

Seasonal snapshot gives a new picture of water levels in Canterbury

Our new webpage provides the public with a data-driven look at how much water is in Canterbury at the change of each season.

The Canterbury water this season webpage (ecan.govt.nz/freshwater) is a new resource you can use to get a quick glance at some important indicators of freshwater levels in the region.

Our scientists and field staff monitor water at hundreds of points across Canterbury – measuring flows in our waterways, as well as checking rain gauges and well levels, and receiving additional data from NIWA.

We're now analysing this data and using it to create easy-to-understand maps of what water levels are like each season using four different measures:

- Groundwater levels
- River and stream flows
- Soil moisture levels
- Rainfall

Spring began with healthy water levels for much of Canterbury, but low groundwater levels remain a concern in some parts.

Our rainfall map (right) uses the Standard Precipitation Index (SPI) to paint a picture of how wet the previous three months were.

In our spring snapshot it shows that – after a few years of dry winters – 2021 saw a return to normal rainfall levels across Canterbury, with some parts of the Southern Alps even recording rainfall well above normal.

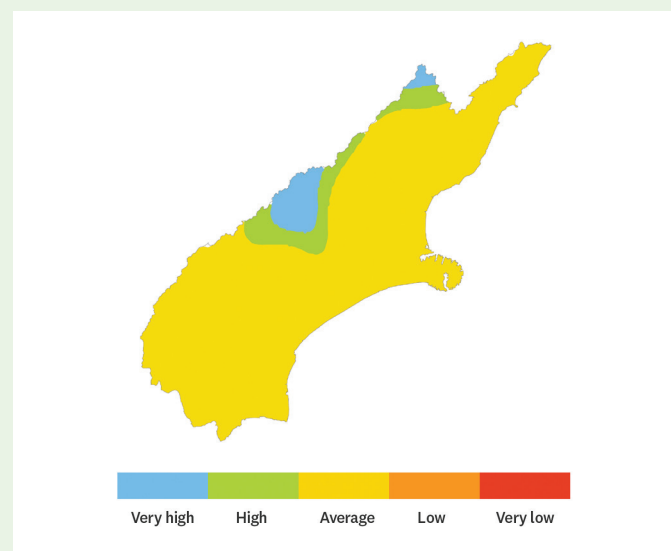
Another major finding of our latest seasonal snapshot is that heavy rains earlier this year, followed by a return to normal rainfall over winter, have helped restore healthy water flows and groundwater levels in much of Canterbury.

However, this isn't the case across the region, with groundwater still well below normal spring levels in some parts.

Most of the wells we measure in the Selwyn and Waimakariri districts are showing normal or even above average water levels for this time of year.

But in the north-eastern Ashburton district, as well as around Southbridge, wells are still well below expected normal levels.

Environment Canterbury will publish a new seasonal outlook with updated data in the first month of each season, so you can keep an eye out on how much fresh water is in our region.



View the Canterbury water this season webpage at ecan.govt.nz/freshwater

Young talent eager to help Canterbury landowners

It's the 'aha!' lightbulb moments that make Billy Bartrum and Maria Captein enthusiastic about coming to work each day.

Billy and Maria are relatively new to their roles as land management and biodiversity Advisors at Environment Canterbury's Ashburton depot – they've had a combined seven months on the job – but they like nothing more than being out on a farm having a cup of tea and a chat with a landowner.

At the kitchen bench or out in the field is where the best conversations happen when it comes to working out what's best both for the farm and the environment.

Those, they say, are the 'aha!' moments – when a seemingly impossible task or project on-farm suddenly becomes viable, through the power of conversation and advice.

What does a land management and biodiversity advisor do?

The role of a land management and biodiversity advisor is varied, but includes helping farmers with biodiversity and planting plans, working towards Good Management Practice (GMP), providing support with funding, and making farm visits to help farmers prepare for audits.

Billy says that he spends a bit more time at the Ashburton depot than he'd like – but he's usually planning to escape to a nearby farm to lend a hand.

"I really like the biodiversity funding projects where we help out on farm. It's really great to see landowners who have the confidence to do it themselves. Sometimes they don't need our help, they just want a bit of advice on where to put things, or what type of plant." - Billy Bartrum



Billy Bartrum and Maria Captein

Depending on the type of visit, Maria says they could be heading out of the office for a variety of reasons.

"A lot of farmers just want a guiding hand to steer them in the right direction, rather than someone telling them what to plant, where, how, why, all of that stuff," she says.

"But we could be helping with anything from drawing up planting plans, to giving advice on GMP, following up an FEP (Farm Environment Plan), providing advice about winter grazing, supporting with funding applications."

Staff who know what it's like to work on a farm

Both Maria and Billy grew up on farms in different regions of the country. Maria's background in political science may sound like it's not relevant to her new role, but surprisingly, the skills she learned studying for her degree come in handy all the time.

"My background is in Waikato dairy farming and sheep and beef farming in Taranaki. I studied political science at Waikato University and worked for Taranaki Regional Council in land management for three years," she says.

"The degree feeds right into my role now. It's a perfect mix of working with policy and what it means to the people on the ground. It's about interpreting those rules and seeing how it affects their day to day lives."

Billy lived on farms across the South Island before taking up tertiary education at Lincoln University. "I've just graduated from Lincoln, where I was doing a Bachelor of Environment Management, majoring in freshwater management," he says.

"I grew up on a variety of sheep and beef farms across the island. We were up in Bluff Station in Kaikōura, then out by Hanmer, two farms in Southland for seven years, and out in Lynton Downs. Then I took up the role here."

Finding solutions together is the key to making progress

They may come from different backgrounds and islands, but Billy and Maria agree on best aspects of their job.

