Envirosouth

April 2021

A positive attitude

Top performing dairy farmer

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Fish passage

Freeing up the way for fish

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Cover

◀ Surfer Marama Pou by the changing sheds at Mitchells Bay, Riverton. See story page 10.



Southland's rivers, lakes and estuaries need significant reductions in nutrient loads.

Our People, Water and Land programme has been modelling how much reduction in nitrogen and phosphorus is required to get the water quality improvements Southlanders want to see.

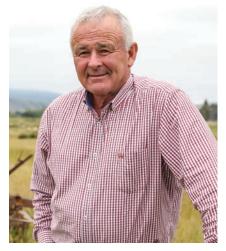
The numbers are big, but we have a plan.

We will support the community to make changes and improvements in stages, over time. This includes building on many of the good initiatives already underway and supporting new technologies and innovative thinking and practice.

The changes are going to affect the whole community from the agricultural industry to our towns' and city's management of storm water and wastewater.

Regulation alone will never be enough; for sustained improvements to water quality everyone will have to do their bit.

Rob Phillips, chief executive, Environment Southland



This Long-term Plan 2021-2031 is a challenging one.

It addresses important issues that we're keen to get your views on. Consultation starts in May 2021.

Our future focus is on building real strength and resilience in Southland for the changes needed to improve our freshwater quality and to deal with the impacts of climate change.

Some tough decisions need to be made.

We are being expected to do more by the government and the community yet our reserves and income have taken significant hits due to Covid-19 and the 2020 floods.

The councillors have given careful consideration to budgeting for the long term and are mindful of how it will affect Southlanders.

There are options, so get in touch and let us know what you think.

Nicol Horrell, chairman, Environment Southland

Environment Southland





▲ Reforest Southland's Daniel Jones and Josie Blackshaw tend plants at their home nursery in Lumsden.

Gollum galaxias found in Lumsden Creek.**

Community the driving force behind planting projects

Patience is needed when going for a bushwalk with Josie Blackshaw. "I'm a bit of a plant nerd," she says.

osie and partner Daniel Jones are two of the driving forces behind Reforest Southland, a Lumsden-based charitable trust and community nursery.

The Trust's focus is on growing, replanting and regenerating areas of native bush, from riparian and marginal planting to larger reserves and parks, for the benefit of the local eco-system and the enjoyment of the local community; "doing something nice for the kids and showing them what can be done," Daniel says.

They have two projects underway, replanting Lumsden Creek and a community nursery, which will be located in central Lumsden.

The importance of the project has been enhanced with the discovery of both Gollum Galaxias and Southern Flathead Galaxias in the Lumsden Creek. Both native fish species are threatened and found only in Southland.

"It's really exciting to find these wee guys living in our area, and knowing that the work we are doing replanting the creek will help provide shelter and reduce water temperature and pollution, giving these little guys a bit of extra protection they deserve," Daniel says.

Reforest Southland started quite naturally, with a group of Lumsden residents looking for a local planting project. The vision and idea grew from there and the group formed a trust to help with fundraising.

They applied successfully for funding for the nursery from the Ministry for Primary Industries' One Billion Trees Programme. Josie says they've also had generous support from Community Trust South, their local community board and councillor, and local businesses.

Environment Southland's land sustainability team has been "awesome" with advice and support, and helped out at a planting day at Lumsden School, Daniel says. A replanting project with Northern Southland College is also germinating.

The Trust wants its Lumsden work to act as a blueprint for people to activate community planting projects in their own areas.

For more information check out reforestsouthland.co.nz

Positive attitude key for top performers

Doing the right thing comes naturally to Mataura Island dairy farmers Arjan and Tracy van der Straaten.

he couple have been dairy farming for 22 years and are in their seventh season on their current property.

They were surprised to receive a recent letter from Environment Southland naming them as one of its 50 top performers, as part of a compliance programme launched last year.

"It wasn't something I had heard about and I was surprised because I don't think I do anything special," Arjan says.

The new programme recognises dairy farmers who have proved themselves with five years of full compliance with all their consents. This recognition provides an opportunity for them to carry out a self-assessment, and to supply that to Environment Southland, rather than be inspected by a compliance officer.

However, 15% of the top performers will be randomly selected for inspection by a compliance officer to ensure the integrity of the programme.

Compliance manager Simon Mapp says while the threshold for the programme is high and a single slip-up in compliance will see somebody removed from the programme, it puts trust in those who have proven themselves to be doing the right thing.

"At the moment the top performers only account for around 5% of our dairy farmers and we know there are many others out there doing some fantastic work, so these are really the cream of the crop. We've set the threshold very high, initially, and we will reassess it in time," he says.

"This is a pilot programme at this stage and we only have 50 farms who have achieved the required level to be involved, but it is a good way to acknowledge the work they put in and also to utilise our compliance resources where they most need to be."

Meanwhile, Arjan believes the key to his success is as simple as keeping on top of everything.

"You really have to be aware of stuff, fix things straight away and just know what is happening all of the time."

Arjan and Tracy have 119 hectares of their own land and lease a further 120 hectares, milking 300 cows. As an owner-operator with no staff, he believes it helps that he is always there on the ground and has full knowledge of every aspect of his operation. He's aware of all the requirements of his consent conditions and keeps abreast of any changing regulatory requirements.

