



The HBRC's Client Services team is relatively small and dedicated to providing high quality services to consent holders, general ratepayers and some HBRC internal clients. Irrigators can contact the Water Information Services team, who cover water use data management, on-site field advisory and user group facilitation to promote irrigation efficiency (they provide much of the information for IrrigationNZ News). The Heatsmart team works with a mainly urban customer base on the air quality programme. It's in the Data Management and Quality teams that HBRC has made great progress in the last two years, so clients and the public can be assured about the data we provide. These staff have helped the HBRC Resource Management Group (environmental science, resource use and consents teams) to gain ISO accreditation, the only HBRC Group to achieve this international recognition for managing business processes. This is critical as HBRC's science monitoring data is now also being used for LAWA (the national federated data repository) giving public access to a wealth of environmental science data.

Mark Heaney, Client Services Manager, Hawke's Bay Regional Council.

## TANK groundwater modelling progress

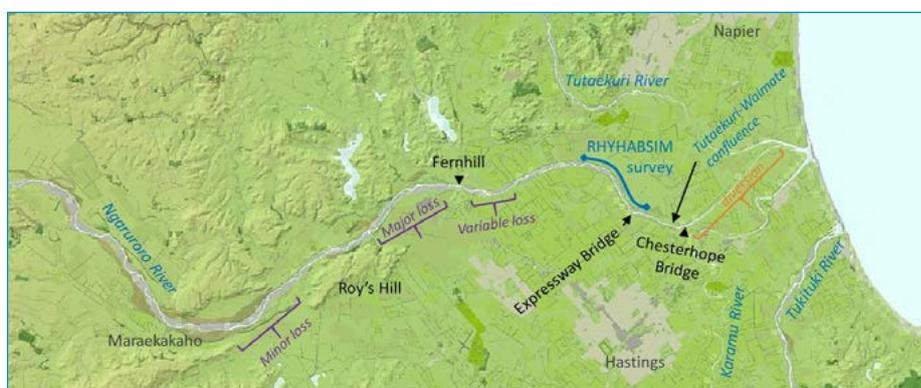
The TANK Group has received initial results from the complex Heretaunga Plains computer model.

The model shows that aquifers under Heretaunga Plains are connected with each other across the Plains. For example, it appears that a spring-fed stream flow, such as Raupare Stream, could not be managed with targeted management of groundwater takes in any sub-zone, due to the high connectivity throughout the Heretaunga aquifers. This finding will be tested further.

An artificial recharge has been modelled. This scenario was based on a scheme that operated near Roy's Hill between the 1980s and 1990s. The scheme pumped water from the Ngaruroro into soakage trenches to enhance groundwater levels. The model showed it had a limited effect on aquifer levels, and that benefits to spring-fed streams quickly dissipated.

### PLAINS WIDE BANS EFFECTS

The model shows there is a relatively small flow recovery for the rivers in response to a plains-wide pumping ban for all groundwater takes. There was a greater percentage change to flows in smaller rivers (Raupare and Karamū) as a result of widespread irrigation bans than there was for the Ngaruroro flow. The total groundwater ban scenario shows some recovery over a 30-day period on Karamū Stream, but less on Ngaruroro flows – that is, it takes a long time for a stream to recover after a ban, which would have to be applied to all plains water takes.



Map showing areas where river water is lost to the Heretaunga aquifer groundwater. This also shows the reach where a TANK habitat study assessed if there is sufficient water for fish (RHYHABSIM) downstream of the losses.

### STREAM FLOW AUGMENTATION

Because of the connection between groundwater takes and spring discharges across the entire plains, the TANK Group will be considering the effect of flow augmentation for a range of spring-fed streams in the Plains at its next meeting. This reflects the approach taken by the Twyford Irrigation Group to maintaining flows in the Raupare Stream by pumping groundwater into the spring when flows fall below a specified level.

### AQUATIC HABITATS

The TANK Group is considering requirements for lowland stream ecosystems differently to those of the larger Ngaruroro and Tutaekuri rivers. Oxygen is more important for aquatic life in smaller spring-fed Karamū and Raupare streams than the area of

wetted usable habitat, which is important for the larger rivers.

### ECONOMIC MODEL

AgFirst is making progress on the development of the economic model that will be used to predict the effects of different management regimes on farm (EBIT) and then on the regional economy. The TANK Group has heard from the AgFirst consultants who are developing a range of representative model farms that will be used to test production outcomes from a range of different water management regimes. These model farms will also be used to test the effects of potential contaminant management scenarios.

For more information on TANK – [www.hbrc.govt.nz](http://www.hbrc.govt.nz) (search #tankresources).

# Use technology to track water use

Next summer, when it's hot, your crops and pasture will need water as the soil moisture levels drop. You will need to irrigate. The last thing you want to worry about is using more water than your consent allows. HBRC has added some new features to their web log for water users that you will find useful.

