

# EnvirosOUTH

September 2021



---

## Celebrating 25 years

Recognising our environmental  
champions

Page 8

---

## Habitat restoration

Returning the birds to the river

Page 16

---



environment  
**SOUTHLAND**  
REGIONAL COUNCIL

Te Taiao Tonga



## Contents

A kohanga connection	3
Flood protection progress	4
Losing one of our own	5
Weed work in Fiordland	6
25 Years of awards	8
Waihopai planting project	10
Big changes needed	12
Facing the challenges	13
A day in the life	14
Habitat restoration	16
Updates	18
Time to think about...	19
On the farm	19
Out in the field	20

## EnvirosOUTH

Envirosouth is published three times a year by Environment Southland. It is delivered to every mailbox in the region. We welcome your comments on anything published in this magazine.

ISSN 2537-8902 (Print)  
ISSN 2537-8910 (Online)

### Contact Us

Cnr North Rd & Price St, Invercargill  
(03) 211 5115 | 0800 76 88 45  
service@es.govt.nz | www.es.govt.nz  
www.facebook.com/envirosouthland

### Cover

James Hargest College students Patrick Haveron, Ethan Turnhout and Andrew Baynham (all 16) demonstrate their 'green thumbs' at a planting day near the Waihopai River. Read the full story on page 10.



We are working on a multi-pronged approach to tackle Southland's significant environmental challenges.

Improving freshwater quality, addressing climate change impacts and dealing with at-risk biodiversity is the focus.

Some great work is already underway. We know the scale of change required means working together in a sustained effort is what will lead to the improvements we all want to see.

As a matter of priority, we have been working with our partners, industry groups and others to identify short-term actions that will make a difference, and five and 10-year targets with a view to substantial change in a generation.

The willingness, I see, of people to step up and be part of the solution and bring innovative thinking to the table, bodes well for Southland's future.

Sign up online to receive our email updates, [www.es.govt.nz/subscribe](http://www.es.govt.nz/subscribe).

**Rob Phillips**, Chief Executive, Environment Southland



Our new Long-term Plan sets clear direction on the services we need to deliver.

Developing this plan was an extremely difficult balancing act to ensure we maintained tight budgets, yet had the resources to carry out the increasing amount of work coming from central government.

Regional council responsibilities are broader than many people realise. Most are environmental, but there are others such as maritime/harbourmaster and regional transport.

We address some pretty complex, gnarly issues and I'm always keen to secure enduring solutions that work for Southland, but that takes a collective effort.

Recently, we've had success advocating for workable intensive winter grazing rules and we've also initiated a collaboration to innovatively address Southland's big environmental challenges – climate change, water quality and biodiversity.

**Nicol Horrell**, Chairman, Environment Southland

# Environment Southland

*A thriving Southland – te taurikura o Murihiku*



▲ Te Rakau Kowhai O Nga Tamariki kohanga reo tamariki (children), kaiako (teachers) and Environment Southland staff harvesting potatoes.

# Social responsibility leads to kohanga connection

Tamariki (children) at Te Rakau Kowhai O Nga Tamariki kohanga reo are learning about the connection between the food they eat and the ground they stand on, with the help of the team at Environment Southland.

**E**ight tamariki, aged between two and four, helped Environment Southland staff harvest potatoes from the staff vegetable garden earlier this year, as part of the Council’s corporate social responsibility initiative - *tō tātou kawenga, it’s our responsibility*.

Kaiako (teacher) Tumanako Mohi says for some of the tamariki, it was the first time they had seen veggies being dug out of the ground. At the end of the day, they took the produce home for their whanau.

“It teaches them that veggies don’t always come from the supermarkets – they grow in the ground.

“The tamariki absolutely loved it.”

Environment Southland principal land sustainability officer Karl Erikson, who supported the building and planting of the gardens, says it was special to be able to spend time with children and give back to the community.

“There’s nothing quite like eating your own produce. It’s quite rewarding to be able share this with the kids, and it’s helping our staff wellbeing too.”

The connection between the kohanga reo and Environment Southland was facilitated by Healthy Families Invercargill as part of the work it does in the kai space.

Healthy Families Invercargill lead systems innovator Stella O’Connor says creating those connections, helping local

organisations work together to address local issues, was part of building a stronger food environment.

“Food resilience is a big issue to tackle, but by working together and listening to our community, we can make significant and valuable changes.”

Environment Southland’s corporate social responsibility committee, made up of representatives from across the organisation, has also established a worm farm, which has processed over 10kgs of old bait; helped to recycle more than 24kgs of batteries; encouraged staff to donate blood during the January 2021 Blood Drive; and is investigating green transport initiatives for staff.



# Steady progress on flood protection upgrades

Our ambitious work programme, made possible by Government ‘shovel ready’ funding, to fast-track upgrades to parts of Southland’s flood defences, is underway.

The programme includes three packages of projects in the Mataura, Invercargill and Waiau catchments. Environment Southland catchment operations manager Ramon Strong describes the work as a very important component of the Council’s climate resilience responsibilities.

“It’s an opportunity to make those parts of our flood protection networks more resilient and to reduce future costs on communities.”

In February 2020, record-breaking floodwaters came through the Mataura River catchment, testing our flood protection to capacity. Bevin Watt, who

is the chair of the Mataura catchment liaison committee, believes upgrades in his catchment will benefit everyone.

“Protection for our rural town is important for townspeople and rural people because we all need a viable, non-flooded service centre,” he says.

