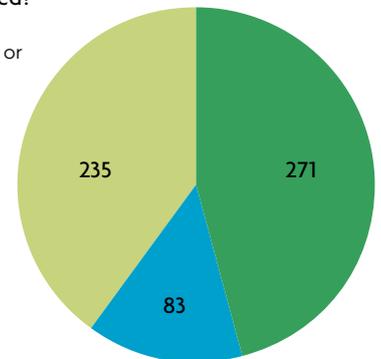
All this water-use information is stored in our Water-Use Data Management System.

We have been storing water-use records electronically in this system since July 2012.

This information is used for a variety of purposes including catchment modelling (understanding the effect of changes across the wider water collection area) and consent compliance.

How are water-use records provided?

- Telemetered or logged data
- WATER USE website
- Other



“Water-use information provided by consent holders is valuable as it helps us understand our important surface and groundwater resources in the region. It enables us to more confidently set sustainable water allocation regimes,” says Mike Thompson, GWRC Senior Environmental Scientist.



IN BRIEF

WATER METER VERIFICATION

Under the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010, all water takes between 5 and 10 litres per second need to have their water meter verified by 30 June 2017. Water take consent holders with these sized takes are encouraged to contact an accredited service provider to book in their water meter verification to meet this deadline.

RUAMAHANGA WHAITUA COMMITTEE

The Ruamahanga Whaitua Committee is continuing to work on producing a Whaitua Implementation Programme (WIP) in 2017. The programme will contain recommendations to insert into GWRC’s Natural Resources Plan for the integrated management of land and water resources within the Ruamahanga River catchment.

PROPOSED NATURAL RESOURCES PLAN

Hearings on GWRC’s Proposed Natural Resources Plan commence in April 2017. The hearings are split into topic areas. At this stage hearings on water allocation are scheduled for June 2017. For more information, see our website: www.gw.govt.nz/proposed-natural-resources-plan



Irrigation sows seed for economic prosperity

An award-winning Wairarapa farmer is imploring fellow land users to 'think outside the square' when they examine the opportunities created by irrigation.

Crop and specialist seed farmer, Richard Kershaw, says irrigation has the potential to transform a farming business in ways that most farmers have probably never considered possible, nor will they if they remain locked in their present day mindset.

Moiki Farm, on the flats of the Ruamahanga River between Greytown and Martinborough, is a far cry from when Richard's great-great-grandfather settled there in 1898.

While sheep and cattle still graze some paddocks, much of the 280 hectare farm is in crops. An additional 180–200 hectares is leased elsewhere in the surrounding district. All up, Moiki Farm crops 330 hectares annually, growing over a dozen variety of plants, most of which is for seed, grown under contract and bound for overseas markets in Asia, Australia, Europe, South Africa and USA.

Borage, broccoli, carrots, chard, kohlrabi, maize, milton oats, onions, pak choi, peas, phacellia, ryegrass, sorghum, spinach, squash and sweetcorn, it's extraordinary the diversity of crops that can be grown under Wairarapa conditions. All is dependent on the availability of reliable water.

"Irrigation provides you with opportunities that you never used to have," Richard says.

"It gives you the flexibility to quickly adapt to market changes that are outside of your control."

The two-year ban imposed on Wairarapa pea growers last year following the detection of pea weevil is a great example of this. With around a third of its crops in the last three years in peas, the ban could have dealt a major blow to Moiki Farm.

But Richard turned it into a positive with a combination of new crops, such as Asian brassica, as well as beefing up the some of the more traditional crops.

"We wouldn't have been able to do that if we didn't have irrigation. With irrigation you have got options ... you have the ability to duck and dive and try new things."

A passionate advocate for the proposed Water Wairarapa scheme, Richard believes it will be the catalyst for large scale expansion of cropping, in turn driving significant economic growth in the region.

His sentiments are backed up by a high-level report by leading farm advisory firm, BakerAg, which investigated the changing land uses in the Ruamahanga valley, both with and without water storage. The report, "Water Wairarapa Future Land Use Scenarios", concluded that with the proposed region-wide water storage scheme the primary sector in the region will flourish.

The BakerAg report forecasts arable, cropping and vegetables to be significant drivers of land use changes taking advantage of the new water as this is where the highest sustainable returns are.

For Moiki Farm, the shift to irrigation was brought about by necessity rather than bold

new innovation. Repeated droughts in the 1970s nearly brought the farm to its knees and finally, on advice from his accountant, Richard's father made the investment in irrigation. Based on 1976 costs, the \$10,000 spent to irrigate 20 hectares wasn't cheap, but it was a watershed moment for the farm.

Lucerne was the crop of choice in those days, with the first couple of cuts turned into silage feed for ewes and also to fatten lambs. Additional cuts of lucerne, sometimes up to another three in a season, were sold to the horse and stud industry.

"All of a sudden, by the late 1970s we had options and opportunities that nobody else had."

Since then about 80 percent of the home farm has been brought under gun irrigation or row drip irrigation. The farm has consent to draw water from two bores. The majority of leased land also has irrigation.

Richard Kershaw and wife, Karen, are past Supreme winners of the Greater Wellington Farm Environment Awards.



Wairarapa crop and seed grower, Richard Kershaw, in a paddock of Asian broccoli.



A paddock of pak choi at Moiki Farm, grown for seed and bound for Taiwan.

Irrigation a licence to grow

To appreciate the benefits to crop farming derived from irrigation, first you need to understand the mechanics of the market.

After all, it doesn't matter how good the harvest is – if there's no buyer, the grower's efforts will be in vain.

