**MANAGEMENT 19** 

## **Tool enables good data collection**

PROMINENT RURAL consultant Alison Dewes has been using Overseer for more than a decade.

The Bay of Plenty rural leader used the tool for her master's degree, in her private consultancy and as former head of environment for Pāmu (Landcorp). She also uses it on her own farm in the Rotorua Lakes Catchment and in providing farm system services for Wai Kōkopu, a community-led programme to revitalise the severely degraded Waihi Estuary at Maketū on the Bay of Plenty coast.

"OverseerFM gives us a guide of the relative risk of the various activities on the land that impacts on the catchment. It also gives us the ability to look at scenarios for reducing risk in the receiving environment."

Dewes says the Government has asked catchment groups to link farm plans to their catchment.

"OverseerFM provides a way to quantify relative risk in numeric terms and we have been able to develop a score card for each of the relative risks to the catchment.

"The goal was to assess how far farmers in the catchment could move from the current baseline of the second most degraded estuary in New Zealand, to what it would take to get it to a moderately healthy state.

"We found 15 'lighthouse farmers' and have been working with them to make their farm system changes to reduce

## N, P and Background also greenhouse gas (GHG)

emissions. We have done three years of modelling using OverseerFM to help them to

understand where they were at, how they were operating and what their footprint was." Dewes says the goal was to assess how far farmers could move from the current baseline to what it would take to get the estuary to a moder-

ately healthy state. "These farmers have made significant inroads into using fertiliser better in more optimal ways and also reducing their N losses, so are benefiting financially and environmentally," she explains. "They have explored options around more appropriate land use,

ALISON DEWES is a fourth generation dairy farmer and a second generation veterinarian She is the owner director of the Tipu

Whenua consultancy, which focuses on the wellbeing of people, animals and ecosystems - supporting low footprint farming systems to operate profitably.

> including retiring steep slopes and wetland and reducing GHG emissions. There has been a significant shift."

Dewes believes because the catchment had not previously been regulated for nutrient loads so farmers were not familiar with Overseer or nutrient reductions

"In somewhere like the Rotorua Lakes catchment, farmers are familiar with OverseerFM, but in an area like the coastal Bay of Plenty, where there has not been the strict regulation, it is harder to get good qual-

## LONG-TIME USER

DEWES FIRST began using Overseer in 2010.

She also used it extensively in her master's degree, with her thesis topic Economic Resilience and Environmental Performance of Dairy Farms in the Upper Waikato Region. That included assessing 25 dairy farms over four years -100 Overseer files - to find the most economically resilient with the lowest footprint in the upper Waikato - for N loss mainly but also assessing GHG and P loss, risk and farm systems style.

Her Tipu Whenua team - all women farm consultants and

mothers who are able to work from home - used Overseer and undertook full economic analysis on all of the farms to find the most economically viable with the lowest emissions systems.

"As head of environment for Pāmu/Landcorp for three years until 2020, we used OverseerFM across 125 farms," Dewes adds. "I have also trained a lot of other people to use it, including consultants, to help them understand the ecological footprint for the high intensity farms they consult on."

She says there have been significant improvements in Over-

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seerFM during the years she has been using it.

"It has got a lot better and it keeps improving. The changes could be unsettling, the new versions were hard when I was trading N in the Rotorua catchment, but it has gotten a lot more user-friendly. The good thing about it is it allows us to get a benchmark for a farm system risk to the receiving environment."

Dewes says it's important to acknowledge that OverseerFM will not be 100% but it gives a guide to GHG, N and P loss. She believes it is the best we currently have in

terms of a calculator for that.

"It's a one stop shop. There are many calculators out there that are not as accurate," she explains.

"We have to keep farmers on the journey, especially if they have multiple enterprises. OverseerFM has enabled us to analyse and get emissions profiles for those farms."

Dewes' advice to other catchments in terms of the value of using OverseerFM is that there is nothing more valuable than getting good data. "If you don't know what your baseline or trajectory is, then you are flying blind. OverseerFM enables us to collect good data."

**"OverseerFM** gives us a quide of the relative risk of the various activities on the land that impacts on the catchment."

ity data, so it has taken three years to do that," she says.

"It's been a tough three years for farmers, with Covid-19 and new regulations and many feel overwhelmed. Now they tell us, 'I know my numbers and I know my numbers in detail'. They are very clear on what their hot spots are."

Dewes says farmers now understand the core area they need for effluent spreading and optimising N use.

"They understand their N footprint and the different management blocks within their farms and they understand the relative risks of practices like maize growing, cropping and effluent spreading," she adds.

"In many cases, there has been a lot of conversation about He Waka Eke Noa and GHG and the profile OverseerFM gives is very helpful as it helps to explain the relative source of gases from activities and what levers farmers have to pull to get nitrous oxide and methane down."



than getting good data.





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