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Case study: Francois Tillard, dairy farm manager

Waiareka Creek creates some interesting environmental challenges for Francois Tillard. He manages two dairy farms in North Otago – Clydesdale and Glen Keen farms – and in some places the level of the creek is higher than the paddocks.

This is a problem for irrigation, spreading effluent and grazing, to ensure no runoff enters the creek and affects water quality.

When Francois came onto the farm at the start of 2014, one of his first steps was re-fencing the water-logged areas on the flat to keep the cattle out. While the animals had no access to the creek, he was conscious of the potential environmental impact, and wanted to prevent pugging and stop runoff getting into the water.

His environmental approach doesn't stop at fencing. Francois embraces technology and believes that the information it provides, combined with farming knowledge and experience, results in better decision making.



Francois Tillard.

FARM FACTS

- 325 hectares (both farms)
- 1150 cows (both farms)
- 310 shares in NOIC
- 6 pivots and one K-line
- 4 soil moisture probes
- Flat and rolling land
- Irrigates 110–120 days a year
- All wetlands have been fenced off

the grass grows better because the soil isn't too wet. It also means the cattle aren't compacting the ground because I can keep them out of the wet areas. I know many people who think compaction is a normal part of dairy farming but it isn't, and it has an economic effect as well as environmental."

A number of farms use VRI and soil moisture testing, but what sets Francois apart is how well he understands and uses the technology to add value to farming decisions.

"In the past I couldn't see a use for the information, but now I can see the benefits, especially as the technology has developed and the information you get is more reliable, for soil moisture probes in particular. I'm looking forward to the next development of a system that automatically shuts off if it detects a leak.

"I will always keep my own eye on the irrigation system though," he said. "I want to make sure there are no problems and that I have time to stop irrigating if I see something going wrong."

Francois has set up several irrigation programmes based on the constantly-changing moisture levels, so he can select the right one for the conditions. He can manage this from his phone.

"I have seven programmes set up at the moment, and it's important to know how to use the technology well so it can be effective. If I kept on doing the same thing that was always done, the chances are that we'd have a swamp.

"The soil moisture probes tell the VRI how much effluent to put on, and in time the technology will evolve to the point that the soil moisture readers will be on the pivot, making it even more efficient," he said.

"We are doing everything we can to protect water quality. With the Waiareka Creek running through our farms, we have a responsibility to look after it."

National interest in expiring permits

Water is possibly our most precious resource, and historic Otago water rights called “deemed permits”, based on former gold mining rights, are due to be replaced in the next few years.

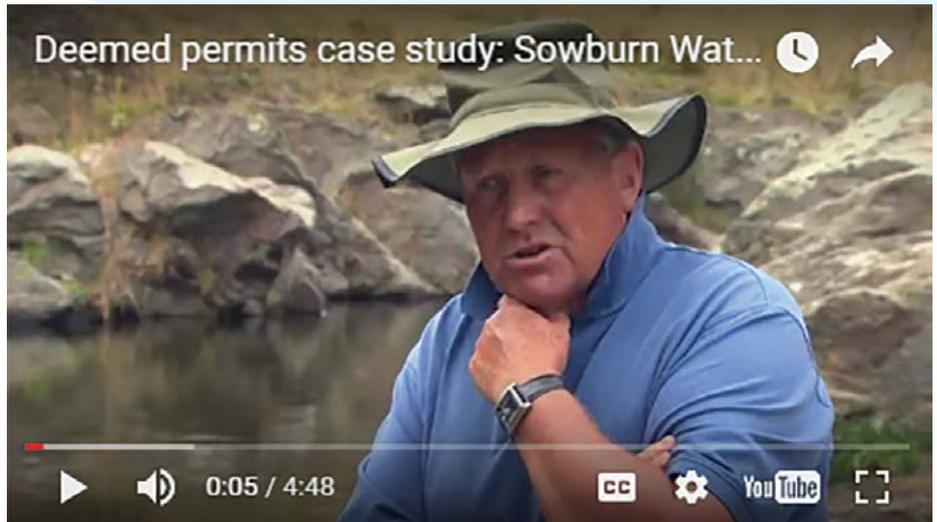
When the Resource Management Act (RMA) came into force in 1991 it set a 30-year limit for all deemed permits to be replaced with a water permit, in order to continue to take water.

There’s been increasing regional and national interest in expiring deemed permits following the recent forum in Alexandra.

On a stunning autumn day, 140 people packed into Alexandra’s Cellar Door Function Centre to learn what’s involved to replace their expiring deemed permits with a RMA water permit.

At the forum ORC staff explained the transition, while representatives from iwi, the Department of Conservation (DoC), and Otago Fish and Game explained the values they place on the waterways and the use of water as a resource.

A video of the Sowburn Water Company Ltd, who have recently replaced their deemed permits with new RMA water permits,



was premiered. It highlighted their experience in the transition, and included suggestions to help make the process easier.

You can watch this video online at www.orc.govt.nz/sowburn

At the same time as the forum in Alexandra, Radio New Zealand was working on an Insight documentary on the issue, which was broadcast in late April.

The programme takes an in-depth look at the issue from a range of perspectives, including interviews with permit holders, affected parties, and the ORC. It is interesting listening, and it’s good to see the challenges we’re facing in this area brought to national attention.

Go to www.rnz.co.nz then type in “Insight” in the search box, to find the programme podcast.



