

# EnvirosOUTH

May 2020

---

## When the rain fell

Our flooding special

From page 3

---

## New councillors

What makes our new councillors tick?

Page 20



environment  
**SOUTHLAND**  
REGIONAL COUNCIL

Te Taiao Tonga

## Contents

February's floods – a look back	3-13
More than a pond	14
Coastal Plan	16
Pest advice online	18
Proud to be Ag Proud	19
New councillors	20
Updates	22
Time to think about...	23
On the farm	23
Out in the field	24

## 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

« Southland Federated Farmers president Bernadette Hunt (in high vis vest) joins the Farmy Army clearing fence lines after the February floods.

See story page 7.



We have been open for business even if our office has been closed.

Very early on in the Covid-19 response the majority of our staff were set up to work remotely.

We have continued to deliver our essential services such as pollution incident response, harbourmaster activities, flood warning, flood protection and support for Emergency Management Southland.

What field work we do is subject to Covid-19 requirements and ensuring our staff and people in the community can be kept safe.

Our engineers have mostly completed the repairs to our stop banks following the February flood.

The stop banks continue to prove their worth, and we have responded to the call for infrastructure projects to aid the economic recovery with a \$34 million proposal to upgrade some of Southland's stop bank infrastructure.

Rob Phillips, Chief Executive, Environment Southland



Southlanders are resilient and we will get through these uncertain times.

The Covid-19 pandemic has impacted our lives, livelihoods and communities in ways we couldn't have imagined. My thoughts are with those who have experienced personal loss and hardship.

Both the February flood and Covid-19 have set ongoing challenges and our farmers, as high quality food producers, now find themselves at the forefront of New Zealand's economic recovery.

The flood was the largest on record for Maitauro.

Fortunately, our stop bank infrastructure protected a lot of people and property. It performed well in urban areas, though there were some breaches in rural areas that caused damage.

During the flood, Southlanders really looked out for one another and we need to continue to do that as we forge a new normal.

Nicol Horrell, Chairman, Environment Southland

# Environment Southland

*A thriving Southland – te taurikura o Murihiku*

## Smiles, games and kitten sitting during flood response

A smile and a friendly face can make a big difference in an emergency. That's the view of Kevin Whitney from New Zealand Red Cross Disaster, Welfare and Support Team in Invercargill.



▲ Volunteers from the Invercargill Red Cross Disaster, Welfare and Support Team train weekly for deployment to places affected by disasters. That training came in handy when they were sent to support the Te Anau and Mataura communities during the February floods. L-R Kevin Whitney, Thomas Driver, Connie Reid, Gita Bhendari and Nigel Pau'u.

Kevin was one of the volunteers who were activated to support tourists and locals in Milford and Mataura during February's floods.

"We initially spent the day in Te Anau, supporting staff and tourists being evacuated from Milford. We were mainly providing lots of cups of tea and coffee and support; just being there."

The team had its trailer, which is loaded with everything anyone could need in an evacuation, even games. "It was really handy to have games and balls to entertain the kids on the basketball courts in the centre," Kevin says.

Next, the team was redeployed to the

Mataura Community Hub where they supported local people who had been evacuated and were returning home.

In Mataura the team's role was slightly different. "We were filling out needs assessment forms with people, putting together care packages of food and blankets, and providing that emotional support."

The trailer also came in handy at the local marae where the Red Cross team helped to set up for evacuees not able to return home. "The marae had enough mattresses, but we were able to provide pillows and blankets from our trailer."

The team took the night shift at the community hub, and added to their

already important responsibilities – looking after a rescued kitten. Despite all the volunteers willing to take it home, the kitten was very happy to be reunited with its 10-year-old owner the next day.

Red Cross volunteers also spent some time with the Farmy Army helping with the fence clearing during the clean-up, and making follow-up needs' assessment calls from the Emergency Coordination Centre in Invercargill.

Kevin says the thing that has stuck with him from his experience is how the community stepped up and took care of each other. "The community support has really been excellent."

## Preparation pays off during February floods

When your full-time job is spent preparing and waiting for the big emergency, what does it feel like when it actually happens?

For Emergency Management Southland manager Angus McKay, he hasn't really taken time to reflect on that since the beginning of February when a major flooding event in Milford rapidly merged into an even bigger flooding event for Southland.

He does believe though that the event proved that the team at Emergency Management Southland is on the right track with the approach they've been working on for the last few years and the benefits were obvious as the rain continued to fall,

rivers rose, evacuations got underway and communities needed support.

"Our approach has been about building relationships with key people, building that trust and confidence and knowing who to talk to. We were able to delegate decisions to local people who were in the best position to make those decisions and let them get on with it. We supported them to do what they knew was best."

Angus said the evacuation of tourists from Milford is believed to be the biggest air evacuation in New Zealand and required a huge team effort to ensure the tourists were not only safely evacuated, but that their needs were met when they arrived in Te Anau.

"Many of these people arrived wet, cold and quite distressed. Some of them had nothing with them and many were concerned about what all this was going to cost them."

Angus said the overseas tourists were

both impressed to discover their unique experience came at no cost and humbled by the care they received.

For Angus, who has been in Southland for just under five years, he always imagined the big emergency would be a flood.

"We've stood up the Emergency Coordination Centre to assist with other things, like the velvetleaf incursion and provided support during smaller events, but I expected a big flood would come eventually."