There are eight catchment liaison committees and their role is to advise the Council on annual maintenance works and budgets to address land and drainage issues for river communities, taking a holistic, mountains to the sea approach.

Ramon says upgrading flood protection infrastructure is more complex than many people realise and while the programme is behind schedule, work is progressing.

“When you’re spending public money there is a lot of due process to follow. We’re being as systematic as we can, but big chunks of work can’t be done all at once.”

In addition to getting our flood defences upgraded, there are social benefits with 76 people gaining work on the projects, so far.

Ramon: “Without a doubt, this is positive for Southland.”

## Projects and progress

### Waiau

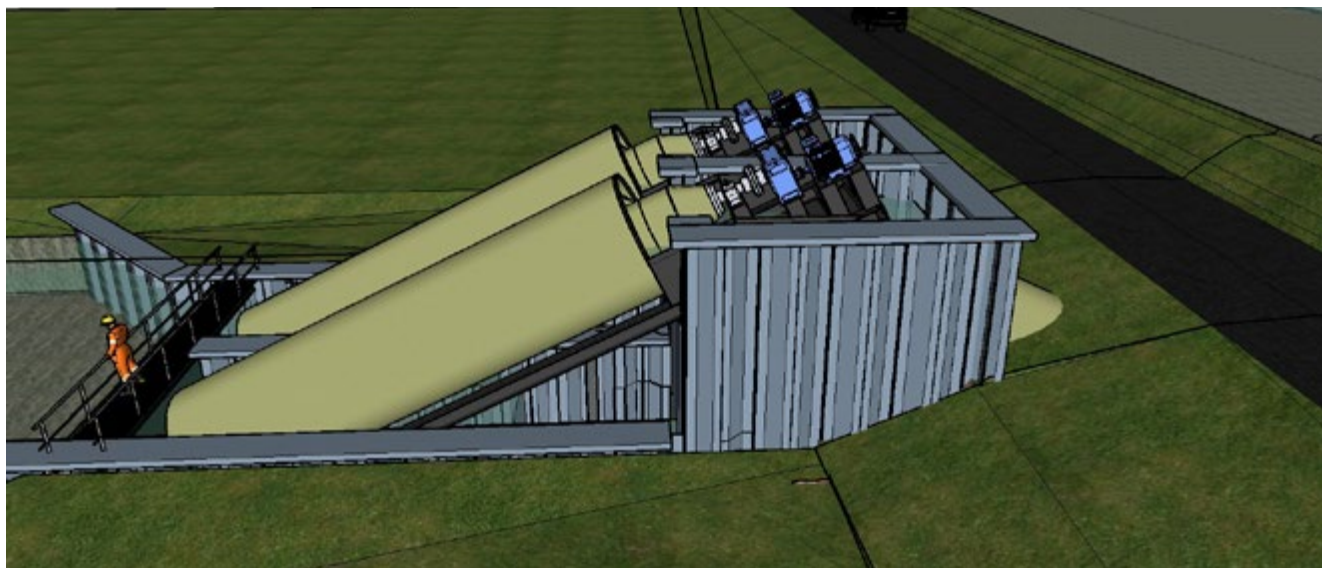
- ▶ Repairs following the 2019 flood – *nearly complete*

### Mataura

- ▶ Extend stop bank at Boundary Creek upstream of Mataura township – *done*
- ▶ Raise stop banks at Mataura, Gore and Wyndham – *survey and design work underway*

### Invercargill

- ▶ Raise stop banks on Waihopai River – *survey and design work underway*
- ▶ Otepunui/Kingswell – *being assessed*
- ▶ Replace pump house near Invercargill airport – *two pumps ordered*



▲ A new pump station for Stead Street has been ordered, as part of the flood protection upgrades. The fish-friendly pumps are 2.5 metres in diameter and 10 metres in length.

# A tribute to Paddy

On the last day of May, Environment Southland lost one of its own. Paddy Haynes was our climate resilience manager and his passing, which came after a short period of illness, caught us all unawares.

Paddy was a valued employee and a well-respected and well-liked colleague. He was a people's person and he called a spade a spade. At work he was about achieving outcomes, but could change tack if you gave him a convincing enough rationale.

He joined the Council in late 2015, having come from the Waikato Regional Council where he had worked in engineering river/drainage roles since 2007. The news of his impending arrival was met with some raised eyebrows by many in our catchment team who wondered why a North Islander would come so far south.

But Paddy quickly won everyone over with his down to earth manner and good humour, his expertise – he knew his stuff, and his love of the outdoors, particularly hunting and fishing. During his time here he explored Fiordland and many other wild places with family and friends from up north.

He hadn't long arrived when the Council mounted its response to search out the invasive weed, velvetleaf, which had contaminated fodder beet seed. Paddy's role was to check out individual reports of potential sightings. This was a great initiation to Southland as he got to travel all over the region.

Paddy was our catchment engineer, managing the work teams for three years before becoming our catchment operations manager in 2018. One of his first achievements was to liaise with organisations and the community to develop the Council's Environmental Code of Practice for River Works. Its purpose is to set out environmental standards of good practice for all river and drainage works. It provides clarity and has, and continues to, streamline processes, including for consents.

The February floods in 2020 tested the capacity of the Maitua catchment's flood defences. Paddy was one of the advisors to Civil Defence during the crisis period, on the job during the early hours, and always clear that the stop banks would hold. That they did, was a testament to his knowledge, his team and their work programme.

During the Covid-19 lockdown, the opportunity presented to gain 'shovel ready' funding from the Government to boost some of Southland's flood protection. Paddy worked remotely with our engineer to come up with a proposal for \$18.5 million worth of upgrades in the Maitua, Invercargill and Waiau catchments. It was successful.

