



Justine's column



Welcome to our June 2017 edition of Agri-gate. It's been an action-packed couple of months, full of achievements and events across our investment programmes.

A couple of weeks ago the Sustainable Farming Fund (SFF) and Primary Growth Partnership (PGP) were front

and centre at the Mystery Creek Fielddays. We provide a short report on the SFF and PGP events and milestones at the Fielddays in this edition of Agri-gate.

Te Mana Lamb launched in New Zealand and Hong Kong

In May Prime Minister, Rt Hon Bill English, members of the Hong Kong business community and others were the first in Asia to try Te Mana Lamb – a high quality lamb product rich in polyunsaturated and Omega-3 fats – at an event in Hong Kong. Te Mana Lamb is bred in New Zealand's iconic South Island high country and finished on special chicory herb pastures. It was developed by The Omega Lamb Project, one of our PGP programmes.

The event was organised by **Eat the Kiwi**, a New Zealand coalition supported by New Zealand Trade and Enterprise that provides premium primary products to Hong Kong restaurants, hotels and caterers.

Te Mana Lamb is currently available in selected New Zealand and Hong Kong restaurants. See the **Te Mana Lamb website** for more information.

I'd like to congratulate The Omega Lamb Project for reaching this milestone.



Te Mana Lamb, produced by The Omega Lamb Project

Red Meat Profit Partnership hits half-way mark

Earlier this month stakeholders and investors in the Red Meat Profit Partnership (RMPP) gathered in Wellington to mark the half-way point in this PGP programme, and hear about its successes to date.

RMPP has made crucial progress towards growing a more sustainable red meat sector. For example, it has enabled

an unprecedented level of information sharing between farmers to help grow their productivity and profitability, culminating in a new RMPP Action Network soon to be rolled out to around 3 000 farmers; it has introduced resources into secondary schools to place agriculture into mainstream subjects such as Maths, Science and English; and it has enabled capability-building and data and information-sharing.

A number of people spoke at the event including Minister for Primary Industries Hon Nathan Guy, RMPP Board Chair Malcolm Bailey, Marton farmer Brenda Stewart, and Hutt International Boys School's Head of the English Department Jane Dewar.



Minister for Primary Industries Hon Nathan Guy addresses the audience at the RMPP event in Wellington.

Forestry demo

On the slopes of a plantation forest in the Bay of Plenty, the Steepland Harvesting PGP programme demonstrated its wide array of innovations aimed at improving worker safety, while increasing productivity of steep slope forestry operations.

This demonstration is one of a number since the programme started in November 2010.

At the demonstration, around 60 industry members and media gathered to watch innovations in action such as the programme's tele-operated (operation beyond line-of-sight) feller-buncher. Teleoperation enables an operator to control the feller-buncher to cut and fell trees from the comfort and safety of a purpose built operator cabin.

The programme also demonstrated the Skyshifter twin winch tail hold carriage, part of log hauling operations which serve as an anchor point at the far end of the 'skyline' – a wire rope strung high above a harvesting site that supports a motorised carriage to haul logs. Other innovations shown on the day included a new model of the CutoverCam hauler vision system, which uses wireless camera technology to provide high resolution video of forestry operations on steep slopes and importantly, ground crews.



Daniel Lamborn from Applied Teleoperation Ltd in the operator's cabin talking about the tele-operated feller-buncher.

The programme is currently planning a further demonstration in August, near Nelson.

New Taranaki jobs created under ANZCO FoodPlus PGP programme

One of the key spillover benefits of PGP programmes is the creation of new jobs. The FoodPlus PGP programme, led by ANZCO Foods, has enabled the creation of twelve new jobs following the recent introduction of a plant at Taranaki Bio Extracts (TBE). TBE is a joint venture involving ANZCO Foods and Taranaki By Products. FoodPlus is developing new and innovative uses for the parts of the red meat carcass that currently generate less value. New uses include food, ingredients and healthcare products.

The new plant and associated products are creating exciting opportunities and enabling TBE to attract people to Taranaki from outside the region.

One step closer to eradicating footrot in sheep

In a recent scientific breakthrough, the NZSTX – New Zealand Sheep Industry Transformation PGP programme, led by The New Zealand Merino Company, has successfully developed a way of predicting footrot in fine-wool sheep. Footrot is a painful hoof infection that affects sheep.

The breakthrough will enable farmers to easily identify which sheep are more resistant to the debilitating disease, through a simple DNA test. Sheep breeders can use the information to selectively breed for greater resistance to footrot.