"It was a bit of the unknown because we had lots of flood protection that was amazing but it really hadn't been put to the test. On the whole it stood up really well, but it was a reminder that we will still get lots of flooding even with the best protection in place, that's the reality."

The highlights for Angus include the success of the emergency mobile alert system, the community approach, the efforts of the team in the Emergency Coordination Centre and the support of the wider Civil Defence community, including the fly-in team (teams formed at a national level who fly in to support regional Civil Defence teams during an event).

"But at the end of the day it's about the people and they all performed really well. You can have all the great processes and systems, but it's the people who make it happen."

And while the recovery continues, Angus is all too aware that there's no time to take a breath.

"We actually don't know what's around the corner - we have to be ready if this was to happen again in another two weeks. And we would be..."

*This story was written before the Covid-19 lockdown when Angus and his team were immediately put into action to support the Government response.*



▲ Environment Southland councillor and Civil Defence Emergency Management Group chair Neville Cook and Emergency Management Southland manager Angus McKay sign the declaration of a state of emergency for Southland on Tuesday 4 February.

## People the key to success during an emergency

This February's severe flooding might have been a first for many of those involved in the response, but for Southland Civil Defence Emergency Management Group chair Neville Cook, it was his third major flooding event.

During his long Police career, Neville worked through the 1978 and 1984 floods, before overseeing the most recent event from a broader perspective.

It puts him in the unusual position of being able to compare the events and reflect on how much technology and knowledge has supported improved management and helped reduce the impacts of events like these.

"This was so much better managed, but this was also our first real opportunity to test the new structure set up several years ago, with the shared service model. It really showed its value as the situation escalated pretty quickly, we had a dedicated team there ready to go and we weren't rushing around trying to get councils together."

He acknowledged the entire Southland community who responded superbly to the emergency, making the work of emergency services staff so much easier.

Neville also paid credit to Emergency Management Southland manager Angus McKay and his team who had spent a long time preparing for an emergency, training staff and working with communities to ensure they knew how to support themselves and each other.

"We had the Ministry for Civil Defence sitting with us, there were people who came from so many organisations to work in the Emergency Coordination Centre and there was a real sense that everybody who was there wanted to be there."

"The potential for damage was high and if we hadn't had the flood protection infrastructure in place that we do, some of the predictions for possibly disastrous outcomes would have been realised."

Neville said he will remember this event as a success. He acknowledged there are people who have suffered losses from the flooding but the outcomes could have been so much worse.

"The amazing team we had made a difference, they were prepared to make decisions and adapt when something unexpected came up. We've also proved that we can evacuate Milford if we need to and that people can be safely looked after in there in the event of an emergency."

"There's a lot of learnings from these floods but personally it was a delight to be involved with people so good at their jobs."

Emergency Management Southland is a shared service established by the four Southland councils (Environment Southland, Invercargill City Council, Gore District Council, Southland District Council). They are responsible for the delivery of Civil Defence and emergency management responses throughout the region.



▲ The busy Emergency Coordination Centre operated 24/7 during the first week of the floods, with people from a variety of services involved.

# Recovery will take time



▲ Ken Swinney, Recovery Manager

For many, the impact of February's flooding is already becoming a distant memory, but for those most affected, there are still many challenges ahead.

Emergency Management Southland has appointed former Environment Southland strategy and corporate planning manager Ken Swinney as the recovery manager. Ken left his full-time role last year after nearly 40 years involvement at the Southland County Council, Southland District Council and Environment Southland.

Although he always planned to return in a part-time capacity this year for some

"As a community we have to find a new normal, it won't be the same as before, not just physically but emotionally too."

KEN SWINNEY

project work, his expertise and years of experience as an alternate controller for Civil Defence made him the obvious choice to lead the recovery.

Ken says the Southland community is well known for pulling together and helping each other out when times are tough, so it's more important than ever that we remember people still need help and the recovery from these floods could take a long time.

"As a community we have to find a new normal, it won't be the same as before, not just physically but emotionally too. There are people who have been forced out of their homes by the flood damage, farmers who have lost their winter feed supplies and businesses who are struggling."

As part of the recovery plan, local recovery coordinators were appointed in March and they will be the main point of contact for affected communities.

"Our biggest challenges over the next few months will be the Milford Road, getting damaged homes repaired and people back into them and supporting the rural sector to tackle their problems," says Ken.

"However, people will always be our number one priority, so we need to make sure we are all looking after each other."

## Recovery coordinators

- ▶ In Fiordland, where businesses will face disruption from the impacts of the flooding on the Milford Road for some time, Community Board chair Sarah Greaney is coordinating the local recovery, supported by Southland District councillor Ebel Kremer.
- ▶ For Eastern Southland the local recovery coordination is being done by Gore District Council team member Shelley Lithgow (focusing on Gore) and Maitua community development coordinator Eleanor Ranstead (focusing on Maitua).
- ▶ Recovery coordination for the rural sector continues to be led by the Rural Support Trust.

## Community responds to call for help

When the community pulls together great things can happen and this has been clearly demonstrated during and after the February floods.

Realising early on that the flooding in Southland was going to be a serious event, Southland Federated Farmers president Bernadette Hunt sent out a Facebook call for people to join their 'Farmy Army' and the community responded.

The flooding caused an estimated 100 kilometres of damage to fencing that needed to be cleared or repaired, and destroyed or damaged over 2000 bales of hay.

The only requirement of helpers was a willingness to get stuck in.