Later in 2020 Paddy was the engineering face of the public consultation on the 'shovel ready' projects and how they might be funded, providing practical explanations and pouring over maps with people.

This year Paddy became our climate resilience manager in charge of all the 'shovel ready' projects.

He'd had a long-standing interest in upgrading the ageing pump house that kept the weepy land around Invercargill airport drained and the funding meant he was able to place the order for new pumps from the Netherlands sooner, rather than later.

Each pump will measure 2.5 metres in diameter and 10 metres in length and, importantly, they are fish-friendly. Their design is based on Archimedes' screw pump technology where fish are transported up through the pump safely, without getting caught up.



▲ Paddy Haynes

It's sad that Paddy won't be here to see the projects he cared about come to fruition, but we can all be grateful that he chose to come to Southland and contribute to maintaining and strengthening the resilience of our communities. That is quite a legacy.



# Wellbeing at the cent weed wo

Faced with a wall of impenetrable vegetation, there were times when Fiordland resident Madeleine Peacock wondered what she had got herself into.

**M**adeleine is part of a team working on the Fiordland buffer zone project, removing highly invasive weeds from the Lake Mistletoe Conservation Area (a short drive north of Te Anau on SH 94 to Milford Sound Piopiotahi).

Environment Southland was granted \$690,000 from the Government's Jobs for Nature programme in December 2020, after a successful funding application to the Department of Conservation for the two-year project. The Jobs for Nature programme is about revitalising communities through nature-based employment and stimulating the economy post-Covid-19.

Environment Southland biosecurity and biodiversity manager Ali Meade says the buffer zone project is about weed control along the margins of Fiordland National Park, creating a 1km buffer zone, from Manapouri in the south to Milford Sound Piopiotahi in the north. The aim is to stop invasive species like cotoneaster, Darwin's barberry, and Chilean fire bush from entering the park, protecting its biodiversity values for future generations.

What makes this programme special is that the work is being undertaken by people from the Te Anau-Manapouri community, notably those whose employment has been impacted by Covid-19.

A local through and through, Madeleine is the granddaughter of Fiordland (and New Zealand) tourism pioneers and conservationists Les and Olive Hutchins and daughter of Robynne and the late Ron Peacock.

Madeleine has made her mark in conservation in the tourism sector, serving as a Guardian of Lake Manapouri, Monowai and Te Anau since 2017. And, until recently, was manager of Destination Fiordland, the former regional tourism organisation, which wound down in June 2021.

So, it is not surprising to find Madeleine literally rolling up her sleeves for the Fiordland buffer zone project.

In March 2021, facing redundancy, Madeleine began working for a local guiding company, Trips & Tramps. Her time was divided between guiding and running the company's weeding contract at Lake Mistletoe.

Trips & Tramps was one of 15 local business entities, including sole traders, awarded a contract on the buffer zone project earlier this year. It enabled the company to extend their work season for casual staff and guarantee them more hours, which meant they remained within the community.

The first day on the job was training with Becky Goodsell from Environment Southland and Kylie Krippner, the local programme coordinator, a role also funded as part of the Jobs for Nature programme.

Madeleine's first impressions were of a massive area of impenetrable vegetation. "I wondered how we could even break through the thick wall of bracken to get to the weeds. And, I wondered, what I had got myself into!" Madeleine says.

"At Lake Mistletoe, we targeted two particularly invasive weeds, Chilean fire

---

"I wondered how we could even break through the thick wall of bracken to get to the weeds. And, I wondered, what I had got myself into!"

---

MADELEINE PEACOCK



▲ Madeleine recalls her interest in Lake Mistletoe as a child planting native trees with Forest & Bird's Kiwi Conservation Club. She has found returning there to work on the buffer zone project very rewarding



# re of rk in Fiordland



▲ Warren Jensen, an employee of Milford Sound Tourism, takes part in weed identification training for the Fiordland buffer zone project.

bush and cotoneaster. We had gloves, safety glasses, hand saws, and bottles of gel herbicide. It didn't take us long to get our 'eye in' on the weeds, but you had to get right into the thickest of scrub to find them.

"We'd clear away the bracken, lop off the branches of the mature weed trees and saw the main trunk close to the ground. We painted the stumps and ends of the branches with gel paste. All the cut wood had to be stacked off the ground to prevent it from re-rooting. We would be left with a halo of seedlings where the tree once stood, and these had to be removed as well. The best approach was to take your time and be very methodical."

Madeleine says they came across a few native seedlings, predominantly coprosma, pittosporum and lancewood, which was cause for hope that the area

may regenerate in time. The possibility that their hard work would give these young plants the best chance at establishing and aiding the regeneration of the area was motivating. She would love to see the ongoing weed work supplemented with extra native planting.

"It's very easy to get overwhelmed with the task. The work is physically demanding, and you can't avoid feeling its effects at the end of the day.

"It is slow going due to the nature of the bush, and we didn't get as much done as we'd hoped. But we are really proud of what we have achieved so far," Madeleine says.

The weeding work has paused for winter, and with guiding off Madeleine's radar until next spring, she is undertaking contract work and spending time with her

family. Madeleine intends to return to the work next season, saying that despite the challenges, she enjoyed it!

A particularly memorable day for Madeleine was a visit by Minister Dr Ayesha Verrall, in her role as Acting Conservation Minister. "We were students at Fiordland College together. The level of personal interest she took in the project and the people doing the work and how our community was doing was nice to see."

