Hawke's Bay Regional Council is committed to improving the recreational and freshwater quality in the region, but we must balance environmental and social values of water with its use for our economic wellbeing. Last month, the Hawke's Bay Regional Council voted unanimously to oppose the Water Conservation Order (WCO) application for the Ngaruroro and Clive Rivers. This process cuts across the functions and role of the Regional Planning Committee and the work of the TANK Group, which is reviewing the way land and water resources are managed in the Greater Heretaunga and Ahuriri area. Modelling shows in the last eight years there were an average of 10 irrigation ban days per year, but under the WCO this would increase to 27 days and in an extremely dry year upwards of 90 ban days. The TANK community stakeholder group, which includes irrigators and growers, is making very good progress to create a much better solution that reflects all our community values.

James Palmer, Hawke's Bay Regional Council Chief Executive.

Irrigation efficiency check summer programme 2017

A pilot irrigation efficiency programme will be run this summer by Hawke's Bay Regional Council's Water Information Services team with IrrigationNZ.

Following the success of the Environment Canterbury Summer Student Irrigation Efficiency Pilot Programme 2016–17, Hawke's Bay Regional Council will lead the voluntary programme with the aim of increasing the knowledge of landowners, irrigators and Council on good irrigation practice.

The programme aims to complete irrigation efficiency checks on 60 farms that represent the predominant land uses in Hawke's Bay, covering up to 120 irrigation systems. Two university students will operate the programme by doing the checks, collecting the data and preparing reports. The pilot will initially focus on the Twyford and Tukituki areas, then other areas where growers show interest in participating.

IRRIGATION EFFICIENCY CHECKS

Adopting good irrigation practice is becoming more and more important for public perception, the environment, and to get the best out of your investment. It not only benefits the individual, but also benefits industry and the region.

Therefore, irrigation system efficiency checks are necessary. A well-designed system needs to be working at its best before good decisions can be made around when to apply water. An efficient system gives you the confidence that you are reaching expected target depths, so that, given good management, when you choose to apply 10mm, you get 10mm applied and not a range between 5mm and 15mm. Only once this is established can you really manage irrigation to influence crop quality and quantity.

PROGRAMME SCOPE

The Irrigation Efficiency Programme will work with volunteer consent holders and each property can have a maximum of two systems or zones checked. The project aims to answers three questions:

- "Do I have a problem?" – Is the system working as intended?
- "What is causing the problem?" – From the data gathered, what can be done to fix it?
- "Who do I need to fix it?" – Myself or link back to the service industry for solutions?

It is not intended to give each property a complete overhaul but to provide a stepping-stone to embedding irrigation efficiency checks in the annual on-farm calendar. Programme participants will be encouraged to continue their own annual efficiency checks. In the Tukituki Plan zone these checks will contribute to objectives set out in farm environment management plans (FEMP) by highlighting where improvements can be made.

In an earlier life, IrrigationNZ CEO Andrew Curtis doing the hard yards of an irrigation efficiency check in a Hawke's Bay orchard.

Both Application Depth and Distribution Uniformity will be tested against the original system's design. Improvements can come from identifying losses through excessive or uneven application. With the support of IrrigationNZ, participants will be given technical support to improve on key areas. A questionnaire will also be used to understand decision-making around technology uptake, scheduling and maintenance of irrigation systems.

Interested? Irrigators who are interested in participating in this programme and think they could benefit, can contact Monique Benson in the Water Information Services team, monique@hbrc.govt.nz, 0274 966 138.

HEAD OFF YOUR FARM PLAN BEFORE MAY 2018

DON'T LEAVE IT TOO LATE!

Tukituki Plan is HBRC's first catchment-specific plan, paving the way for land management in Hawke's Bay.

Farm Plans, Nutrient Budgets and Resource Consents

Farmers are working closely with Farm Environment Management Plan (FEMP) providers in the Tukituki catchment. The sector is ramping up ahead of next year's May 2018 deadline, when the new rules kick in.