The initiative was well received, with up to 100 volunteers a day coming forward, including local lawyers, families with young children, SIT students, high school classes and experienced retired farmers from up north.

"We've done this a few times in the past, but this was by far the biggest turn out of volunteers we have ever seen," Bernadette says.

"The farmers were really moved by the support, you could see it on their faces. Having help with time consuming, basic clean-up allowed them to start to focus on the bigger clean-up issues."

Meeting points were set up in Gore, Edendale and Riversdale to support a range of areas that were affected. The support became so widespread that smaller individual groups made up of neighbours, family and friends started springing up creating their own mini farmy armies.

The volunteers worked clearing fences and picking up plastic baleage wrap. "It doesn't seem like a big job but its massive when you think about the 100 or more kilometres of fencing that needed to be cleared."

"The comradery and support from town to country was overwhelming, it echoes the nature of our community. Southlanders really pull together."

By March over 50 farmers had signed up

for help from the service and although the flood is over, there are still a number of recovery projects and people that need support. The rural recovery programme is being led by the Southland Rural Support Trust which is an active part of the wider emergency response.

The Southland Rural Support Trust also played a key role in the flooding response, initially creating a base in a building at Environment Southland alongside the Emergency Coordination Centre.

For weeks, a dedicated team was kept busy phoning farmers throughout the region to check on the state of their properties, what help was required and then putting in place a variety of support.

They worked closely with the Farmy Army to get volunteers out to properties and also ensured those who needed supplies got what they needed, including delivering a large number of care packages to remind our rural community they were not alone.



▲ Members of the Farmy Army, including Federated Farmers president Bernadette Hunt (in high-vis vest) work to clear debris from fence lines during the clean up after the floods. Hundreds turned up to offer their support.

## Not a bag lost during successful air evacuation

Having more than 1100mm of rain over three days wreaked havoc in the Milford area, causing multiple slips, widespread flooding and damage to many tracks, huts and roads.

Department of Conservation operations manager Nedra Burns, Southern Lakes Helicopter operations manager Lloyd Matheson and Tony Woodham, operations leader for Milford Sound Tourism were in the thick of the response from the get go.

Tony says there were around 420 people isolated in Milford – a mix of guests and staff. “It’s generally made up of travellers

working here for the summer, and others who have been here for a few years. There’s a number of internationals who work for different companies plus tourists in the township and on boats.”

He says they are a capable little community, and in the thick of it they simply focused on looking after their tourists. “It was important that they were well looked after, fed and watered. We

communicated with everyone twice a day and we set up social committees to keep people entertained. They played charades, board games, face painting, especially for the kids, to keep everyone engaged.”

For Lloyd Matheson, the highlight wasn’t only that no one was seriously injured but also, despite the pressure and constantly changing nature of the emergency response, they didn’t lose any of the 400-



▲ Helicopters played a key role in ensuring everybody (and their luggage) was safely evacuated from the Milford area.



## ing cuation



▲ The Community Hub in Te Anau was kept busy catering for all those evacuated from the Milford area.

odd suitcases, bags or backpacks. “That’s a huge achievement – not even Air New Zealand can claim that.”

He believes it’s one of the largest air evacuations in New Zealand. Training and local support were crucial to the smooth running of the evacuations, with each helicopter having a local water rescue volunteer on-board as well as the pilot.

“The evacuations were probably a bit hair-raising for the evacuees, but that’s what we train for and it was a good team effort.”

For the Department of Conservation, the concerns were for the wellbeing of the people and damage to the infrastructure. They had to close 75 tracks across Southland and Otago following the storm event, including two Great Walks, Milford and the Routeburn. “This caused major disruption and disappointment for walkers from all over the world who had booked their experience of a lifetime in Fiordland,” Nedra Burns says.

“Many of our rangers are long-term builders, maintainers and users of this infrastructure and have a strong emotional connection to it and to Fiordland, so they were saddened to see so much devastation.”

Nedra says she’s incredibly proud of the way the Fiordland community pulled together and supported each other. “It has obviously had a financial impact on many businesses and individuals and it’s been great to be part of the community approach to developing solutions.”

---

**“The evacuations were probably a bit hair-raising for the evacuees, but that’s what we train for and it was a good team effort.”**

LLOYD MATHESON

---

In Milford, despite being isolated, Tony says they could see there was a bigger problem brewing for Southland more widely. “We recognised that other people were far worse off than us and we wanted to be the ‘solved problem’ for Emergency Management Southland so they could focus on other areas and we could take the pressure off.”

They concentrated on getting the tourists out as soon as possible, but also recognised they could have some fun and do some fundraising for the Mayoral Relief Fund at the same time.

“We held a couple of community events,” Tony says. Particularly popular were the ‘Meat Masters’ cooking contest, painting classes, yoga and an intro to DJ-ing – which Tony admits he was terrible at.

“We put collection boxes on the boats and in the classes, and asked for a gold coin donation. It helped to galvanise people’s attention.”

“Milford is a special place, and it’s kinda weird when there’s no one here,” Tony says. Once the tourists were evacuated the crew left behind moved into clean-up mode and started preparing for business again. It was a relief when tourists were able to start flying back in later that week.

Lloyd and Tony agree that the liaison and cooperation between civil defence teams and all other emergency services and agencies was outstanding. “The whole operation was brilliant,” Lloyd says.

## The knowledge behind the

During a Civil Defence emergency, big decisions have to be made, often quickly and with potentially huge consequences if they are wrong. Having access to the right knowledge is crucial.