Another benefit of the project was community building. Madeleine says it was good to get to know some of the others doing weed control in the area, with 44 people employed on the scheme. The group spanned several generations and cut across diverse sectors within the community. This aspect, being outdoors and involved in conservation work, contributed to both individual and collective wellbeing.

"Becky and Kylie were outstanding. They were really good to work with and always had the wellbeing objective at the heart of the programme, whether that was health and safety or emphasising that the programme was about keeping people in our community in employment."

## The numbers

- Teams weeded approximately 364 hectares in the first season, including 360 residential sections in Te Anau.
- Environment Southland is contributing a further \$25,000 and staff time for three seasons of weed work.

# Community awards stand the test of time

This year the Environment Southland Community Awards reach a milestone celebrating 25 years of recognising and honouring the dedication and achievements of many of our environmental champions.

The awards have evolved a lot since their inception in 1995. In the beginning, winners were presented with certificates in the council chambers and this has progressed to

what we have now; seven categories and almost 400 people attending an awards dinner. The event is an important and much anticipated evening on the environmental calendar.

The format of the awards may have changed, but reasons for running them have stayed the same for the 25 years – recognising and celebrating those who work tirelessly in our community for the benefit of the environment.



2004



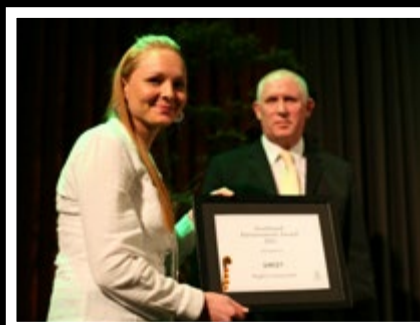
2005



2006



2008



2011



2013



2014



2017



2019



ENVIRONMENT SOUTHLAND  
**COMMUNITY  
AWARDS 2021**



## Celebrating past winners

Two previous award winners, Jenny Campbell and Warwick Day have similar stories to tell. Both say the recognition from their peers was a true highlight of the process.

So often those nominated in the community awards go about their work without any want for recognition, yet when their work is highlighted and celebrated, it is special and memorable.

Warwick Day won the farming category in 1999 for his 'Singing Hills' property and, like so many other award nominees, was nominated by others for the work he was doing. He undertook extensive riparian planting, wetland restoration and protection. Over 20 hectares of forest and wetland were given protection in perpetuity under a QEII covenant.

Warwick started his riparian management in the early 80s and was heavily involved in conservation. On reflection, Warwick says,

"I was ahead of my time and there weren't many others doing it. I've always been a freak with nature," he laughs.

His experience with the community awards were a "good recognition of his achievements". Warwick still has his award and keeps an eye on who wins. He is pleased the awards are still going and relevant.

Warwick has since sold his winning property and now owns 4040 hectares of natural landscape in Fairlie, which has little more than a hut to stay in. He tries to get there once a month to go fishing, hunting and mountain biking. "There's a bit of work there, but I enjoy doing that sort of thing."

Jenny Campbell is another quiet achiever who doesn't take to the spotlight, preferring to shine the light on what others are doing. Over the years she has regularly nominated people for awards.



▲ Warwick Day won the farming category in 1999 for his 'Singing Hills property'. He's pictured here in 2012 with his wife Wendy, when he was again a nominee.



▲ Jenny Campbell

Jenny has been a recipient of an environment award, though. "They surprised me with it. They knew there was no way I would have accepted the nomination if they had asked. All I could think of was, 'what about all the others I've nominated for this category?'"

Although surprised by the Individual Award in 2007, Jenny says it was a huge honour to have her work affirmed by her peers. "It meant everything."

Jenny established the Invercargill Environment Centre in 2000 to address many challenges she and others saw in the community. "My aim was to do myself out of a job," Jenny says, which is exactly what she did. "We were a seed when we started and now others are doing the work."

The Environment Centre closed in 2017, however Jenny has stayed very involved in the community and the environmental space. "I have a responsibility to my granddaughter, to other grandchildren, to the animals and to those that can't speak for themselves. I've used my share of the world's resources. We have a responsibility to improve life on earth."

Jenny sees the Environment Southland Community Awards as having an important role to play in encouraging and inspiring others.

"I'm passionate about putting together nominations. Ensuring a good number of nominations means that when you win, it means something. It's so wonderful to see people being honoured for the work that they do. If people don't recognise what others are doing, they won't keep doing it themselves. We are in this together. He waka eke noa."

# Growing knowledge and nature

School students and community groups are the key players in an ambitious project. With the help of Environment Southland, they're transforming a former sheep paddock below Invercargill's Waihōpai dam into a native bush reserve.

Land sustainability officer Keith Finlayson says the project has been underway since 2013, with hundreds of students and numerous community groups being involved over the years.

There's easy access from Racecourse Road where it meets the Waihōpai River stop banks. It's just around the corner from James Hargest College, whose students worked with Environment Southland to come up with a vision for the area.

"The vision is to turn the entire 1.65 hectare paddock into native bush over the next couple of years," says Keith. "The end goal is to put a walking track in, which will branch off from the top of the stop bank and provide an optional loop for dog walkers, runners and cyclists."

Paula Brown, who's a teacher at James Hargest College's senior campus, says a lot of different classes have been involved in planting projects around the dam over the years.

"I was teaching the agriculture class last year and got involved through that. At the time we looked at the environmental effects of pasture practices.

"It was nice to be part of planting when it has such a positive impact on waterways."