With more than 30 years in the industry, Wairarapa grower Richard Kershaw says first and foremost irrigation helps growers to “get a foot in the door”. A reliable water supply not only strengthens a farmer's capacity to grow a crop, it also gives them the ability to sell it as well.

“Without irrigation I wouldn't be able to get a crop contract,” he says.

In the seed business, it works like this: Each year around May to August seed reps jump on a plane, and shoot off overseas to USA, Asia or Europe in search of seed contracts. It kicks off a whole chain reaction starting with a Kiwi

grower obtaining a seed line to multiply out for an Asian seed customer who has a contract with a processor in Taiwan, for example, who has a contract to supply supermarkets with fresh pak choi leaves.

The New Zealand rep has to place an order for seed to insure he fulfills his contractual obligations.

“When looking to place contracts the seed company guys are going to go to the guys with irrigation because they know that straight away they have eliminated a risk.”

Canterbury is currently the heavyweight grower in New Zealand, accounting for between 80–90 percent of supply, and in the foreseeable future that is not about to change. However, Richard believes Wairarapa has the ability to become an “insurance policy” for Canterbury growers, making up the additional 10–20 percent.

“We have the right climate and we have isolation, which is very important. Now it is about getting the water, from that the contracts will follow.”

Working in tandem is the need for further investment in off-farm infrastructure, according to Richard.

Excited about the proposed region-wide water storage scheme, Richard is a member of the Water Wairarapa Stakeholders Advisory Group. He encourages farmers to think about the scheme than not just in economic terms, but for the wider opportunities that it provides.

“What we think the irrigated land will be used for now will be completely different once the scheme is completed and this will forever change as market requirements change.”

“The important thing to remember is irrigation gives us the ability to change as the markets require.”

Short term pain, long term gain

The pain inflicted on Wairarapa pea growers last year could have a silver lining. In response to the two-year ban on pea production in the region following the discovery of pea weevil, efforts are underway to find alternative crops.

At two trial sites, near Martinborough and Masterton, a range of crops have been planted including adzuki beans, buckwheat, lentils, linseed, peanuts and sunflower.

Gladstone cropping farmer and Ministry of Primary Industries' arable industry representative, Karen Williams, says the trial crops are by no means the definitive answer to a replacement for peas, but “they're a starting point”.

MPI moved swiftly following the discovery of pea weevils in seeds from eight farms. The ban, which is hoped will eradicate the weevil,

affects about 100 growers. Wairarapa makes up about 10 percent of the \$150 million pea industry in New Zealand.

Karen says it is early days for the trial. A field day was held at one of the sites in early February, attended by growers and industry representatives.

In addition to the trial, growers in conjunction with FAR (The Foundation for Arable Research) have made an application to MPI for funds to develop a cropping strategy for Wairarapa, with the aim of building resilience into the industry.

The pea weevil has highlighted possible shortcomings in the local industry with an over-reliance on peas.

“We are really good at growing peas, but



Pea weevil: could this little bugger be a blessing in disguise for Wairarapa crop farmers?

there is no reason why we can't be really good at growing something else.”

Whatever crops ‘come up trumps’, matching it to market demand is also key, Karen says.

Fundamental to any positive outcomes will be irrigation.

“If you have irrigation you have much more likelihood of having more diverse growing contracts offered to you,” Karen says.

“Seed companies want reliability and irrigation provides that reliability. They are not that keen to delve into arrangements where things are not guaranteed, so in that respect irrigation is a massive strength.”

www.waterwairarapa.co.nz

Water Wairarapa is led and funded by GWRC with assistance from Crown Irrigation Investments Ltd.

Water
Wairarapa

Securing a sustainable future

AUTUMN 2017 IRRIGATION NZ NEWS

Training Day upskills irrigators

Around thirty irrigation system operators and managers learnt more about working within consent regulations and efficient irrigation practices at a one-day training course earlier in the season. The day was part-funded by Greater Wellington Regional Council (GWRC) and gave participants a practical understanding of the issues, as well as an opportunity to discuss management issues with local water-take consent holders and experts.

Richard Parkes, GWRC Senior Sustainable Agriculture Advisor, says the Council is committed to helping consent-holders.

“We are very keen to see new and existing water-users upskill and develop sustainable on-farm practices. It makes good economic sense and of course means better environmental outcomes.”

“At GWRC we are under no illusion that there is a lot to learn about irrigation: keeping systems running well mechanically, managing technology, soil typing, managing drift and evaporation – these aspects all need thinking through. There’s no better way to learn than to see a system in action and be able to ask questions. We are pleased to have been able to support our local irrigators with this educational opportunity.”

The Irrigators Training Day talked – and walked – participants through four modules:

- Irrigation Regulation – business implications
- Irrigation Scheduling – understanding soils, water and climate towards efficient application
- Operation and Maintenance – safety and efficiency
- Irrigator Performance Assessment – analysing data for optimum efficiency.

“We know that attendees at the Irrigation Training Day really valued the information and discussions,” said Parkes. “Farmers and other users enjoyed getting out in the paddock with buckets and an irrigator to learn more about application, efficiency gains through more precise application and how to mitigate variables such as wind and diurnal temperature changes.”

GWRC is considering running further irrigation training events. Please contact stephen.thawley@gw.govt.nz to register your interest.



Workshop attendees participate in an irrigator efficiency assessment exercise.



Steven Breneger, IrrigationNZ, talks to attendees about the variables that impact on efficient water application.



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IRRIGATION NZ NEWS AUTUMN 2017

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