**D**uring February's flood, there was a dedicated team of Environment Southland staff with many years of knowledge and expertise to provide the valuable information needed.

Team leader hydrological response Chris Jenkins has spent his whole working life watching the weather, measuring rainfall and river levels and predicting just what the impacts will be on our river systems.

For him, this year's event wasn't really any different to other significant rainfall events. His sense of calm never wavers, he gets on with running a number of models which provide the information on where, when and how high rivers are expected to peak. It's not an exact science, but one based on formulas, geography and a wealth of knowledge. And it's pretty accurate, certainly enough to give confidence to those who need to make calls about possible evacuations.

It means long nights for Chris and his team during an event and a reliance on a network of sophisticated equipment doing its thing.

"We were lucky that, given the huge flows, particularly in the Mataura catchment, all our flood warning sites stayed intact and performed as they were supposed to. We did have a couple of river level monitoring sites wiped out by debris, but overall we got through with enough information to know what was happening."

While Chris was monitoring the rainfall and river levels, Environment Southland catchment operations manager Paddy Haynes and his team were watching over the flood protection systems, many put in place after the 1978 and 1984 floods. These systems, including 458kms of stop banks and many hectares of designated flood spill zones, were facing their biggest test since their construction.



▲ Stop banks in Gore were pushed to their limit as floodwaters raged.

## the big decisions

There were some hairy moments, but the catchment team, many of whom have clocked up 30+ years in their roles, were confident the banks would hold – even when predicted peaks were expected to be higher than design capacity.

“The stop banks at Mataura have a design capacity of 2400 cumecs. At one stage it was looking like the peak could hit 2700 cumecs, but fortunately that didn’t eventuate,” Paddy says.

The Oreti River also faced some challenges, with extremely high flows. Sections of stop banks were breached in the upper catchment near Lumsden and Five Rivers. In the Taramoa area, a number of banks overtopped as they were designed to do when certain levels were reached. Surface flooding occurred in a number of areas



around the Oreti catchment, blocking roads and flooding farmland but no towns on the Oreti were threatened.

While many in Southland were busy trying to stay dry and away from flooded areas, the catchment team were out inspecting banks, looking for potential trouble spots and flying over to get a view of hard to see areas.

The stop banks did their job, holding the water and protecting the townships.

“We know that we can’t protect everything during a flooding event, but the flood protection systems are firstly designed to protect townships, to protect people and create safe areas for the water to pond. They did exactly that.”

“We know that we can’t protect everything during a flooding event, but the flood protection systems are firstly designed to protect townships, to protect people and create safe areas for the water to pond. They did exactly that.”

PADDY HAYNES

“There was a lot of investment in these systems, both at a regional and central government level, and that has certainly paid off.”

Paddy says although there are repairs to be done and investigations to ensure the ongoing integrity of the banks, overall the results have been excellent. He says ongoing investment so the stop banks can cope with future challenges is important.

## FLOODING 2020 the numbers...



### EMERGENCY MANAGEMENT

**200** Staff worked in the Emergency Coordination Centre

**1,000** People were assisted at Gore & Mataura Community Centres

**26** Community Hubs opened



### PEOPLE EVACUATED

**2,400** Gore

**1,500** Mataura

**500** Wyndham

**500** Milford Sound



### FARMING ASSISTANCE

**900** Farmers contacted by Southland Rural Support Trust

**100** Farmers helped by the Farny Army



### RIVER FLOWS

▶ Mataura River at Gore peaked at **2,400** cumecs (usually **65** cumecs)

▶ Oreti River at Wallacetown peaked at **1,279** cumecs (usually **40** cumecs)

## How one couple became more than flood victims

On 4 February, Amber Geerlings-Parker and Luke Howden of Gore were packed and ready to head to Dunedin to see the Elton John concert and then continue onto a road trip with their dog Scruffy.

As they prepared for their holiday they noticed water was pooling in the back yard. “I didn’t initially worry,” says Amber, “The back yard did that sometimes when we had really heavy rains, but when it didn’t dissipate and started to creep up to our back step I thought ‘okay, this isn’t going to stop it’. That’s when Luke and I started to worry.”

Within an hour the couple’s entire back yard was flooded and water was starting to creep into the house. The Gore Fire Service arrived and much to the couple’s horror they were told they would need

to evacuate their home immediately and given 15 minutes to collect anything they could carry with them.

The couple left their home with just two duffle bags and their dog. “As we walked out of the house, I remember thinking ‘this is like something out of a movie’. The water was up to our waist by that point,” Amber says.

For most people in this situation, their focus would understandably be on protecting themselves, but not this couple. Luke, a local DJ at the Hokonui radio station in Gore, had a co-worker pick them up and take them directly to the radio station.

This became the base for the couple for the next 72 hours. By 6pm that day Emergency Management Southland had issued an emergency mobile alert and evacuation notice and Amber and Luke had become the local source for channelling information updates, community support messaging and breaking news.

“We were interviewing people on the ground in affected areas, getting Civil Defence messages out, sharing information locals provided and letting people know where to get help, says Luke.



▲ Floodwaters took time to recede, even though the sun was shining.



▲ Family and friends got stuck in to help Luke and Amber with the

## It came much easier

“The whole reason I got into radio was to connect with people. Not everyone has internet and in an emergency situation the radio can be a great source of information and comfort. People on the other end knew we were there for them and they were going to be ok.”