She says it also improved her students' connections with their environment and community.

"I think teenagers especially need to learn to give something back to the community. Getting out there with the school and



▲ Land sustainability officer Keith Finlayson (right) plants native plants with James Hargest College students Declan Crombie (15) and Mila Young (14).





▲ A planting day below the Waihōpai River dam in 2020.

being involved in the project actually gives them some ownership of the environment they live in. It was cool to be part of it.”

Keith says the project started off small. “The initial plan was to fence out stock and plant native plants along a ditch that drains the farmland and feeds into the Waihōpai River.”

Plants trap sediment and nutrients before they reach the water, stabilise the bank and shade the water.

“Riparian planting like this improves water quality and native fish habitat. It’s a good land management practice, and as the regional council we need to be leading by example when it comes to looking after our land.”

Environment Southland owns and maintains 458km of stop banks across the region, which are designed to protect people, property and livelihoods. It also owns approximately 4700 hectares of land surrounding the stop banks, most of which is in flood ways and leased to farmers.

“Early on in the project someone had the idea to invite school groups along to be part of the project. In the process they could do a ‘stream study’ and learn more about water quality.”

Schools were enthusiastic to take part, and many kept coming back year after year. By the time the drain margins were completely planted out, the project had taken on a life of its own.

---

“It was nice to be part of planting when it has such a positive impact on waterways.”

PAULA BROWN

---

It’s also provided Environment Southland’s land sustainability team with many practical lessons. They’re finding out which plants survive best in our southern climate, and are exploring how maintenance tasks can be adapted to be more environmentally friendly.

“Putting plants in the ground is actually the easy bit. It takes a lot of time and perseverance doing monthly maintenance,” says Keith.

“We found that mānatu/ribbonwood, manuka, koromiko/hebe, tī kōuka/cabbage trees, pittosporums and kōwhai are all doing really well. And the bigger the trees are when they’re planted, the higher the chances of survival. I’d recommend a minimum pot size of one litre.”

“We also discovered that placing wool dags around young plants makes a difference. It effectively suppresses pasture grasses which compete for nutrients and light. This means we can reduce the amount of herbicide we’d normally use to spray out the grass around the plants – a

practice known as ‘release spraying’. The only downside is that dags can introduce thistles.”

If you’ve never been to the Waihōpai dam, it’s well worth a visit. On the western side you can see the emerging forest in its various stages of growth, and if you venture over top of the dam, there’s a wetland area to explore.

During the past three decades, a pond upstream of the dam has been planted out by school groups. It’s full of birdsong and a great spot for a summer picnic, and provides a glimpse of what the rest of the surrounding area might look like in future years.

# Big changes needed to get quality freshwater

Southland has a real opportunity to lead New Zealand by tackling the big freshwater challenges during the next 25 to 30 years.

**R**egional Forum chair Fiona Smith says all Southlanders have a right to good freshwater, and that's achievable with stakeholders and communities working together.

"We have all contributed to the current state of our water and the forum believes that working as one community, we can take the steps to make the necessary big changes together," Fiona says.

The Regional Forum, a group of 16 community members, is tasked with advising Environment Southland's council and Te Ao Marama board on how to achieve the community's values and objectives for freshwater. Since forming in April 2019, they have been learning from and listening to those who use the water or have a particular interest such as businesses, recreationalists, councils and farmers.

They're now putting together their recommendations for making real and lasting changes to improve Southland's freshwater.

"All solutions are on the table," Fiona says. "We're hearing ideas on how to tackle this challenge and we're considering everything including incentive-based

actions, greywater options, allowing river/stream bed movement, and stock exclusion beyond current requirements."

Fiona says the forum is well aware of the journey ahead. "We are conscious that the range of methods and actions we put together in our recommendations needs to be relevant and suitable for Southland's entire community.


"We'll be looking for input over the next few months and will let you know where and how you can share your thoughts and ideas. The Regional Forum is happy to talk to groups about our work, and to listen.


"We are focused on outcomes over a generation that will result in significant improvement of all water bodies in Southland," she says. "We have to go beyond just good ecosystem health and consider the whole river catchment, ki uta ki tai – from the mountains to the sea. Delivering on Te Mana o Te Wai, the integrated and holistic wellbeing of a freshwater body, is at the core of our thinking."



▲ Regional Forum chair and deputy chair Fiona Smith and Phil Morrison.

## More information

 Contact the Regional Forum at [regionalforum@es.govt.nz](mailto:regionalforum@es.govt.nz)

 Read more about the Regional Forum at [www.es.govt.nz/regional-forum](http://www.es.govt.nz/regional-forum).

 Post your ideas on the Regional Forum's Facebook page - [www.facebook.com/RegionalForum](https://www.facebook.com/RegionalForum)



# Environmental challenges call for local solutions

Southland sheep and beef farmer Andrew Morrison is regularly called on to be the eyes, ears and voice of the rural community.

When he's not working on the family farm near Gore, Andrew is kept busy talking to and hearing from farmers, politicians and rural professionals in his role as the national chairman of Beef + Lamb New Zealand.

Andrew says there's a huge amount of good work going on from farm planning and adopting good practices to investing in innovation. "But there's also a lot of worry and uncertainty out there with so much coming at the rural sector."

"The Government has set a very clear direction but I know there is a lot of concern out there about the speed and scale of the reforms, particularly in the environmental space. Farmers need sensible and practical policies that work on the ground.

"At the same time there aren't a lot of solutions coming," Andrew says. "We know that a one-size-fits-all solution isn't going to work across the entire country. That doesn't get us where we want to be.