The beauty of a Farm Plan is that it helps give direction and priority to specific farm tasks, such as nutrient budgeting, stock exclusion and planting.

It would pay to start developing your Farm Plan now, as it will help you to know if you're likely to need a Resource Consent.

APPROVED FEMP PROVIDER
HAWKE'S BAY

For a full list of Farm Plan providers, head off to **hbrc.govt.nz** search #FEMP.

Farm Plan Providers

These are the Farm Plan providers currently approved by HBRC:

Colin Stace
colin.stace@opus.co.nz
021 526 030

Peter Taylor
peter@thecatalystgroup.co.nz
022 152 9434

Emma Buchanan
info@soter.co.nz / 027 438 7055

Christina Finlayson
farm.sustainability@ballance.co.nz
0800 222 090

Lilian Sherman
lilian@irricon.co.nz
021 378 308

Colin Tyler
colin.tyler@ravensdown.co.nz
021 529 146

Lachie Grant
lachie.grant@gmail.com
021 526 478

TUKI TUKI

0800 108 838 06 835 9200
MORE AT WWW.HBRC.GOVT.NZ, SEARCH #TUKITUKI

HAWKE'S BAY REGIONAL COUNCIL

Farm plans for productivity

By now most irrigators living within the Tukituki River Catchment should be underway getting their farm environmental management plans (FEMP) done for their properties. Plan Change 6 (or the Tukituki Plan) requires that farm plans be completed for all farms over 4 hectares by 31 May 2018.

Be aware that a FEMP takes time and is a lot of work! From making that first phone call to a FEMP provider, to having a final version of a farm plan ready takes about four months. To get ready by 31 May 2018 please make that phone call, if you haven't already. HBRC has developed an 'approved' FEMP Provider Scheme to help the process and contact details are on the previous page.

The purpose of completing a farm plan is to: identify risks to water quality on your farm; if these are not being managed already, understand what actions are needed; decide on realistic timeframes to take those actions.

It is also a good opportunity for farmers to review their whole farming system and highlight the positive environmental work that has already been done. For irrigators, in particular, it provides a very good reason to test their current irrigation systems and identify opportunities to improve accuracy and efficiency (which may have the additional benefit of some cost savings!).

Additional information is available at www.hbrc.govt.nz Search #FEMP.
You can also contact Charlotte Drury on 027 566 4526 or Paul Train 027 533 2539 in HBRC's Land Management Team.

TANK update

The TANK Group has learnt that the ground waters of the Heretaunga Plains are highly connected. There is also a cumulative effect from groundwater takes on surface water flows, including for the lowland streams and Ngaruroro River.

STREAM AUGMENTATION

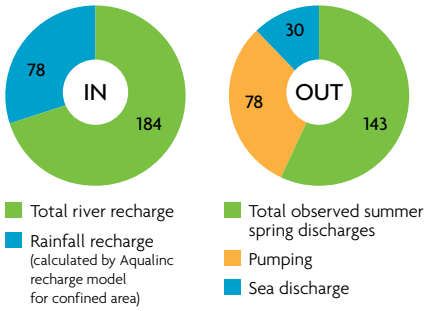
Since learning that restricting individual groundwater takes was relatively ineffective in maintaining surface water flows, the TANK Group has been modelling the feasibility of using groundwater to augment stream flows. While the extra groundwater take does have additional effect on stream flow, the modelling found that, overall, it was still a viable method for managing the depleting effects of groundwater takes on the lowland streams.

NGARURORO RIVER

The Group is yet to consider how to address the cumulative effect of groundwater takes on the Ngaruroro River. The TANK Group will be considering the feasibility of water augmentation schemes that could be used to reduce the effects of water takes on river flows, as well as possibly meet new water demand. A sub-group will consider options further.

The flow management regime for the Ngaruroro River is yet to be resolved. Information about the effects of groundwater takes on the flows will be used to model various management options for maintaining flows. These will be discussed at upcoming meetings.

