

Local communities making a difference

Managing land and water resources in regional catchments is a national and regionally significant issue for urban and rural communities as well as regional and local councils.

Greater Wellington Regional Council has taken an innovative approach to finding a way forward by establishing Whaitua, or catchment management, committees.

These community-led committees will bring the community together to agree shared goals for land and water management. Work has begun in the Ruamāhanga (Wairarapa) and Te Awarua-o-Porirua catchments. A further three Whaitua Committees will be established.

The Ruamāhanga Whaitua Committee (RWC) has been working to understand what the Ruamāhanga river community values and wants from land and water. They have created a community vision for land and water management following discussions across the catchment community.

The next step is to test ideas and describe

actions that deliver this vision through land and water management practices. The RWC is working in partnership with the wider community and a range of experts in agriculture, biodiversity, tangata whenua perspectives, recreation, urban and economic interests to gather the essential information needed to prioritise objectives for land and water management.

This team of experts is creating a representation or 'model' of the current state of the catchment. The model can be used to show the potential impact of any changes that the community, through the committee, want to better understand.

In early 2017, the community's objectives for land and water management will be translated into the Whaitua Committee's recommendations which will feed into the Ruamāhanga Whaitua Implementation Programme (WIP).

This WIP goes to the Greater Wellington

Regional Council and the Te Upoko Taiao – Natural Resource Management Committee for approval before a chapter is incorporated into the GWRC Natural Resources Plan. The Natural Resources Plan helps the regional council carry out the work it is required to do under the Resource Management Act, which is to sustainably manage the physical and natural resources in the region.

The Ruamāhanga WIP is a non-statutory report. It will contain both regulatory and non-regulatory proposals for the integrated management of land and water resources within the whaitua boundary, specifically created by local people for their catchment.

The WIP will also describe some ways to manage land and water that the Ruamāhanga Whaitua community want to undertake – ideas that reflect the passion our rural and urban community have for sustainable land and water management in our region.

www.gw.govt.nz/whaitua-committees



Whaitua Committee's future vision

A major milestone on the Ruamāhanga Whaitua Committee's journey to develop a community-led action plan for the Ruamāhanga River Catchment has been released.

The vision for the future – '*Wairarapa; where water glistens*' is an aspiration developed on behalf of the community following extensive discussions with those who have an interest in land and water management in Wairarapa.

The Ruamāhanga Whaitua Committee's vision describes a future where the 'community is engaged and proactive in the long term sustainability of the catchment as a whole', a place where:

1. we are all connected to the water so we are all equally responsible for creating a more natural state;
2. holistic land and water management creates resilience;
3. recreational and cultural opportunities are enhanced;
4. there is a sustainable economic future;

5. water quality is improving;
6. ecological enhancement is sustainable;
7. Ko wai, Mo wai, No wai: waterways connect communities, there is a sense of identity for people and water;
8. there is safety and security of (drinking) water supply.

"The community has engaged in a comprehensive conversation to narrow down its concerns about, and aspirations for the future of land and water management for the Ruamāhanga River catchment," said Peter Gawith, Ruamāhanga Whaitua Committee Chair.

"The vision synthesises many of these discussions and will help us make informed decisions about the future of the catchment".



Water storage provides options

Water Wairarapa aims to secure a sustainable future for the region's people, land and water, by storing and using water in ways that boost regional prosperity, care for the environment and support community use.

The question of how to increase the reliable supply of water through storage has been considered in Wairarapa for several decades.



Water Wairarapa's proposed water storage (blue) and indicative water supply areas (green).

A series of new studies since 2010 has identified the optimal locations for water storage and distribution infrastructure. The two proposed water storage locations are situated at Black Creek in the Kaituna area west of Masterton and Tividale, north-east of Masterton. The schemes could be staged depending upon the demand for water.

Currently around 12,000 hectares of Wairarapa land are irrigated. It is estimated that this could increase by about 30,000 hectares, depending on actual demand.