"Now's the time to work together and come up with the best solutions for Southland and present those back to the Government, like we did with winter grazing late last year."

In June, Environment Southland hosted an initial hui bringing together around 60 rural professionals, leaders and community members. The hui focused on Southland's environmental challenges – climate change, biodiversity and water quality.

Andrew says the hui was the next step on a journey that started years ago with the Council investing in science, economics and establishing the Southland Regional Forum. "This is another example of how we are getting through things, getting things done."

With change being a key theme to many of the conversations Andrew has had recently, he believes looking for integrated solutions that provide multiple benefits and tackle these challenges is where the big wins will be for Southlanders.

Andrew says the challenge has never been clearer.

"There's a lot of talk about uncertainty, people are hearing big numbers and lots of change, and aren't sure what to do.

"It's going to be a big job, but that doesn't mean that we shouldn't be exploring ways of getting there. We don't need to wait for more science, or spend time pointing the finger. Farmer-led catchment

community groups are a great platform for groups of farmers to achieve long-term goals, whether that is water quality or biodiversity."

Andrew explains with an analogy of roof painting: "Just because my neighbour hasn't painted his roof, doesn't mean I should wait to paint mine. I'm part of the community, and by painting my roof, my neighbour might see how great it looks and get onto painting his as well.

"We need to leverage the momentum we have right now. It is not going to be easy, but it's our community and it's worth doing."



▲ Andrew Morrison



# A day in the life...

▲ Environment Southland compliance technical team leader Graeme McKenzie's role is to gather and interpret data.

Building respectful relationships with landowners and consent holders is vitally important to a compliance role at Environment Southland, compliance technical team leader Graeme McKenzie says.

**A**nd he should know; he's been working at the regional council for more than 40 years, 20 of those with the compliance team.

"In the compliance field, if you develop a professional relationship with consent holders, they will respect the fact that you have to tell them bad news when things go wrong.

"Whilst we have to be reasonably hard-nosed, the key thing in compliance, and in life, is you have to be supportive. It's an understanding of what others might be enduring, but also having a clear vision of what the expectations are. We are all fallible and we all make mistakes, but it must be clear what we expect from you."

Starting as a lab technician in 1980 with the Southland Catchment Board, Graeme's role involved gathering, processing and reporting data. About 20 years ago, Graeme started in the compliance team and hasn't looked back since.

The implementation of the Resource Management Act in the 1990s brought with it a lot of changes to how council worked. As new legislation comes in, like the new Essential Freshwater package brought in by the Government in 2020, the role of council continues to evolve.

Graeme highlights the importance of the 4Es – engagement, education, enablement, and enforcement – when

dealing with a pollution incident or a breach of consent.

"We're not just going to throw the book at people. We do try and encourage landowners and consent holders to do the right thing – and that's important. Sometimes, people don't know what they're doing wrong. We can't fix things for them, but we can identify areas that need to improve so they can find solutions.

"The workload and the expectation from the community has grown. There's a lot more emphasis being put on compliance, monitoring and enforcement – and we've grown in response to that. There's a lot of change in the legislative environment, which is putting pressure on us to deliver, and we are doing our best to fairly enforce them using the 4Es."

On any regular day, Graeme can be seen supporting the four compliance technical officers in his team who manage the consents for industrial companies and local authorities.



These types of consents vary between bed and breakfasts, school sewerage systems, freezing works or big industrial company consents.

“An average day for the team is about understanding data, reading reports, interpreting information provided by the consent holder to confirm that we agree with their conclusions.

“We do also aim to visit our major industrial sites at least once a year to audit their monitoring activities and check to make sure that everything they’re doing does meet the consent conditions.”

More recently, a significant amount of work is coming through after the announcement of the New Zealand Aluminium Smelters (NZAS) Tiwai site closure in 2024. Graeme is part of the project team whose role is to identify and monitor contaminated land at the site with a view to ensuring that NZAS can remediate the site as required.

---

“We do try and encourage landowners and consent holders to do the right thing – and that’s important.”

GRAEME MCKENZIE

---

With years of knowledge and understanding of the Tiwai site and the consents that NZAS holds, Graeme is leading his team to increase monitoring and sampling of priority areas across the site.

He is also liaising with land contamination consultants who are reviewing information from NZAS’ closure study, and will provide recommendations on the council’s next steps.

When people call Environment Southland’s 24-hour pollution hotline after-hours, they talk to a member of the compliance team. While Graeme doesn’t have the privilege of being on the on-call roster for after-hours responses anymore, he does support

the team to make decisions on how to respond and actions to take when dealing with a pollution incident.

“The reports we get could be anything from odour complaints and smoky fires, to effluent discharges and anything in between.”

One job highlight that comes to mind for Graeme, is the time he attended an incident that involved hazardous substances.

“The defence force got wind that we needed to remove this unknown hazardous substance, so they came out and used it as a training exercise. They removed it, contained it and sent it away for testing.”

Steadfast and calm, Graeme speaks with a clear purpose when he’s discussing incidents and technical information. It’s his ability to remain level-headed that has proven very useful during region-wide emergencies. As Intel Manager for emergency responses, most recently the February 2020 floods, Graeme gathers and shares information with the Emergency Management Southland team.

As well as this, he plays a key role in oil spill responses – helping to plan and deploy equipment that helps to contain and remove oil from land and water.

So, what’s Graeme’s favourite part of the job?

“The variety,” he says. “Some days you just don’t know what to expect. I especially enjoy the technical elements, because of my background, and I enjoy trying to understand what the science is and what the problem is.