This breakthrough will allow farmers to breed more resilient animals that can thrive in more regions throughout New Zealand, increasing New Zealand's production of premium merino.

In time, this could significantly reduce the incidence of footrot leading to improved animal welfare and production gains on New Zealand farms.



Emma Wilding from The New Zealand Merino Company's Production Science team inspecting a sheep for footrot (source: Jessica Trang).

Sustainable Farming Fund celebration events

It was great to see many of our project partners at our Sustainable Farming Fund celebration workshops in Hamilton and Christchurch in May. The Fund is in its 17th year and throughout this time, we have invested close to \$135 million in farmer, grower or forester led projects. We hope those at the event got something out of the workshops and enjoyed the opportunity to network with those carrying out similar work. For us, events like this are always insightful as we thoroughly enjoy learning about your projects' successes.

Following on from these events, we announced our 1000th project and launched a commemorative booklet at the Fieldays, you can find out more about that event in our Fieldays story in this edition of Agri-gate.



Minister Guy presenting at the Hamilton Sustainable Farming Fund celebration workshop.

Gisborne aquifer recharge trial underway

On 20 June, the Minister for Primary Industries Nathan Guy and Gisborne District Mayor Meng Foon turned the tap on to signal the start of the trial recharge in the Makauri Aquifer.

The Makauri Aquifer has had declining water levels for decades. The aim of the trial, led by the Gisborne District Council, is to see if it's possible to use Managed Aquifer Recharge (MAR) technology by injecting water from the Waipaoa River into the aquifer to increase the water levels and sustain water availability on the Poverty Bay Flats.

MPI support of recharge trials like this is essential for the livelihoods of regional communities, and in turn the New Zealand economy. We've committed \$250 000 to this trial through the MPI Irrigation Acceleration Fund as this project meets our criteria which considers environmental, cultural, social, recreation and economic benefits. The trial has also been supported by the Gisborne District Council (around \$230 000) and the Eastland Community Trust (\$200 000).



Minister Guy along with Gisborne Mayor Meng Foon turning the tap on to signal the start of the trial recharge in the Makauri Aquifer.

Also in this edition of Agri-gate

- PGP Investment Advisory Panel Chair John Parker provides some of his perspectives on PGP as a key way of pooling resources and bringing together competitors to work towards common goals.
- We provide an update on the PGP's newest programme, Sheep – Horizon Three.
- We profile the Erosion Control Funding Programme and the recent changes that have been made to encourage uptake of the funding
- A Sustainable Farming Fund spotlight on a project to control Californian thistles on hill country land.

I hope that you enjoy this edition.

Justine

From the Chair, PGP Investment Advisory Panel



Welcome to this edition of Agri-gate. In some of my previous columns I've mentioned there is a steady stream of new programmes proposed through the PGP pipeline. MPI and the PGP independent Investment Advisory Panel that I chair are seeing greater variation in the programme proposals coming in, which to me means companies are still seeing many opportunities for innovation across the primary industries.

I think one of the key reasons for this interest in future PGP programmes is the value the wider industry is seeing, not only in the investment from government if a programme meets the PGP criteria and goes ahead, but also due to the partnership aspect. We can see this partnership aspect in action across all PGP programmes. Many programmes bring together those who have not previously worked together. They may well have seen each

other as 'the enemy' or at least competitors with whom one didn't collaborate.

The pooling of expertise amongst these earlier competitors along with MPI input is indicating substantial benefit largely unforeseen in initial estimates of what returns would accrue to the PGP programmes. I use the word 'indicating' because the benefits are probably mostly in the future and are quite hard to apply a monetary calculation to. For example, what is the value of the avocado industry putting together a structure of cooperation, research and marketing that will outlast the term of its New Zealand Avocados Go Global PGP programme? That's growers cooperating for mutual good that will have much greater longevity than the current programme's objectives.