The Tararua mountain range west of the Wairarapa valley captures an annual rainfall of 5–6

metres. However, comparatively little of it falls on the good soils of the flat valley floor that are potentially suitable for high-value agricultural and horticultural production.

Current resource consents to take surface water account for nearly all of the available core allocation from rivers in the Wairarapa valley and limited additional groundwater is available.

Compared with pumping water from rivers and the ground during summer when water levels are at their lowest, storing water during wet periods could supplement rivers and streams when water levels are low and help support the urban supply.

Water Wairarapa investigations are funded by Greater Wellington Regional Council and the Ministry for Primary Industry's Irrigation Acceleration Fund.

Water users focus on improvement

Formed in 2012 as a conduit for informing local irrigators and representing their views, the Wairarapa Water Users Society now has more than 80 members.

An aim is for the public to retain an appreciation of the value of using water for both rural and urban communities.

Kahutara dairy farmer and 2015 Greater Wellington Ballance Farm Environment Supreme Award Winner, Leo Vollebregt, was instrumental in the group's formation and chairs its executive committee.

"We envisage a vibrant rural community that has great opportunities, quality of life and services that are also enjoyed by urban people," Leo says. "Sustained farm productivity and responsible, efficient use of resources including water are key to this vision."

To that end the society meets regularly, works one-on-one with members and holds annual field days that focus on improving the efficient use of water. Since 2012, it has actively engaged with Greater Wellington Regional Council's review of the regional plan (the proposed Natural Resources Plan) and

other issues of importance to the region.

"Our members understand the need to keep up-to-date with environmental knowledge and management techniques. Big gains in water use efficiency and managing the environmental effects of land use are being made through the adoption of new irrigation technologies such as telemetry and measuring weather, water use and soil moisture.

The Wairarapa Water Users Society is one of 19 organisations that share views on and provide input into investigations into Wairarapa's proposed water storage scheme as part of Water Wairarapa's Stakeholder Advisory Group.

"Wairarapa needs reliable water and more of it," Leo Vollebregt says. "While irrigators already use the existing sources of water – rivers, aquifers and lakes – we realise that



IrrigationNZ's Andrew Curtis conducts a 'bucket test' to show members of the Wairarapa Water Users Society how to monitor water use and manage irrigation systems.

a strong element of storage is necessary to improve water reliability and increase the productivity of land in the region.

The Society welcomes new members.

Contact members of the executive committee:

Leo Vollebregt – phone 027 258 8405

Richard Kershaw, 027 449 4026 or

Michael Warren, 027 446 5312



Securing a sustainable future

Irrigated land use case studies provide starting point for farmers

Feasibility investigations into the proposal to store water for irrigation and other uses in Wairarapa are focusing on likely demand from farmers and other potential customers.

Some of the land use options enabled by irrigation have been tested on three Wairarapa dryland farms and were presented to local farmers at field days held in April on the three farms involved.

“We are entering a crucial stage in determining scheme feasibility and establishing farmer interest is a priority,” Water Wairarapa project director Michael Bassett-Foss says.

“The case studies theoretically tested just some of the options that water provides to highlight the opportunities and challenges, and provide a starting point for farmers to consider whether irrigation could work for them.”

The case studies were designed to inform local farmers of possibilities for irrigation ahead of an independent survey later this year that will influence scheme feasibility and ownership structure.

Eight different scenarios under irrigation were assessed by industry experts for financial viability, environmental impacts, and the management and lifestyle implications of changing from the current dryland use.

Sheep milking, dairy farming, apple orcharding, livestock finishing, and a mixed use of livestock, specialist seeds and cropping were chosen for the study because they were already successfully established in Wairarapa.

The sheep milking operations modelled on two of the properties, and an apple orchard tested on one, would provide attractive financial returns but would all require high capital investment and lifestyle changes for owners. Environmental impacts from nutrient losses of these operations were minimal.