Now that the water has receded the clean-up has begun. While Luke and Amber say they feel really lucky to have been able to support their community through this time, they are humbled by the support they received as well.

“Amber and I could not have gotten through all of this without the support of all our friends especially Chris Giles who was driving tractors through the water to keep the station running.”



▲ Hokonui radio announcer Luke Howden (left) takes a selfie with his partner Amber Geerlings-Parker and friend Chris Giles, who used his tractor as transport to ensure the radio station kept operating during the floods.



the clean-up.



▲ The mark on the hedge behind Amber shows how high the flood waters got.

# A giant pond to improve water

It might look like just a giant pond, but this project to reduce sediment and nutrients entering the Waihopai River and New River Estuary, is already proving successful.

Invercargill City Council capital projects technician Leonardo Ramirez says the sediment pond near the river at the bottom of Beatrice Street in Invercargill has been constructed to collect stormwater from drains within 82 hectares of the city.

The \$500,000 project was completed late last year, after first being mooted by drainage manager Malcolm Loan in 2012.

The 24-metre by 200-metre pond holds approximately 5,000m<sup>3</sup> of water. The water from stormwater drains has traditionally fed straight into the river, taking with it large

volumes of sediment and any rubbish picked up along the way that wasn't caught by the grates in the pumps.

Leonardo says they knew the water quality could be improved by lengthening the time the water spent getting to the river, allowing the sediment and rubbish time to settle and sink to the bottom.

"Ponds like this have been very successful in other regions in New Zealand, so we followed the Christchurch City Council's guide quite closely."

"Improving the water retention time is the simple key to improving the water quality at the outlet, the sunlight then has the opportunity to kill much of the bacteria and that has to be positive."

Just a week after the pond was installed, Leonardo says results were already obvious, with sediment reduced by up to 50%. The pond is likely to need the sediment removed every 5-10 years, but will hopefully require little other maintenance.

For Leonardo, who moved from Colombia several years ago, being involved in such a large project

with really constructive outcomes has been a fantastic experience.

"It was exciting to be part of such a positive project. Here we had a ditch and the water we were purging was just rubbish, but we've made big improvements and that's great."

It's not only the water that is benefitting from the pond, the environment around it has also seen significant improvement, with around 9,000 plants added to help support the area's biodiversity and assimilate nutrients like nitrogen and phosphorus.

A community planting day was held to get the plants in the ground and this was the first real opportunity for the public to take a look at something that had been the subject of much public speculation about its purpose during construction.

Leonardo would like to see a second pond built, which he thinks would complement the first and improve the water quality more. He hopes this may be part of the longer term planning for the city's infrastructure.

# to help water quality



▲ The new sediment pond near the bottom of Beatrice Street (above and background).



▲ Regan McRandle from The Roading Company, ICC Parks operations manager Chris McAulay and ICC capital projects technician Leonardo Ramirez get busy at a planting day at the new sediment pond.



# Complex coastal context for plan development

There's no denying that as Southlanders, we love our coast. It forms part of our identity – as individuals and as a community.

Our coastline, the longest of any region in New Zealand, is valued for its outstanding natural character and landscapes, recreational and economic opportunities, as well as its biodiversity, ecology and cultural significance.

The coastal marine area is an important habitat for numerous species of plants and animals, some of which are nationally and internationally significant.

Historically, the coast has been very important to Southland, providing food for early Māori and European settlers, creating trade opportunities (sealing, whaling, and fishing), and enabling transport of Southland produce (including meat, wool, and dairy products) overseas.

Our connection to the coast remains significant today with 54% of the

population (approximately 50,000 people) living within five kilometres of the sea.

Environment Southland's acting policy and planning manager Alex Morgan says reassessing how we manage this special part of Southland by reviewing the Regional Coastal Plan is not only timely, but will also ensure our rules are relevant and provide appropriate protections.

"In the 23 years since the plan was notified, the environment, how we use the coast, and the legislative requirements have all changed. Our current plan is no longer protecting all the things that we value about this place," Alex says.

Environment Southland, with Te Ao Mārama (the environmental arm of Ngāi Tahu Ki Murihiku) began the review process in 2018 with the development of a strategic

direction and a number of discussion papers covering key issues for the coast.

"This year we have sought feedback on protecting young toheroa on Oreti Beach by proposing vehicle restrictions. This is just one issue the community will be asked to share their thoughts on over the next year or so as the review moves towards a new Southland Coastal Plan."

The New Zealand Coastal Policy Statement was updated in 2010 and provides the legislative framework that all regional coastal plans must meet. "The new coastal plan will be more restrictive than our current plan as the New Zealand Coastal Policy Statement 2010 sets a higher bar than the previous version, which will ensure we can protect our special coastal areas for generations to come," Alex says.



## Our coast

- ▶ Foveaux Strait/Te Ara a Kiwa is less than 60m deep.
- ▶ Southland's coastline is 3,400 km long, the longest of any region in New Zealand.
- ▶ Southland's coastal waters total 23,110 sq km.
- ▶ There are currently 11 marine reserves, seven mātaītai reserves, two marine mammal sanctuaries and 23 'china shops'\* within Southland's coastal marine area.
- ▶ Approximately 54 percent of Southlanders live within five kilometres of the sea..
- ▶ At its narrowest point, the strait between Stewart Island/Rakiura and the South Island is 10 nautical miles.
- ▶ The Coastal Marine Environment is managed by at least 25 pieces of legislation and 14 government agencies

\* China shops are identified and defined in the Fiordland Marine Conservation Strategy. They include small discrete areas that are outstanding for the abundance and/or diversity of animal communities, mixed animal and plant communities or particular animal species.