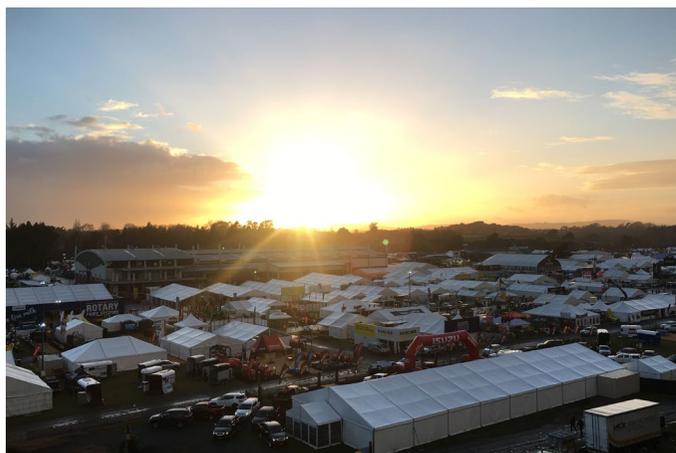
One might say that avocado growers cooperating is easy - they were not direct competitors anyway, but in the Red Meat Profit Partnership we have meat companies cooperating on work that, in my experience, would not have been likely without the catalyst of the PGP. It's

also true of seafood and fishing, apiculture and others. My prediction is that, particularly for primary industries with a substantial export orientation, the cooperation on production problem-solving, research and development and marketing will eventually prove to be one of the larger benefits of PGP participation.

Co-investment from industry partners and the Ministry for Primary Industries (MPI) brings certain responsibilities. These include the requirement and ability to contribute to joint decisions and putting strong governance around programmes to ensure parties are accountable to one another. Co-investors in PGP programmes are not simply 'silent partners'. And because each partner has contributed significant time, money and effort, each has a significant stake in making sure their respective PGP programmes are successful.

John Parker
Chairman, PGP Investment Advisory Panel

National Fielddays – an opportunity to connect



Sunrise on Day 1 of the Fielddays at Mystery Creek, Hamilton

The Fielddays at Mystery Creek is an important event on the MPI calendar. It's an opportunity for us to connect with farmers, growers and foresters who make up New Zealand's primary industries. This year we were pleased to be able to showcase many of our investment programmes – on our site and by hosting events.

Sustainable Farming Fund success celebration

On the eve of Fielddays opening, we hosted an event focused on celebrating the primary industries. Minister for Primary Industries Hon Nathan Guy and Associate Minister for Primary Industries Hon Louise Upston announced the recipient of the 1000th Sustainable Farming Fund grant

and launched a commemorative booklet to celebrate the achievements of the Fund over the last 17 years.

MPI's Director Investment Programmes, Justine Gilliland, says the announcement was a significant milestone for the Sustainable Farming Fund.

"There has been so much positive change and progression across the primary industries as a result of some fantastic SFF projects. We wanted to celebrate that, so we developed a '1000 projects and counting' booklet to tell some of the success stories."

"While we weren't able to capture all 1000 projects, but the

commemorative booklet covers the last 17 years and many different sectors. I hope everyone enjoys reading it as much as I did.”

The 1000th project that was announced is titled “*Ka Matau ka Ora (People and Capability) – An ecosystem for workforce and governance development for Māori kiwifruit orchardists*” managed by Tūhono Whenua Horticulture. The three year project gets underway in the coming months.

You can download an [e-edition of the booklet here](#), alternatively, if you would like a copy of the booklet, please email funding@mpi.govt.nz and we can post it to you.



The 1000 projects and counting booklet, launched at the Celebrating the Primary Industries event.

Red Meat Showcase

Primary Growth Partnership (PGP) red meat partners, red meat farmers, meat companies and media were invited to a unique event focused on showcasing the high-end, quality red meat products that have been developed as part of many PGP programmes.

“This event was enjoyed by all – we had expert chefs, joined by many Ministers, on the barbeque cooking delicious

cuts of meat for attendees to enjoy while our programme partners described the work they were doing to add value to New Zealand’s red meat products,” says Justine.

The red meat industry is New Zealand’s second largest exporter of goods valued at about \$8 billion for the year ended 30 June 2016. This represents 22 percent of total primary industry exports.

Tony Egan, Managing director of Greenlea Premier Meats says he was pleased to support the Fieldays and Red Meat Showcase event for the Red Meat Profit Partnership.

“As one of six meat processing companies involved we were able to highlight the way positive collaboration can take the industry forward and how our stronger alignment with farming can strengthen value for the red meat industry as a whole. Some of the initiatives involved will take time to bear fruit, but they are changing the way we operate and breaking down the silos of the past,” says Tony.

Meat companies or organisations participating in the showcase were Alliance Group, ANZCO, Deer Industry NZ, Greenlea Premier Meats, Firstlight Foods, Progressive Meats and Silver Fern Farms.