“Compliance is always going to be a challenging role. It’s challenging to balance expectations of the different parts of the community – you are never going to please everyone. You do have to have a thick skin and be quite clear in how you deliver your message. But in saying that, it’s a rewarding role, because you are also helping people and educating people.”

► Graeme gathers a water sample for testing from the Waihopi River.



# Habitat restoration project proving its worth for endangered birds

When Grant McGregor looked at the process of gravel extraction and thought “surely we can do this better”, it was the start of something special that is finally starting to take shape.

It was many years ago when Grant first floated the idea of being able to leave something good behind, while still maintaining his gravel extraction business. It's taken perseverance and commitment to reach the point where he's recreated a habitat to attract endangered birds – including the black-fronted tern and black-billed gull.

Grant has spent the last decade working extensively with DOC and Environment Southland, finding a way through the concessions and consents required to undertake gravel extraction and restore braided river habitats at the same time.

On the Aparima River, near Wreys Bush, an exciting project has reached the halfway point and results are starting to be seen, while challenges continue to present themselves.

Below: Restoring the braided river has provided a number of channels, with low gravel beaches suitable for nesting birds. Inset: Black-billed gull chicks (Photo – Chris Garden)

The gravel extraction process has been changed to mechanically remove the accumulated sediment and weeds (grass, gorse and broom) smothering gravel banks over large areas rather than digging ponds. Gravel is then redistributed, creating clean, low beaches for the birds to return and nest – more like the original braided river. It's been a learning curve understanding how to create the best living and nesting conditions for different bird species and Grant says watching them has been fascinating.

“The gulls aren't that fussy, but the terns definitely are – they like particular gravel depths and even seem to prefer areas with scattered dead grass clumps.”

He's also learnt a bit about their personalities. As a consent requirement, he must not dig when the birds are nesting, but he's finding the gulls are increasingly hunting the digger out and almost playing around it.

“They're quite entertaining to watch and will even land on the digger.”

While the original vision was Grant's, he pays credit to many people who managed to turn his vision into a plan, build on it and are continuing to work with him to see it through.

DOC has been leading a project on site since 2016, monitoring gains and issues associated with Grant's alternative gravel extraction methods. Clement Lagrue (science advisor ecosystems based in Dunedin) took over as lead for the 10-year project in 2020 and is excited by the progress being seen.

“The monitoring project we're undertaking focuses on nesting success, diversity of species and numbers. The restoration of the river has definitely attracted the birds back to the river, providing great nesting and feeding habitat for birds we know are struggling.”





However, Clement says they are now dealing with a new issue – predators. Ferrets, rats and feral cats are having a huge impact on nesting birds.

“Nest-predation has been a constant issue since the beginning of the project. We now need to protect those birds we are attracting back to the river and monitor whether this makes a difference.

“Last nesting season, a black-fronted tern colony established at the restored site, which had 28 nests. Within one week 25 of those had been raided by predators.”

The problem with predators has led to an additional aspect to the habitat restoration trial, which involves setting up a network of traps, assisted by funding from Environment Southland’s Environmental Enhancement Fund.

The project team plans to get 200 traps in place for the upcoming bird nesting season, and they are getting good support from landowners whose properties border the river. Predators travel some distance to get to the river and the trapping needs to intercept them before they get to the birds.

“We cannot do this without landowner involvement,” Clement says.

Grant said the project is actually having some additional benefits in terms of relationships and understanding different perspectives. A number of university students and DOC seasonal workers have been involved in the monitoring programme and they need to make contact with landowners to access the nesting areas.

“It’s been great because the farmers are taking an active interest in the project and can tell the students where the nests are



▲ Clement Lagrue (left) and Grant McGregor.

and the students are seeing farmers in a different light to perhaps what they might have envisioned – it’s definitely turned into a bit of a PR exercise.”

For Grant, it’s also very personal. He grew up on the river and knows it almost better than anybody. While he wants to maintain a successful business, he’s also passionate about leaving something good behind.

“I knew we could do something better than what we were doing, but I struggled to work out exactly how to make that happen. That’s when the team from DOC came in and they managed to get a plan down on paper and eventually push it through all the channels it needed to go through.”

Grant does all the gravel work himself, while DOC is responsible for the monitoring. The next big challenge is maintenance of the areas, as they do regrow with weeds and sometimes need the gravel redistributed after floods go through. They will also look at the effects

(positive or negative) of the work on freshwater components of the ecosystem (fish, invertebrate and water quality) to perfect and refine the technique.

He’s hoping this stretch of the Aparima River might be the start of something bigger, as the lessons and techniques learned could be transferred to other areas. The Environment Southland catchment division has had a number of meetings with Clement to look at whether there are further suitable sites for the research.

Grant and Clement are also excited about sharing the project with others and have already presented the project to Te Ao Marama, SIT, Forest and Bird, DOC Invercargill and Fish & Game through seminar presentations or site visits.

“It hasn’t been easy, but it’s definitely worth it,” Grant says.