# ndrums



▲ Kaumatua Michael Skerrett

## Toheroa – a national treasure

For kaumatua Michael Skerrett, protecting this indigenous species isn't only about their survival, but importantly, it's about manaakitanga, too.

“Manaakitanga is an important part of Maori culture, essentially it's about looking after people,” Michael says. In the early days local Maori had to adapt to the seasons for food, while toheroa could be harvested all year round.

“In some of the histories, early settlers said they couldn't have survived without food from the local tribe. That's manaakitanga.”

That's the philosophy Michael operates the current permit system for collecting toheroa on. Michael is a Tangata Kaitiaki – someone authorised to issue Customary Authority for the collection of toheroa.

“Basically the authorisations are for us [Ngāi Tahu], but it's better to manage it like this, to give authorisations to the local community because they are going to have a special occasion.”

“We think it is better to do this than have pressure for an open day like in 1993,” Michael says. That was the last time there was an open day. It was attended by 20,000 people who were allowed to harvest five toheroa each. “It is said some people went out twice, which meant over 100,000 toheroa were harvested that day, the majority ending up in the dump because people didn't know what to do with them.”

Michael says they're a national treasure. “There are only about four places in the country where they grow. They require a

wide, flat beach for the wave energy to run off. The spat comes in on the tide, right up to the dunes. When they're tiny like that they live just under the surface – they can be dug out easily by waves or crushed by vehicles.”

Recently, Environment Southland sought feedback on potential vehicle restrictions on Oreti Beach to help protect the taonga shellfish species, toheroa. Vehicles cause significant damage to juvenile toheroa in particular, so it is hoped by restricting vehicle access to at least some of the beach, the population can thrive.

“We need to maintain the juveniles so that there's enough for them to come back should something happen. Especially with the increased pressures from a changing climate,” says Michael.

He believes the El Nino conditions in certain years have had a strong impact on not just toheroa but also how well oysters and mutton birds have fared.

“We must be aware that from time to time there will be high mortality events, as happened in 1993 when probably three quarters of the toheroa population died. At the time, toheroa were tested for disease but none was found and starvation was considered a likely factor.”

Michael says it's all about balance. “We have a responsibility for looking after these things. We know people value the beach, and driving on it. We need to provide for that while doing the least damage and helping the toheroa to thrive.”



▲ Environment Southland scientist Sorrel O'Connell-Milne returns an adult toheroa to the sand at Oreti Beach after digging it up to show fellow coastal scientists during a conference in 2019.

# Pest advice in your pocket

Students at Otatara School are using the new Southland Pest Hub website to answer their questions as they work to control weeds in the bush behind their school.

While out in the bush, year six teacher Tracey Maclennan's students recently discovered a large amount of Chilean flamer creeper, an exotic vine that's strangling our native shrubs and trees. The children made short work of the weed, pulling out over 16 kilograms in 40 minutes in one spot.

"We were a bit shocked about how many pest plants there are in just a small section of the reserve. Students were able to use the Southland Pest Hub to learn more about weeds, and have also discovered blackberry and sycamore, which are on our radar for the future," said Tracey.



Environment Southland launched the Southland Pest Hub as a tool to provide online advice on around 140 species that are, or have the potential to become a problem for Southland.

The Pest Hub is an important link between Southlanders and the council's biosecurity team, says biosecurity and biodiversity manager Ali Meade.

"Environment Southland oversees pest management in Southland. And while we can't do all the work ourselves, we can help people with the right tools and knowledge. This is what the Pest Hub is all about."

The award-winning system was adapted from Northland Regional Council, and allows you to learn about pests, why they're causing a problem, and how to deal with them according to the local council rules.

You can report locations of pests by dropping a pin on a map, and request more information. Enquiries made through the Pest Hub will go directly to one of the council's biosecurity team to follow up.

Another benefit of the Pest Hub is that information is accessible on all devices, and it's regularly updated. People can quickly filter through different types of pests either by where they're found, or what type they are.



◆ Otatara School students Emma Rudel (left) and Ocean Healey, both aged 10, investigate pests out in the bush using the Pest Hub.



▲ Northern Southland farmer, John Douglas

# Proud to be Ag Proud

John Douglas is a man who wears many hats. He's a fifth term Southland district councillor, a dairy farmer and one of the founding members of the movement Ag Proud.

Last winter, a spotlight was shone on the environmental and animal welfare concerns of feeding stock during winter in Southland. It was a stressful time for many, with photos and video of some poor practices gaining international attention.

As a result, John, his sharemilker Jason Checketts and two other dairy farming friends saw a need for Ag Proud – which launched in August 2019. “Ag Proud has three core values - promoting positive farming practices, strengthening the relationships between town and country, and supporting farmers with their mental wellness,” John says.

In less than a year since its launch, the self-funded group has travelled the length and breadth of the country to share their messages and support farmers. “We've held BBQs, run seminars with speakers like Lance Burdett, and offered advice on everything from wellness to winter grazing strategies.”

John admits he thought there was a strong urban-rural divide, but on his travels to a few different cities he believes that most urban people do understand and appreciate the role of farmers in the economy.

“I found that most urban people I spoke to thought that farmers were actually doing a good job, but the media continues to

promote the divide, and that's where it mostly exists.”