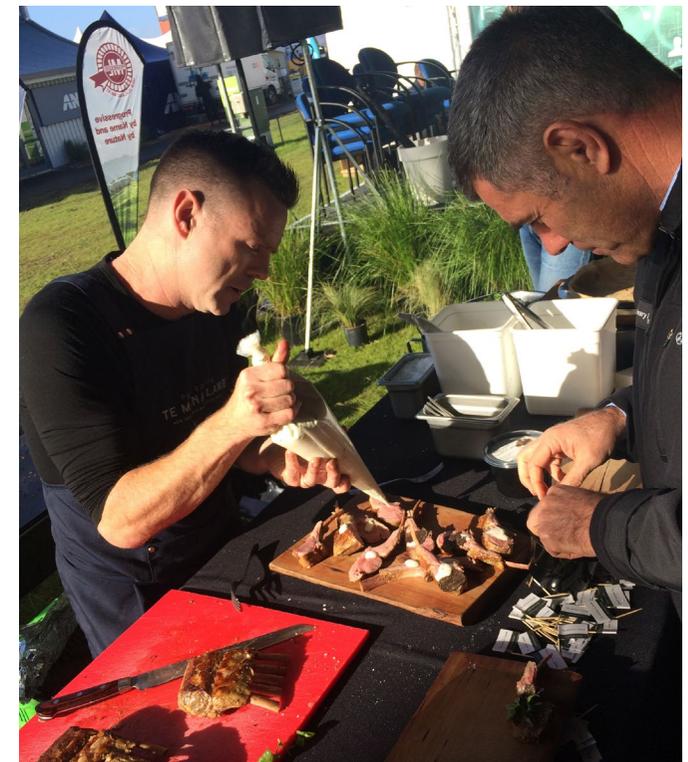
Red Meat PGP programmes include **FarmIQ**, **FoodPlus**, **Marbled Grass-Fed Beef**, **Omega Lamb**, **Passion2Profit** and the **Red Meat Profit Partnership**.



Deputy Prime Minister Hon Paula Bennett and Associate Primary Industries Minister Hon Louise Upston on the barbeque.



Minister for Primary Industries Hon Nathan Guy addresses the crowd (who are waiting in anticipation to try the meat hot off the barbeque).



Minister for Primary Industries Hon Nathan Guy helps out at the Red Meat Showcase.



Associate Primary Industries Minister Hon Louise Upston helps out at the Red Meat Showcase.

Attracting school students to a career in the red meat sector

Two busloads of students from Auckland learnt about the opportunities for a career in the red meat sector at a special event on Thursday 15th June at Fieldays, organised by the Red Meat Profit Partnership (RMPP). An important part of the RMPP, a PGP programme, is to ensure there is a pipeline of talented individuals entering the sector so it continues to be successful.

The students got the opportunity to take part in an Amazing Race-type scavenger hunt to meet a number of RMPP partner exhibitors from across the sector. As part of this, the students were instructed to seek out a wide variety of sector exhibitors and ask them questions.

“The aim was to open their eyes to some of the many opportunities available through a fun challenge - and it was very successful,” says Diane Falconer, RMPP’s Project manager for People Capability.

“The students were really enthusiastic and a lot commented that they’d had no idea there were so many career choices

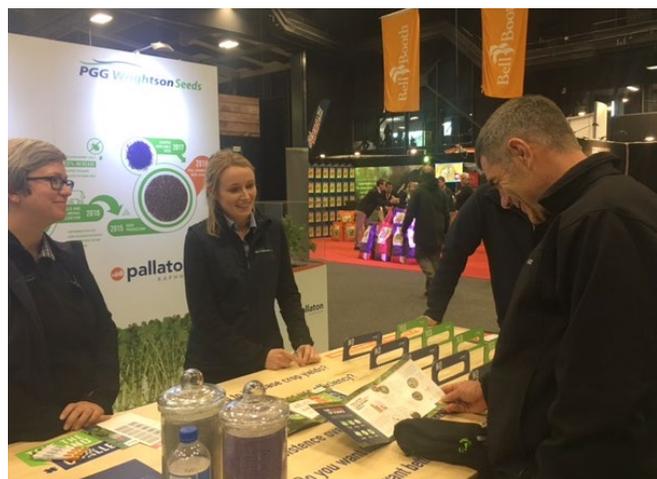
in the agricultural sector. Teachers also said they would be continuing conversations back at school to learn more about career opportunities.”

The day culminated in a prizegiving at the New Zealand Young Farmers tent, where the students were joined by Hon Nathan Guy, Hon Louise Upston, and Fieldays President Peter Carr.