Inset below: Black-fronted tern  
(Photo – Neil Fitzgerald Photography)



# Updates

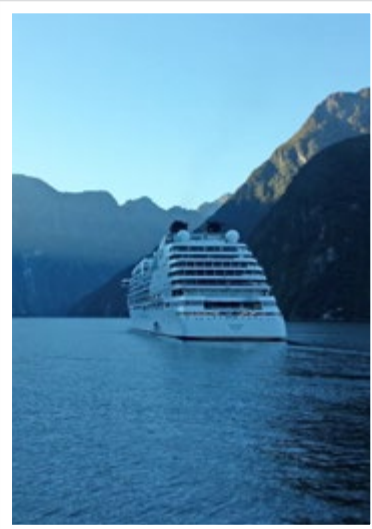


## Long-term Plan 2021-2031

Councillors adopted the Long-term Plan at the end of July. The plan sets out the actions we propose to take over the life of the plan and how we intend to pay for the work. Consultation on this year's Long-term Plan took place in June, with Council facing a number of significant challenges in the years ahead.

Increased work as a result of community and government expectations, particularly in relation to freshwater and climate change, as well as financial challenges as a result of Covid-19 and the loss of cruise ship income, were the focus of the proposals.

Councillors agreed to a 20% rates increase in year one, followed by 5% increases in years two and three. The full plan is available to read at <https://www.es.govt.nz/about-us/plans-and-strategies/council-plans/long-term-plan>



## Cruise ship agreement

An updated Cruise Ship Deed of Agreement has been signed by Environment Southland this year. However, it is being done with the knowledge that any substantial income from cruise ships could be some time off.

The Deed of Agreement reinforces measures to protect some of our most spectacular coastlines.

Although international cruising is currently suspended in New Zealand, the Environment Southland Deed of Agreement applies over the long term, until October 2030 or when a new Regional Coastal Plan comes into force. It has been designed to enable managed access to the Southland coast while at the same time fostering and promoting the sustainable management of the region's internal waters.

Marine fees are budgeted to bring in approximately \$2.8 million per year, but due to the border closures over the past year only a very small number of local cruises have taken place.



# Time to think about...

## SEPTEMBER

**GORSE AND BROOM** – We're asking Southlanders to be good neighbours, and remove all gorse and broom within 10 metres of their property boundary. Good neighbour rules also apply to ragwort and nodding thistle. There are a range of control options, check our Southland Pest Hub or call the biosecurity team for advice.



**RABBITS** – Winter is the most effective time for rabbit control before they start breeding again in spring.

**BOATING** – Now's the time to get your boat serviced and ready for the summer boating season. Check your lifejackets for fit and condition and replace any that are no longer suitable.

## OCTOBER

**MUSTELIDS, RATS AND FERAL CATS** – With the start of bird breeding season, it's essential to get good control of mustelids, feral cats and rats before they start preying on nests and vulnerable young. There are a variety of traps out there so give our biosecurity team a call for advice.

## NOVEMBER

**FIREWOOD** – Now's the perfect time to be sorting your firewood supplies for next winter. Visit [www.BreatheEasySouthland.co.nz](http://www.BreatheEasySouthland.co.nz) for a list of Good Wood approved suppliers

**FARM WASTE** – Make sure you have a plan to dispose of your farm waste, especially baleage wrap, chemicals and plastic containers. Baleage wrap cannot be burnt, but there are disposal options through recycling contractors.



To find out more about pest animals and weeds in Southland, including control advice and the latest rules, visit our Southland Pest Hub at [www.pesthub.es.govt.nz](http://www.pesthub.es.govt.nz)

## On the farm



By **KARL ERIKSON**  
*Principal land sustainability officer*

Many farmers will have started to turn their attention to next year's winter crops. Environment Southland's land sustainability team is always here to help with advice on your paddock selection, grazing strategies and farm plan preparation.

If you're more of a do-it-yourself type, then the new Cultivation and Intensive Winter Grazing mapping tool will be a huge support to your planning and decision-making this year.

The online map allows you to draw the boundary of your paddock or farm from an aerial view. This will give you an ability to see the features of your farm, such as wetlands, rivers, drains and flood banks.

The map pulls in data from a range of areas to provide you with guidance on where best to place your winter grazing paddocks. You can use this information in your farm plan, or as part of a consent application.

The map links through to the regulatory requirements of intensive winter grazing, which help you identify whether a consent is needed, and takes you to the consent application.

These tools have been developed in response to farmers' concerns around the accessibility and interpretation of information on farm. We hope that you find them handy and easy to use.

You'll find the tools online at [www.es.govt.nz/intensive-winter-grazing](http://www.es.govt.nz/intensive-winter-grazing). If you'd like help navigating the map or online consent application form, please give one of the team a call on 0800 76 88 45.

# Out in the field



▲ In July, staff from Environment Southland joined Councillor Lyndal Ludlow and representatives from The Hits Southland and Waikiwi Wood and Coal to deliver and stack a load of firewood for our giveaway winner Mavis Keene (fourth from right). Mavis was nominated by her daughter for all the work she does to help with her grandchildren, which allows her daughter to work as an ambulance officer.



▲ Environment Southland staff and staff from other businesses and agencies came together in March for an oil spill exercise on Stewart Island. Harbourmaster Lyndon Cleaver (second from left) coordinated the exercise, which provided valuable training in the event of an oil spill in or around Stewart Island.



▲ Environment Southland compliance officer Alex Tibshraeny (right) and Ministry for Primary Industries animal welfare inspector Caleb Trent board a flight to carry out one of three aerial compliance inspections for winter grazing. Good management practices were evident from the flights, and only a small number of farms needed to be followed up with an on-ground visit.



▲ Orepuki Catchment Group members were supported by Environment Southland staff Alex Loimaranta (far right) and Keith Finlayson (fourth from right) to carry out a habitat assessment of a retired ford crossing earlier this year. The assessment was part of a stream walk series organised by the ACE (Aparima Community Environment) project to help communities understand water quality in their area.