The Ag Proud team has been lucky to secure some funding for this year's work through Ravensdown and will be continuing to support farmers to carry out best practice.

On his own farm, John has scrutinised his wintering practices and has also recognised areas where he can make improvements. John, partner June and their sharemilker Jason run a 1000-cow, 505-hectare farm in northern Southland, where the majority of his stock are wintered on-farm.

This year, based on the good management practices for strategic winter grazing and improving animal welfare, John will be changing the way he fences during winter grazing on his kale crop, as well as the direction he feeds the animals. He'll also be fencing off his critical source areas (swales) and allowing for an alleyway for loafing areas at night for his cows.

John has also recognised that the community need more reassurance that on-farm practices are being done in the best way possible. “My local community gets their drinking water from groundwater around my farm, so I'm very aware that I need to make sure I'm not impacting their

water quality and they have confidence I've done everything right.”

The Northern Community Board recently visited the pumping station and heard from Southland District Council staff on the water quality testing that occurs at the site, and were told that the town supply continues to be of good quality.

To be certain this continues, John's taking additional precautions with fencing.

“There's a much greater awareness of all the issues and the need for farmers to get up to date with following best practice,” John says.

“Some may have previously just done what was easiest, but that's not good enough anymore. We're looking at the environmental, animal welfare and economic impacts of our farming operations. We have to look at our practices through all those lenses now.”

John believes the biggest challenge for the sector now is positioning farming so it's seen as an industry that follows best practice.

“Most of us are not in it for the short term. We're here for the long term and we have sustainability at the front of our minds. That means that our farming practice leaves a positive legacy for future generations.”

# New to the team

Four new councillors joined Environment Southland in 2019. Find out a little bit more about them.

## Allan Baird Fiordland Constituency



Serving the community runs in Allan's family. His grandfather, who was awarded a CBE for services to the community, was chairman of the Southland County Council for 12 years and provincial president of Federated Farmers.

Allan himself was president of Federated Farmers for three years. When the vacancy on council came up in the Fiordland constituency, he saw it as an opportunity to apply his mix of skills. "It's our region, our problems."

Allan is the fourth Baird to farm their property near Winton, which he converted from deer and sheep to dairy. He lives with his wife Helen, both of whom are keen golfers. They have two grown sons.

Before Allan took over the family farm, he spent 15 years away, getting a degree at Lincoln University and then working in the finance industry in New Zealand and Australia.

During his time on council he would like to encourage consistency of community expectations for rural and urban water quality. He would also like to improve the tone of engagement. "I feel we could do more to lift our image with the farmer base."

Allan has tremendous pride for Southland. "As a region we have a lot to celebrate."

## Bonnie Mager Invercargill-Rakiura Constituency



Bonnie sees her role on the council as an opportunity to put her degrees in geology and biology to good use. "Biodiversity is my passion."

She has found that there is lots of reading to do on the council. "There's a lot Environment Southland does that I didn't know about going into it."

A Southlander, Bonnie lives in Invercargill with her partner Chris and two dogs, Argos a black Labrador-cross and Ferguson a Shepsky.

She is a PlayStation gamer who is keen to motivate young people to engage with councillors and council business.

"When you are young you think 'this is happening to me'. You don't realise you could have more control with what's happening around you."

Bonnie is proud of the work she does in her day job as digital and communications manager at the Invercargill Public Library, where she has worked for seven years.

She's also doing her best to stick to her New Year's resolution to not drive her car. She's been taking the bus and riding her bike or scooter and has only twice driven her car when she's needed to get to meetings quickly.



▲ Environment Southland councillors

## Peter McDonald Hokonui Constituency

Peter has been involved in local environmental issues since 2002, including catchment groups and the Dipton Landcare Group.

He grew up on Gavenwood Farm, a hill country sheep farm in Dipton. He and his wife Kim took it over from his parents 20 years ago. The couple has two grown children.

The farm is 669 hectares, 130ha is thick scrub and native bush and it includes 29ha of QEII covenant.

On council, Peter is keen to see progress on water quality issues, while being mindful of urban and rural communities and their ability to cope in the short and medium

terms. He says central government is likely to set direction, “but I’m keen to retain timeframes and implementation locally”.

Peter describes the work of council as fast paced. “It’s not all about rural water quality. There are a lot of different things happening all the time.”

In his own time, Peter is a regular columnist for farming pages and hunts wild pests on his farm, everything from goats to hares to deer.

He also likes talking to people. “You can get stuck in your own thoughts as a farmer. There’s a whole world out there and it’s good to find out what others think.”



## Lloyd Esler Invercargill–Rakiura Constituency

Lloyd came to Environment Southland after three terms on the Invercargill City Council because his interests are more Southland-wide and in freshwater and salt water.

“There’s a lot more passion. I’m still getting used to the friendliness.”

He wants to do his bit with the difficult issues – freshwater, climate change, the impact of cruise ships in Fiordland, toheroa. He’s also interested in developing the relationship with iwi.

Lloyd has been in Southland for 32 years. He was born in Takaka and grew up in the North Island, returning south to study botany at Otago University.

He has many hats – teacher, writer, tour guide, and he’s worked in museums. He also takes tour groups to the Auckland Islands and other sub Antarctic islands.

His first novel, Jack the Whale Boy, is about to be published. It’s a children’s book and will be part of a trilogy. He’s also planning to publish a natural history of Foveaux Strait this year.