New forage on display

A new brassica, developed by PGG Wrightson Seeds under its Seed and Nutritional Technology Development PGP programme, was on display at the Fieldays. It’s called Pallaton Raphno, and was developed to enable New Zealand farmers to grow forage in increasingly challenging environments. Pallaton Raphno’s traits include high forage yields (allowing for multiple grazing) and drought and aphid tolerance.

For more information about Pallaton Raphno, check out the [PGG Wrightson Seeds website](#).



Minister for Primary Industries Hon Nathan Guy talks with the PGG Wrightson Seeds team about the new Pallaton Raphno brassica.

Sustainable Farming Fund spotlight: Controlling Californian thistles on hill country land

The Californian thistle is estimated to cost almost \$700 million each year in lost productivity, but the green thistle beetle is helping to control it.

The green thistle beetle was introduced in 2007 after years of research into finding an effective biocontrol for the Californian thistle. In recent years, Beef + Lamb NZ and AgResearch have been focused on better understanding the impact of the green thistle beetle on Californian thistles, and establishing the beetle on more farms, particularly hill-country sheep farms.

This project is supported by the Sustainable Farming Fund and has just completed its third year of field days which have been focused on educating farmers, carrying out field trials and presenting results and observations.

Dr Mike Cripps from AgResearch is the key scientist who has been working on this project and presented at field days to discuss the project with sheep and beef farmers.

“Farmers were able to see first-hand the great results of feeding damage on Californian thistle in both the North and South Islands.”

“Biocontrol has the greatest impact when used in conjunction with wider good land management practices which is why this project also had an education element.”

Dr Cripps warns that while initial progress has been impressive, any significant and prolonged impact won't be seen for many years.

“That's the nature of biocontrol. It takes many years, or even decades, for the biocontrol agent to spread and become common and be able to achieve damaging levels.

“And, while they do not eliminate weeds, biocontrol attack

is likely to result in smaller, weaker plants that are less likely to spread and can be more easily outcompeted by other plants or controlled by traditional means. Infestations may be reduced to a level that we can live with, or eliminate effectively and economically by other means.”

The project has now come to an end and farmers who came along to field days indicated that they felt better informed about management of Californian thistle, and that research

into biological control options is valuable for sheep and beef farmers.

AgResearch and Beef+Lamb NZ also produced a Thistle Biocontrol Ute Guide as part of the project to provide basic information on the biology of the main thistle weeds of New Zealand, and aid in their identification. This is available through AgResearch and Beef+Lamb NZ.



The green thistle beetle

PGP programme spotlight – Sheep – Horizon Three

The Sheep – Horizon Three Primary Growth Partnership (PGP) programme officially launched in December 2016 and is an exciting step up for the emerging New Zealand sheep milking industry. The programme is taking a collaborative and cohesive approach to tackle the key challenges inhibiting the growth of the industry.

“A key emphasis of this programme is to be consumer-led in all aspects of the value chain,” says Nick Hammond, Chief Operating Officer for Spring Sheep Milk Co., the company leading the programme. “To successfully create a sustainable sheep milking industry delivering high-value products with multi-market appeal, a consumer-led approach is critical. This will also help to avoid over-exposure to any one market or getting caught in the volatility of commodity pricing.”

To best understand the unique opportunities that New Zealand sheep milk has to offer, this programme has undertaken qualitative and quantitative consumer research to generate key consumer insights. “We are already seeing the significant impact of this on the rest of the sheep milking value chain in all areas – from genetics to new product development,” says Nick.

The first new product from the programme was launched in January this year and is an example of creating a high value differentiated proposition and category position for New Zealand sheep milk. The range of premium chewable calcium tablets for kids positions New Zealand sheep milk in the high-value pharmacy category while also telling a uniquely New Zealand story.

Another output of this programme is to introduce new farmers to sheep milking in New Zealand and help foster their long-term success. There has already been significant interest



Sheep making their way in for milking at the Spring Sheep Milk Co. farm



One of the many groups at the farm open day learning about sheep milking

from potential sheep milk farmers with over 100 attendees at the first farm open day held in December 2016.

A major recent shift in this industry has been the importation of high performance dairy sheep genetics from Europe. After



Benchtop tablet trials underway to be used for concept testing.

long-term genetic improvement, these sheep have been reported as producing 3-5 times more milk per lactation compared to the current New Zealand dairy sheep being milked.