Some irrigators have telemetry installed and their water use is sent to their telemetry provider. If your telemetry provider has a website, you can log on and see what rate you are pumping at and how much water you have used. You might be able to set up alerts that will text you when pumping is getting close to pre-set limits, such as 80% of allocation. Telemetry providers can give you information that is very close to Real Time.

## REGISTER FOR HBRC'S WEBSITE

If you don't have telemetry, or you have a situation where there are two parties using a consent, or you have more than one telemetry provider for your wells on your consent, HBRC is providing another option.

You can register to track your water use through HBRC's website on [data.hbrc.govt.nz/](http://data.hbrc.govt.nz/) wateruse. This will let you see how close you are to your 7-day or 28-day limits and help you manage your water use. See Graph 1.

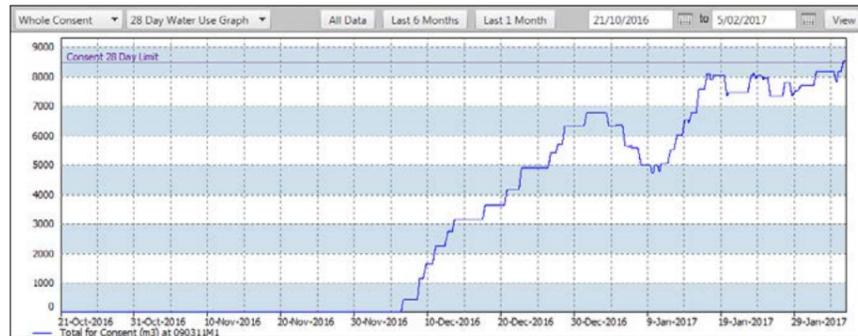
## WITH TELEMETRY

With telemetry installed, you can also see the rate of take for each well and if you are coming under the allowed rate of take. See Graph 2.

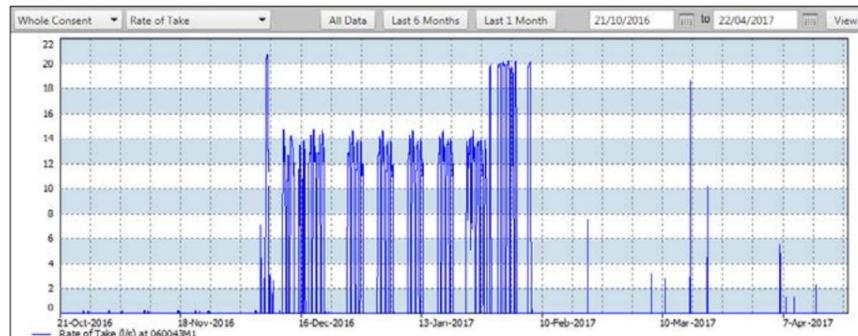
## SHARED DATA

Where two different people are sharing a consent, you can both have a login. Both can check the cumulative total for the consent, and the cumulative totals for each user. See Graphs 3 and 4.

If you are leasing your property and would like to check whether the lessee is sending in the water meter readings and is compliant, you can be set up with a login where it is 'Read-Only'.



Graph 1. This graph shows the 28-day take has been reached.



Graph 2. This graph shows the rate of take for one well.



Graph 3. This graph shows a shared take with two users and their total volume used in 2017. The volume amount is shown at the bottom of the graph.

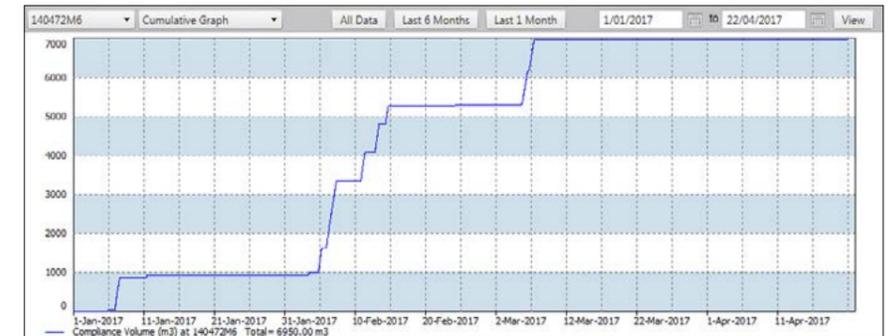
## OTHER FEATURES

There are other features that have been added to the web login page. You can now view your consent document and print it off. You can see when you last entered data, or whether your telemetry data is up to date.