The mixed use of livestock finishing, cropping and specialist seeds tested on all three properties provided similar financial returns but had varied environmental impacts due to differing soil types and assumed farming systems.

The livestock finishing scenario was the least financially-viable option, compared



Water Wairarapa's Greg Ordish (left) with dryland farmers Pasco Reynolds (centre) and Henry Reynolds at one of the three field days held in April to discuss irrigated land use options.

with dryland use, due to timing of pasture production in relation to seasonal fluctuations in lamb and beef prices.

The dairy farming operation modelled on one property was financially viable at the six-year average milk price in late 2015 but not at today's milk prices.

Michael Bassett-Foss says the financial farm surpluses presented in the case studies did not include the cost of water because more work was needed to establish a water price. “The cost of water to users will not only be influenced by scheme construction costs, but also scheme ownership structure and the rate at which users take up the water.”

Water Wairarapa's Greg Ordish and Duncan Didsbury are continuing one-on-one visits to farmers in the scheme's broad supply area to provide information, answer questions and hear farmers' views on their interest in irrigation.

Subject to results of the current feasibility work programme, which includes geotechnical drilling, gauging of rivers and streams involved and financial modelling, a new entity will be formed to raise capital and apply for resource consents.

The entity's shape and ownership will be influenced by results of the feasibility study,

particularly the interest of farmers and other large users that could include local councils.

Summaries of the land use case studies can be found at www.wairarapawater.org.nz

IRRIGATION INSIGHTS

- Irrigation increases certainty. Farmers can have more confidence in planning and budgeting by removing the one variable they can control the least, the climate.
- Water enables opportunities including new land use and ability to profit from seasonal pricing and market volatility.
- Irrigation reduces production volatility.
- Water improves an entire farming business, not just the irrigated footprint.
- A decision to irrigate cannot be based solely on profitability. Other economic factors include reduction in operating risk, reduced production volatility, becoming a lesser credit risk and having more opportunities.

Keep in touch – send your email address to greg.ordish@gw.govt.nz and we'll keep you updated on developments. Or contact Greg Ordish on 06 826 1513.

www.waterwairarapa.co.nz

Water Wairarapa is led and funded by GWRC with assistance from the Ministry for Primary Industries.

 **Water
Wairarapa**

Securing a sustainable future

WINTER 2016 IRRIGATION NZ NEWS

Late, hot, dry summers affect health of rivers and streams

We apply water restrictions to protect the environmental health of our rivers and streams.

One of Greater Wellington Regional Council's (GWRC) jobs is to manage water takes to make sure there is enough water for everyone in the Wairarapa.

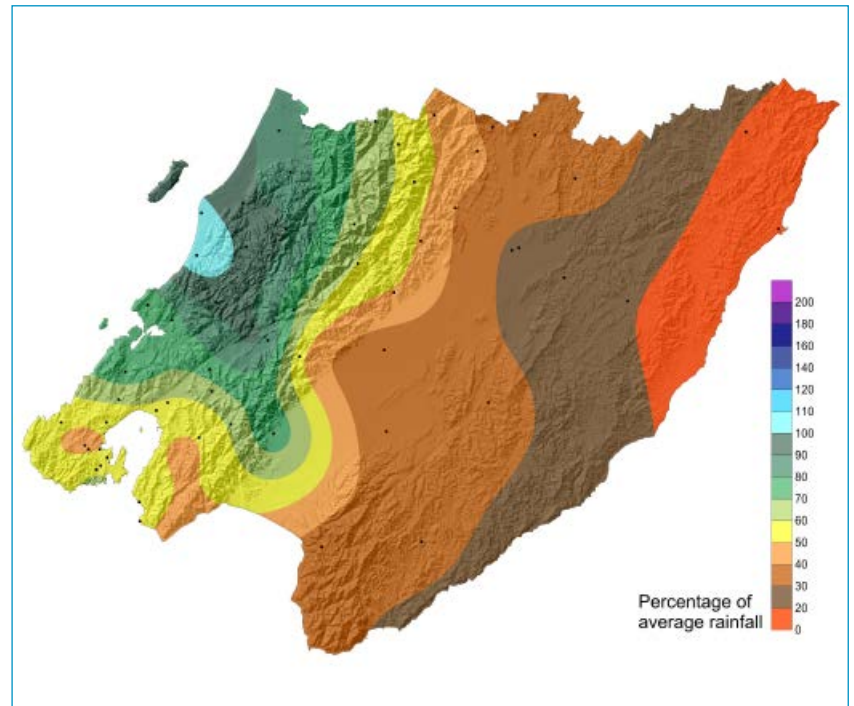
It will come as no surprise to anyone that the latter part of summer from mid-January to May was hot and dry across the whole Wellington Region. This resulted in river and stream flows being lower than normal as both maps show.

