



Scientists study water movement in Pelorus/Te Hoiere

A new study by Council's environmental scientists is looking at groundwater quality and how water moves through parts of Te Hoiere/Pelorus catchment, where hydrology is little understood.

Hydrology is the study of water flow on and below the surface, and how this impacts water quality and quantity alongside land uses.

The one-year study will see several samples taken each season from more than a dozen groundwater wells, as well as surface water locations that flow into the Rai River. Council's Pete Davidson will study the groundwater and Charlotte Tomlinson will lead the science on surface water.

"Rivers and streams are where most of the water quality monitoring takes place but are the nutrients found in groundwater and wells more interconnected to our rivers and streams than we've previously thought? This study will provide some insight," Pete said.

Pete will drill four new wells over summer, with landowners granting access to 11 existing

wells, to measure the water table and water quality. Meanwhile, Charlotte is looking at the levels and flow of surface water into the Rai River. Where the two will overlap is looking at the level of the surface water and how it flows to groundwater (in bores or wells) to better understand how the whole system is working.

Understanding the interaction between groundwater and surface water is not well understood in Te Hoiere/Pelorus, and the flow of nutrient runoff throughout the catchment is even less understood, Pete said.

"Currently, we know that nitrogen is elevated in the groundwater of just one well because that's the one we regularly monitor for our reporting. But we don't know



Charlotte Tomlinson measures river flow of the Tunakino River with a FlowTracker.

if that's indicative of the whole catchment," he said.

In terms of surface water, Council only has one permanent gauge at Rai Falls to measure levels. The historic data on the catchment's waterways have been ad hoc throughout the years. In November, Council began to

take measurements at 15 surface water sites around Rai. This information will be coupled with water level measurements in new and existing wells.

"We'll begin to understand how water moves through gravels in the catchment, both above and below ground," Charlotte said. "For example, landowners have seen the river go dry in the Opouri River in some reaches, but then water resurfaces downstream. We are trying to understand why."

Help from the local community has been key, with some landowners granting access to their wells and others sharing their rainfall data and local knowledge with Council.

This study is expected to improve how water quality is measured in the catchment. Currently, water

quality measurements only take flow into account where this data is available—and there isn't consistent data in Te Hoiere/Pelorus compared to other areas in Marlborough.

This work by Council has been accelerated, but is not part of, Te Hoiere Project. With the Project so far supporting more than 50km of fencing and 100,000 native plants to improve freshwater, Council is seeking to better understand the flow of nutrients and any potential leaching of nutrients into the ground away from waterways.



Initiated in 2019, Te Hoiere Project is a community-led partnership with iwi, Council, Government and other groups to promote landscape-scale restoration across Te Hoiere / Pelorus catchment.

Wither Hills Farm Park remains closed

The Wither Hills Farm Park remains closed due to the hot and dry conditions.

Council made the decision following discussion with Fire and Emergency New Zealand (FENZ) in the interest of public safety. Due to the mixture of dry grass, steep slopes and warm and windy conditions, a fire would spread very quickly, placing people at extreme risk.

Council is also warning people to be very careful when walking or biking in the Taylor River Reserve (pictured) especially between the Burleigh Bridge and Taylor Dam.

The vegetation is super dry and a spark could cause a quick-spreading fire. Reserve users should think carefully about their route and ensure they have a plan to exit the reserve quickly in case of fire. Early morning and late evening walks are recommended when the danger level is a lower.



Creative Communities fund now open

Are you involved in a creative community project that benefits the people of Marlborough? Do you need funding help?

If so, now's the time to get your application in for funding through the Marlborough District Council Creative Communities NZ Scheme.

The purpose of the scheme is to support and encourage local communities to create and present diverse opportunities for accessing and participating in arts activities.

A drop-in clinic for help with applications is being held on Thursday 7 March from 10am to 11.30am at Te Kahu o Waipuna. The fund is now open and closes at 8am on 13 March.

For more information go to www.creativenz.govt.nz/funding-and-support/all-opportunities/creative-communities-scheme For further information please

contact Nicola Neilson, Project Lead – Arts, Culture and Heritage, on Ph: 03 520 7400 or email nicola.neilson@marlborough.govt.nz



Rural sports funding open

If you're involved with a rural sports club or school sports team, you may be eligible for funding.

Council makes funding available through the Sport NZ Rural Travel Fund, which was established in 2003 to remove the barrier of cost to participation for those in rural communities.

Its purpose is to encourage rural youth aged 5 to 18 to get involved in local sports despite their

location, Council's Community Partnerships Support Natalie Lawler said.

Funding is available for rural sports clubs or rural school teams needing financial help for transport to sporting competitions in the Marlborough area.

Applications can be made online



at www.marlborough.govt.nz/our-community/grants-and-awards/sport-nz-rural-travel-fund

Applications are open now and close 8am on Wednesday 13 March.

For further information email natalie.lawler@marlborough.govt.nz or Ph. 03 520 7400.