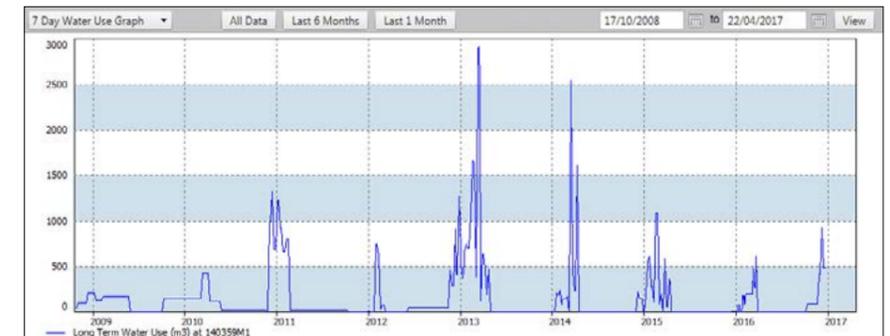
## HISTORICAL DATA

The last feature we have added is viewing historical data. Some consent holders have been collecting data for a long time, but with a consent change, we weren't showing all their old data. As you can see in Graph 5, we can now do this. It can be useful to see past water use to compare use between dry or wet years and see when irrigation started. If you are selling a property, this can also show the capacity of the wells in different seasons.

To get set up to see historical data (data on another consent), you need to get in touch with Jo Rodgers in HBRC's Water Information Services team, [waterinformation@hbrc.govt.nz](mailto:waterinformation@hbrc.govt.nz), 06 833 8043.



Graph 4. Click on the option on top left and you can see just one of the two users over the same period.



Graph 5. A graph showing the historical data from one site.

## New HBRC Chief Executive

Hawke's Bay Regional Council has appointed James Palmer as its new Chief Executive, taking effect on 19 June.

James has been the Group Manager Strategic Development at the Regional Council since January 2016. He has been involved in the TANK process in particular.

James has extensive experience in policy and regulation of matters related to environmental and natural resource management, energy and climate change, and primary production and innovation. Before joining HBRC, he was Deputy Secretary, Sector Strategy at the Ministry for the Environment for three years, responsible for the strategic direction of New Zealand's environmental management system. Previously James was Director Strategy, Systems and Science Policy at the Ministry for Primary Industries, and Director Strategy at the Ministry of Agriculture and Forestry. From 2005 to 2008 James served as Chief of Staff to the Minister of Agriculture, Forestry, Fisheries and Biosecurity, and in the early 2000s was an Advisor and Senior Private Secretary to the Deputy Prime Minister.



## IN BRIEF

### BORE CHECKS

HBRC has a programme to check on the state of all the bores in Hawke's Bay. We are writing to all bore owners to ask them to confirm bore security; that aprons form a seal between casing and the ground and that backflow prevention is in place. A meeting with well drillers, irrigation companies and IrrigationNZ to clarify bore security expectations in a variety of scenarios, was held in May.

If you need any advice on this, either contact your preferred supplier, or HBRC Compliance staff on 0800 108 838.

### VERIFICATION REMINDER

Have you installed a new water meter this year? We'd like to remind you that any water meters installed in the last year must be verified within the first water year to check the meter's accuracy. These must be verified by 30 June 2017. When you've paid good money for a water meter you want to make sure it's working properly.

Approved verifiers in Hawke's Bay are

- Bay Irrigation
- Harris Pumps and Filtration
- PGG Wrightson Water
- Waterforce.

The list is also on [www.hbrc.govt.nz](http://www.hbrc.govt.nz) (search #WISproviders).

### HBRC CHARGES TO CONSENT HOLDERS

HBRC's Annual Consent Charges Guide for 2017/18 will apply from 1 July and

## Introducing Kate Jefferd

Kate Jefferd has joined the HBRC's Water Information Services as Technical Advisor. Her role is to provide advice to consent holders on meters, verifications and water management. She recently completed a BSc at the University of Canterbury, and has had practical experience working in the Gisborne District Council water and coastal team.



information will be online from 1 June. There are no major changes but there are some pricing adjustments. New resource consent applicants will receive information with their application pack in June.

Information on the coming year's freshwater management and monitoring charges (RMA Section 36 Annual Charges ) will be online from 1 July and will be sent with invoices. This monitoring work is done on behalf of all consent holders, which is more cost effective than charging consent holders individually. General ratepayers pay 65% of the costs, consent holders 35%. There are no major changes to S36 charges this year as outlined in our Annual Plan 2016/17.

This information will be on [www.hbrc.govt.nz](http://www.hbrc.govt.nz) (search #consentcost).

### WINTER, A GOOD TIME FOR MAINTENANCE

Now is the time of year to get onto any maintenance you need to do around your property, including checking water meters

ahead of next summer. If you are planning to change your headworks, or reconfiguring your irrigation system, it's best to book it in early with your irrigation company, and not leave it until the season's about to start.



A maintenance 'what not to do'... this meter was so full of stones it didn't work. A stone trap is needed.



### TEST YOURSELF!

Reading a water meter can be difficult. In the Autumn 2017 issue of IrrigationNZ News, we provided a guide to reading an electronic meter to help people report the correct numbers to HBRC.

A mechanical meter, looking like the one in the photo, is a little different. You need to read ALL the numbers across the top. If the last digit is turning over, you need to judge which number it is.

In this photo the meter reading you would send to HBRC is: 223,422m<sup>3</sup>.