Restrictions vary between rivers and streams across the region. Different restrictions apply to those taking from groundwater bores connected to surface water catchments and others who take water directly from rivers and streams.

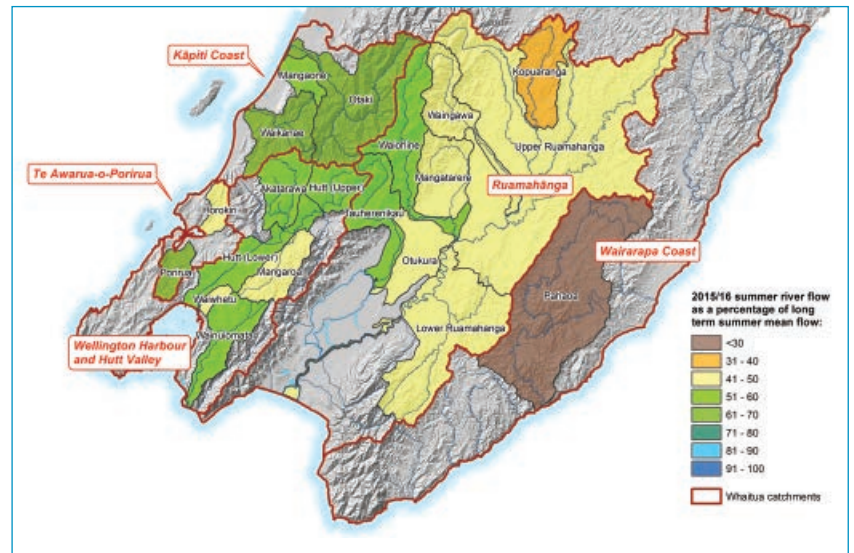
Overall the level of compliance with water restrictions this summer was good. However given the weather, water restrictions to protect minimum river and stream flows were applied to water take consent holders (including irrigators) for a longer period. For example, in February/March water restrictions were in place in the Lower Ruamāhanga River for nearly 50 percent of the time (26 days in total).

The situation is continually monitored to make sure we have up-to-date information available to help people make business decisions affecting what they do.

Check out our regulation information here www.gw.govt.nz/water-takes-and-bores



February rainfall across the Greater Wellington region.



Summer river flows across the Greater Wellington region.

IN BRIEF

IRRIGATORS – TIME TO SUBMIT WATER USE RECORDS!

Unless telemetered (real time) water use data has already been supplied to GWRC, now is the time for irrigators to submit their water use records for the 2015/16

water year. Records can be submitted via our online WATER USE data management system (wateruse.gw.govt.nz) or via e-mail to notifications@gw.govt.nz.

REGULATIONS SOON TO APPLY TO SMALL WATER TAKES

From November 2016, the Resource

Management (Measuring and Reporting of Water Takes) Regulations 2010 will apply to water takes between 5–10 litres/sec. To comply with the regulations, users of these water takes need to install a water meter and keep daily water use records. For more information go to our website at www.gw.govt.nz/water-takes-and-bores.



greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

IRRIGATION NZ NEWS WINTER 2016

www.gw.govt.nz