HERETAUNGA PLAINS WATER BUDGET



GROUNDWATER LEVELS

The TANK Group has also been concerned about groundwater levels. HBRC modellers explained that the aquifer levels are in equilibrium at the current pattern of abstraction. However if use continues at the increasing rate that has been evident in recent years, then groundwater levels will decline.

The increasing rates of groundwater pumping would also have additional impacts on lowland stream flows. A water budget for the Heretaunga Plains has been developed and shows that, although groundwater levels might be affected by changes in pumping, the total amount being abstracted was still considerably less than was entering the system.

ALLOCATION LIMITS

Due to the existing impact of groundwater takes on stream flows, including the Ngaruroro, and on groundwater levels across the plains, the TANK Group has agreed that further water use needs to be limited. The allocation limit for the Plains water abstraction is likely to be based on current existing use. The Group will refine what is meant by 'existing use' as part of their next steps.

CLIVE & KARAMŪ ECOSYSTEM

The Group is also positive about the proposition to improve the Clive and Karamū Rivers to become a healthy lowland ecosystem through better riparian land management, improved management of urban stormwater, and reduced nutrient and sediment inputs.

The TANK Group comprises 30+ Hawke's Bay members representing a wide range of interests, with an independent facilitator. The TANK project is taking a community-based decision-making approach to draft new planning requirements for the Tutaekuri, Ahuriri, Ngaruroro and Karamū catchments. There are also five working groups on specific details.

Ask us about these services...

TAMPER TAGGING

Where you don't plan to irrigate for the year ahead but wish to keep your consent, you have the option of having your well tagged off and listed as non-exercised. This comes with a reduced annual water device charge that will be halved to $45 next year.

This work can be done by your preferred irrigation provider, or by one of the Hawke's Bay Regional Council team at no cost. If you decide to irrigate for the next year or even few years after, simply notify us and remove the tamper tag.

TELEMETRY PRESEASON CHECKS

Ahead of an upcoming busy season, it's important for those who have telemetry installed to know how accurately the unit is reporting.

To avoid having any data missing and to ensure your water usage is continually reporting, either fill out the self-audit form on www.hbrc.govt.nz search #telemetry or have one of our team come out and do it for you.

We will compare over a period of time, the difference in volumes between the meter and telemetry. In many instances, the telemetry may be under-reporting resulting in gaps in the data, which for example could indicate a flat battery that needs replacing. Identifying any problems with the unit earlier on will ensure a proactive start ahead of this season.

Contact Kate Jefferd at Hawke's Bay Regional Council on 06 833 8004.

RETURNING TO WATER INFORMATION SERVICES

Monique Benson is back at HBRC in the Water Information Services team. Monique is working on irrigation efficiency and with water user groups. She has a background in horticulture and irrigation.

COMPETITION – WIN ICECREAM!

In the last issue of IrrigationNZ News (Winter), we provided instructions on how to read a BIL mechanical meter. This time we have a competition to test your ability to read an ARAD mechanical meter.

What's the reading?

All correct answers received by **6 October** will go into a draw to win a big summer box of Rush Munro Ice Creams for your team and/or family.

To enter, phone Kate in our Water Information Services Team, 06 833 8004, or email your correct answer to waterinformation@hbrc.govt.nz. We'll draw the winner on 9 October 2017.

IN BRIEF

OPEN DATA

Much of the data collected by Hawke's Bay Regional Council is available for public use – called 'open data' – and you can find it on our website by searching on #opendata. This data can be viewed online or downloaded for use in your own applications, e.g. the GIS data can be used for developing maps for your own planning. The open data available is:

- **Archives** – of HBRC and previous organisations
- **GIS Open Data** – regional and national
- **LAWA** – national environmental data website
- **Publications** – a searchable library of reports, plus lists of information sheets
- **Retrolens** – scans of historic aerial photos back to 1930s
- **Time Series** – raw data that changes with time (eg rainfall, river flows).

BORE CHECKS

Bore owners have been contacting service providers to inspect the condition of their bores. This follows up letters we sent to bore owners to remind them to confirm bore security. Service providers can sign them off and send details to HBRC.