Those attending the water consent forum valued the opportunity to address ORC, iwi, DoC, and Fish and Game with their queries and concerns.



Bruce Monaghan facilitates a meeting in Central Otago.

Transitioning from deemed permits to RMA water permits

People and businesses who still hold a deemed permit (once called a ‘mining privilege’) have only a few years left to transition to an RMA water permit. With the expiry of all deemed permits in 2021, Otago Regional Council (ORC) is supporting permit holders to help them understand what they need to have ready to apply to replace their expiring permit.

Helping lead the way is ORC liaison specialist Bruce Monaghan, who hosts meetings with deemed permit holders across the region. Bruce has worked for the ORC and its predecessor, the Otago Catchment Board, since 1978, and he has a wealth of knowledge about all the aspects involved in replacing deemed permits.

Bruce helps those exploring working together as groups and one-on-one enquiries to manage their future water needs. The package of support Bruce offers includes a series of meetings tailored around what water users need to know about the process.

If you are looking to replace your deemed permit, Bruce can provide support to you

through these meetings:

- The first meeting outlines what you can expect, and what you need to do to transition your permit.
- The second meeting invites affected parties (usually iwi, Fish and Game, and the Department of Conservation) to outline their values that need to be considered in your water permit application.
- The third meeting is designed to provide clarification of any issues still outstanding.

“At this stage we have never needed to have a third meeting, but they are always available,” Bruce said.

By attending one of these meetings, you’ll find out what your responsibilities are and what you need to do to prepare your consent application.

“Anyone in the relevant catchment who is moving from deemed permits should come along, as this is a great opportunity to

BRUCE’S TOP TIPS INCLUDE:

- If you are unsure about completing the application yourself, you can meet with a consultant. There’s generally no charge for the initial meeting, and it gives the water taker a chance to know how a consultant could support and enhance their application.
- Liaise with affected parties as early as possible.
- Keep collecting water data from your take(s).
- Talk to neighbours in your catchment and explore whether you can work together, to ensure that you are thinking along the same lines on water management.

get the ‘good oil’ on what’s needed to lodge a thorough resource consent application,” Bruce said.

Those taking part can bring all their questions, and feel free to ask anything that springs to mind on the day, Bruce said.

Since last year, Bruce has held 34 meetings regarding expiring deemed permits.

For more information, please see our Water Users Handbook and check out the Fish and Flow web portal

*www.orc.govt.nz/Water-Users-Handbook
www.orc.govt.nz/fishandflowportal*

North Otago farmers team up for better water quality

North Otago Sustainable Land Management Group (NOSLaM) knows that farmers learn best from other farmers, so they've set up a project to help local farmers learn about how their activities can impact on water quality.

Small pod groups of farmers from similar geographic areas are being set up, with pod members working together to set achievable goals for better water quality, then taking action to achieve them. This is part of the 'local solutions built by local people' approach taken by NOSLaM.

The pods cover dairy, cropping, sheep and beef, and wintering stock, to acknowledge that water quality is an issue for all farmers no matter what their land use is.

While the project is still in its infancy, the plan is for the farmers to benefit from belonging to a supportive group that is

results-driven and has an emphasis on learning about water quality and what's expected from farmers in terms of the Otago Water Plan, sharing ideas, and, most importantly, taking action.

As part of the project, water quality at 15 key points in the catchment will be tested fortnightly by ORC and North Otago Irrigation Company (NOIC), with samples being taken at the same time and sent to the same lab for consistency. Results will be analysed over time and used to motivate and inform landowners about what they need to be focussed on with their actions.

The first pod meetings have already taken place and NOSLaM is pleased with how the project is shaping up, with good buy-in from farmers who are keen to work together and share ideas.



Farmer pod groups are discussed by North Otago farmers, along with staff from Otago Regional Council and DairyNZ.

IN BRIEF

AWARDS SEASON

We're proud to announce the winners of the Ballance Farm Environments Awards – Otago Regional Council Quality Water Management Award are Ben and Tanya Davie from Hejlea Dairies in South Otago. Well done!

WATER QUALITY WORKSHOP

We recently held a two-day workshop with invited stakeholders to kick off our review of Water Plan rules around stormwater, waste water, and industry trade waste. This will feed into a water quality strategy to align these areas with updated rural water quality rules. Watch this space for updates.

Winter effluent management

As we approach the new dairy season it is important that you have planned ahead and prepared well for the coming year. Now is the ideal time to ensure your effluent pond/s are as low as possible and in a good state of repair.

What should you be doing over the winter months:

- **Clean out your storage pond.**
The break in milking is the ideal opportunity to do this, and will also give you maximum storage capacity for the upcoming milking season
- **Carry out any maintenance or upgrading that is needed on your pond or effluent system**
- **Check, maintain and service your effluent system, including the pumps to the effluent pond.** Remember to keep a record of everything you do
- **Divert rainwater from the dairy shed yard away from effluent ponds.**

Solids, sludge, muck and slurry:

Applying solids, sludge, muck and slurry to paddocks must be treated the same as liquid effluent in terms of the Water Plan rules.

Good practices:

- **Timing.** Apply only when the grass or crops can take it up quickly and soil moisture levels are low
- **Thickness.** Apply it as thinly and evenly as possible
- **Cultivation.** Apply just before cultivating a paddock so it can be mixed into the topsoil, providing extra nutrients for a crop or new grass.