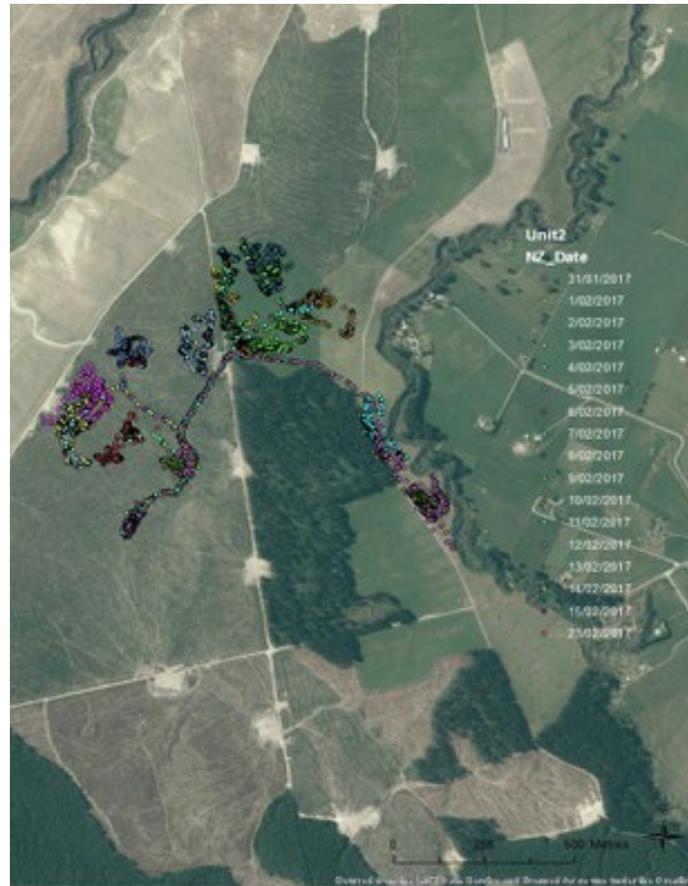
“In a New Zealand context, the challenge is to ensure we have the farming systems and expertise to enable similar results,” says Nick.

“This will be no easy feat, due partially to the nutritional fluctuations of New Zealand grass in comparison to tightly controlled ration systems seen in the classic sheep milking countries. Also, as the European milking models are indoor systems, the genetic lines have not been adapted to the New Zealand environment.”

The first season’s R&D sought to understand this dynamic in more detail and undertook several trials using indoor, hybrid and outdoor systems. This is the first step towards a farming system that utilises high performance dairy sheep in a way that is commercially viable, creates a number of new jobs and also has a lower environmental impact.

The next phase of research seeks to create a farming system that is accessible to New Zealand farmers with all the training support and materials available to ensure success. A key focus of this model is to ensure a lower environmental impact to create a genuine alternative for sensitive areas of land.

While this programme is still in its early stages, it is clear there is a significant and exciting opportunity for New Zealand in sheep milking. All signs point to a promising emerging industry – watch this space.



A dataset from the pedometers tracking sheep movement as part of the indoor, hybrid, and outdoor trials

Erosion Control Funding Programme – supporting the Gisborne region

The Erosion Control Funding Programme is designed to support the Gisborne region to combat erosion. Ultimately, it's about protecting the land for future generations.

“We know the damage that erosion can cause – it affects waterways, infrastructure, and for land owners it can have an impact on their bottom line,” says Justine Gilliland, Director Investment Programmes at the Ministry for Primary Industries.

“We work in partnership with the Gisborne District Council and Te Runanganui o Ngāti Porou to support current fund recipients and encourage uptake in the community.”

The fund has \$30 million available over the next four years and supports the region in two ways. Firstly, MPI provides land treatment grants for landowners to treat erosion. Applications are currently open for land treatment grants and they close on 30 June 2017.

“We made changes recently to mean more landowners are eligible and some grant money is provided up front. These changes were about making it easier for land owners and ultimately being able to better support the Gisborne region to combat erosion.”

Secondly, MPI recently widened the fund to support community

projects which address issues or opportunities that improve erosion outcomes for the Gisborne. Applications for community projects are open year round and all ideas are welcome.

“Projects could be focused on things like increasing the local supply of seedlings and materials, or growing skills and labour, or investigating the best land uses for erodible land. But mainly, we want people to know that if they have an idea, they should definitely get in touch and we can talk them through the criteria and application process.”

For more information on the Erosion Control Funding Programme visit www.mpi.govt.nz/ecfp

Improvements have been made to the Erosion Control Programme recently to better support the Gisborne region to combat erosion.