"It's knowing you've made a positive impact or had a positive interaction in that day. Big or small, it doesn't matter," Billy says. "Working towards an environmental outcome or seeing a change in a farmer."

"It's talking to a farmer and understanding their point of view, having those discussions and coming to a solution that suits everyone. It's not a one-size-fits-all kind of approach, you need to be flexible and a bit creative at times," Maria says.

"I just love it when the 'aha' moments happen on-farm through our discussions – when people realise that actually, it can be done."

They also agree that a tough part of the job was having to tell farmers there wasn't enough funding left to be able to help them complete a particular project at that time.

"Especially when they're really passionate about it. That's probably the toughest part of the role for me," Maria says.

Land management and biodiversity advisors – here to help you

If this article has struck a chord with you, make sure you get in touch with our friendly Land Management and Biodiversity Advisors (LMAs).

Our LMAs can help provide advice and support on a range of topics, including planting plans and suggestions, biodiversity projects, linking up with funding for projects, and free on-farm visits to help with preparing for audits and working to good management practices.

For more information, visit the [ECan Farmers' Hub](https://ecan.govt.nz/farmershub) ecan.govt.nz/farmershub or call our customer services team on 0800 324 636.

Overseer and Essential Freshwater package

We're working towards a new integrated plan for Canterbury, covering both freshwater and coastal, by 2024. Consideration of the Government's recent review of the nutrient modelling tool Overseer and its Essential Freshwater package are important elements of this process.

Overseer

In August this year, a government Science Advisory Panel released a review of Overseer, the nutrient loss modelling tool that we use in Farm Environment Plans. The Panel concluded they did not have confidence in Overseer's estimates of nitrogen loss calculations.

Recognising that irrigation schemes use Overseer in different ways, we've been meeting with schemes both collectively and independently to make sure we understand the situation for them in relation to the review, and that schemes understand how the review potentially impacts them.

We're continuing to work closely with schemes to ensure good management practices by their members on farm and that their environmental enhancement activities are well supported.

For more information, visit ecan.govt.nz/overseer

Essential Freshwater

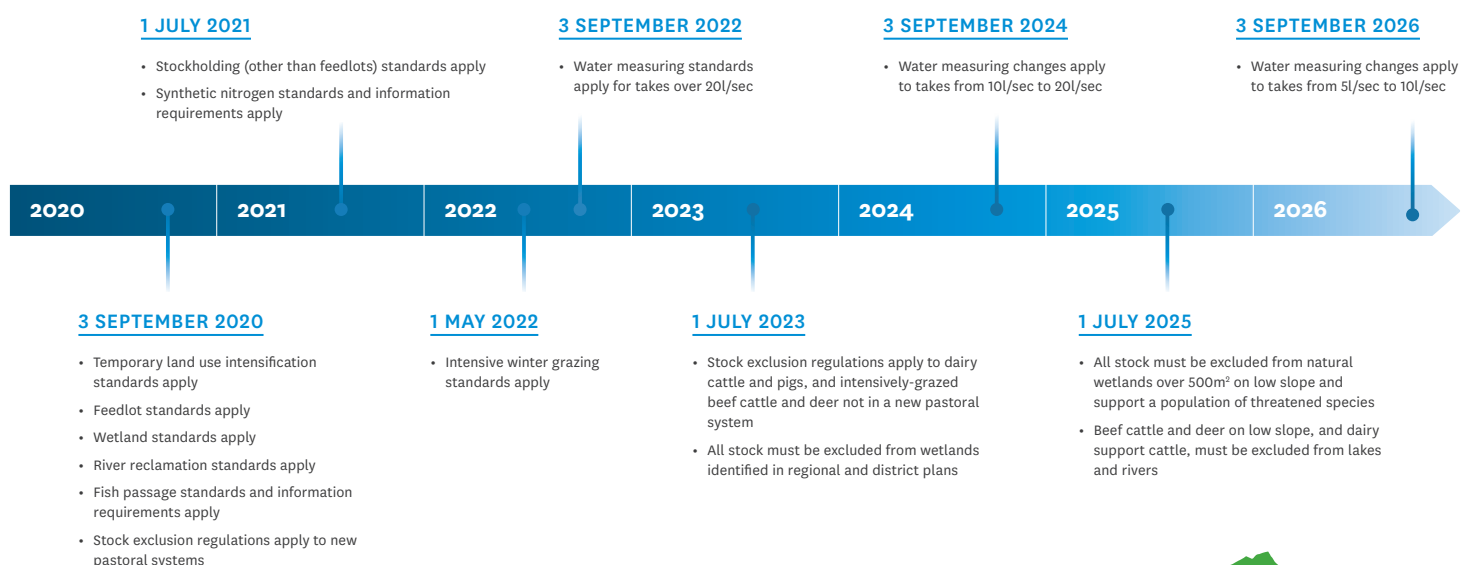
It's important for all farmers to understand the new national regulations in the Essential Freshwater package and what it means for them. The regulations aim to improve freshwater and will affect all sectors, particularly high-input, intensively grazed livestock systems.

Environment Canterbury is here to help farmers understand the national regulations, alongside our existing regional rules, so they can make a start on those actions required now and prepare for the changes coming in the next few years.

We are particularly focused on supporting farmers with national and/or regional regulation around synthetic nitrogen use, wetlands, water use and intensive winter grazing. We're working with farming industry groups to develop clear information for farmers and will provide detailed information to those that need it.

For more information, visit ecan.govt.nz/essential-freshwater

Key Dates – Essential Freshwater Package



Taking action together to shape a thriving and resilient Canterbury, now and for future generations.
Toitū te marae o Tāne, toitū te marae o Tangaroa, toitū te iwi.
www.ecan.govt.nz