Lloyd lives in Otatara in Invercargill and during the weekend often spends time with his 10-year-old buddy who he was paired up with through Presbyterian Support’s buddy programme.

“I’m quite happy here. There’s always some project or another and a book to be done.”



# Updates



## Climate change action

In December 2019, councillors discussed the first draft of the council's Climate Change Action Plan, which is being developed in two parts. The first part is focused on what Environment Southland can do, particularly in its day to day business. The second part takes a regional approach, which the council is working on with the other councils.

The Climate Change Action Plan will continue to evolve, but there are already some actions underway in part one of the plan. These include initiating a full engineering review of the Waihopai flood management scheme (including a drone survey), upgrading the Stead Street pump station, developing a stocktake of actions that can be undertaken within existing budgets, plus the design and implementation of an emission reduction programme across all of the council's operations.



## Environment Court update

The proposed Southland Water and Land Plan is currently in a formal Environment Court process, and is being heard by the court in two parts – Topic A (the objectives and physiographic zone policies) and Topic B (policies and rules).

The court heard from all parties in relation to Topic A in September and October last year.

The court released an interim decision on Topic A in late December 2019. There were no appeals to this interim decision.

The next steps and the timing will be determined by the court. Outstanding matters raised by the interim decision on Topic A will need to be resolved before Topic B can progress.

The plan will be final once the court issues its final decision and any appeals to the High Court are considered.

We cannot say with certainty when this will be but it is unlikely to occur before the end of 2020. To stay up-to-date on this process, go to [www.es.govt.nz/waterandland](http://www.es.govt.nz/waterandland).



## German ivy

Environment Southland is carrying out weed control along the Bluff foreshore over the next two to three years, with the aim of eradicating German ivy.

German ivy grows rapidly and can smother other plants and prevent seedlings from establishing. It often opens up areas to more aggressive weed species.

This project involves herbicide spraying in stages, followed by the planting of native shrubs. The dead vegetation will look unattractive for a while, but the longer-term plan is to beautify the area.

The Invercargill City Council is supplying eco-sourced, low-growing native plants to plant along the foreshore area after the control work is done. We look forward to working together with the Bluff community to organise planting days in 2020/21 and 2021/22.

# Time to think about...

## MAY/JUNE

**MUSTELIDS/RATS** – When carrying out maintenance on your duck pond, remember to set and check traps for mustelids and rats.



▲ Stoat

**VELVETLEAF** – Although velvetleaf hasn't been identified in Southland for some time, the seeds can remain dormant for many years, so it's important that all farmers continue checking their crops for any signs of it. If you find it, contact MPI on 0800 80 99 66.



▲ Velvetleaf

**OUTDOOR BURNING** – Outdoor burning is prohibited in the Invercargill and Gore airsheds from 1 May until 31 August. Leisure activities like barbecues, braziers, hangi and fireworks are exempt from this rule.

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

**ENVIRONMENTAL ENHANCEMENT FUND** Get your application in now. This fund can assist with projects to protect and enhance indigenous biodiversity on private and community-owned land in Southland. Visit [www.es.govt.nz](http://www.es.govt.nz) for more information on how to apply.

## JULY

**WALLABIES** – The animals, not the rugby type, are capable of causing huge issues for Southland's biodiversity and economy if they get established here. This includes preventing regeneration of native bush, depletion of forest understorey and damage to tall tussock grasslands. They also compete heavily with livestock for pasture and crop. Wallabies are spreading out from South Canterbury and moving through Otago. If you happen to see or suspect a wallaby in Southland please report this immediately to the biosecurity pest animal team at Environment Southland.

**GORSE AND BROOM** – Good neighbour rules are now in effect for gorse and broom. If your neighbour has gorse and/or broom within 10 metres of your property boundary, and you're actively controlling plants on your property, then get in touch with our biosecurity team for advice.

*For detailed information on any of these topics visit our website*

[www.es.govt.nz](http://www.es.govt.nz)

## On the farm



By **KARL ERIKSON**  
Principal land sustainability officer

As the saying goes – “if you fail to plan, you plan to fail”.

This is particularly true for preparing for winter grazing. By now winter crops will be ready to feed out to animals and preparations for this important activity will be nearly complete

If you have waterways or critical source areas in your chosen wintering paddocks then now is the time to think about how your animals will graze the crop, keeping in mind it's imperative to protect the waterways and manage the critical source areas.

The main goal is to keep as much vegetation in between the stock and waterways for the entire winter grazing season.

Perhaps the best way to help your planning for winter grazing is to draw the paddock on a piece of paper (or use an aerial photo from Google maps). Draw in your critical source areas, waterways, buffer zones, back-fences, grazing directions, bale placement and troughs. Once you have done this you have essentially created a winter grazing management plan.

You can find more detailed information about winter grazing plans on our website or give one of our land sustainability officers a call.

**For more information contact our land sustainability team on 0800 76 88 45.**

# Out in the field

Our staff and councillors were kept busy chatting with visitors to our site at this year's Southern Field Days at Waimumu in February.



▲ Senior policy planner Nicky Carter and consents officers Jackie Nelson and Rachel Beaton talk with a member of the public.



▲ Citizen science coordinator Sam McLachlan and Councillor Peter McDonald.



▲ Councillor David Stevens (left) in conversation with another visitor to the site.



▲ Biosecurity officer, pest plants Rachel Batley checks out the new Southland Pest Hub website that was launched at field days. Find out more about the website on page 18.