"I love every bit of dairy farming, but you do always have to strive to do better in every aspect of the business.

"With the new regulations coming, it will be really difficult to increase cow numbers so you have to look at other ways to grow your business.

"Most importantly you have to have a positive attitude because why else would you keep doing it?"



Strong relationship at project's success

Getting improvements in Southland's rivers, lakes, streams and estuaries is one step closer after a major project was completed last year.

he project, which sets draft objectives for freshwater based on what is important to Southlanders, has attracted national attention for its innovative approach, being the first of its kind in the country.

It is the weaving together of both iwi and wider community values for freshwater that make it unique.

Creating this New Zealand-first was a core team of four from Environment Southland and Te Ao Marama Incorporated. Maria Bartlett, senior policy advisor at Te Ao Marama, and Karen Wilson, team leader science, strategy and investigations at Environment Southland lent their significant skills and experience to the project.

Maria spent the first half of her career with regional councils and the second half working within Ngãi Tahu. "I have a real passion for improving mana whenua experiences of Resource Management Act (RMA) practice, and strengthening relationships between local authorities and mana whenua," she says.

Originally from Motueka, Maria says what's been wonderful about arriving in Southland is finding a thriving relationship. "There are some really positive opportunities for mana whenua because of that, and actually for the region."

Karen is a groundwater specialist who has been with Environment Southland off and on for the last 20 years, with stints in Central Otago and the United States in between. She says the group was tasked with bringing together the values for freshwater into a single framework that allowed councillors and board members to endorse Southland's objectives, or goals.

"The National Policy Statement for Freshwater requires councils to follow a particular menu when it comes to delivering freshwater planning and water quality improvements," Karen says.

In Southland, these requirements are being delivered through the People, Water and Land programme. This is a partnership between Environment Southland and Te Ao Marama – the environmental arm of Ngāi Tahu ki Murihiku.



the heart of

Within the steps of the national policy statement there is room for each region to determine how it will fulfil the requirements. In Southland, this provided the opportunity to draw on both the community science analysis that had been done, and the iwi work. Overall the primary goal is to ensure hauora; the health and wellbeing of waterbodies, people and land in the region.

Maria explains, "Typically what happens in RMA processes is the environmental science will be sitting on one side and the mana whenua expressions will be sitting on the other, and they run along slightly different tracks never quite meeting. So it's very difficult for mana whenua to see the outcomes they're seeking represented [in consent and planning decisions]."

The approach in Southland started with a conversation. Maria: "We knew we had awesome material to work with. We had Environment Southland's environmental science and a body of work from mana whenua on indicators of health. We said, 'We should be able to do something with this – not sure this has been quite done this way before.'"

There were several challenges. The first, and possibly largest, was in learning how to talk to each other with their different knowledge bases and different ways of thinking and working.

"We put investment in upfront in understanding each other, getting a common language and always checking back. We drew a lot of pictures to help communicate our thoughts to each other and ultimately by the time we were working with the numbers and describing objectives, all of our foundation work just fed into that process," Maria says.

Karen says they weren't sure it could be done at the outset. "We were by no means certain that we would be able to bring the two world views together, but we did."

"We were by no means certain that we would be able to bring the two world views together, but we did."

KAREN WILSON

Both agree that the strength of the relationship that was already in place from years of partnering between Te Ao Marama and Environment Southland was key.

"Hopefully we've done this in a way that honours the work and relationship building that has taken place over many decades, which has allowed us to be in the privileged position to do this work successfully. We were definitely standing on many shoulders to get to this point," Karen says.

Maria says all the ingredients existed to enable this to happen. "I just remind people all the time how fortunate you all are that it was possible for these threads to come together because of the investment over many years. Southland was uniquely placed to be able to achieve something as special as this."

The team

As well as Karen and Maria, the core team also included Dr Jane Kitson and Ned Norton. Read more about Jane on pages 8 and 9, and read more about Ned and his role as co-science lead for the programme in our December 2020 issue of Envirosouth, available online, www.es.govt.nz.

Hauora

This is Southland's expression of Te Mana o te Wai. Essentially the word describes the state we want our water to be in – resilient, meaning it can take a few knocks but will be strong enough to bounce back.

Te Mana o te Wai

Te Mana o te Wai is an important concept for how water is managed and utilised in New Zealand. It recognises the fundamental importance of water in that protecting the health of freshwater protects the health and well-being of the wider environment. It is an approach that protects the Mauri (life-force) of the water.

People, Water and Land programme

The People, Water and Land programme is a partnership with Te Ao Marama Inc. (as the environmental arm of Ngāi Tahu ki Murihiku). It is about taking the next steps to improve Southland's water and land, and takes a 'mountains to the sea approach: ki uta ki tai'.

Mana whenua Indigenous people

◆ Karen Wilson, team leader science, strategy and investigations, Environment Southland (L) and Maria Bartlett, senior policy advisor, Te Ao Marama.



If we're looking to our past for future inspiration - kanakana (lamprey) are a good place to start.

he fact they've been around for more than 360 million years, survived four mass extinctions, and existed at the same time as dinosaurs, should give us pause to ponder what we can learn from them about adaptation.

Murihiku-based ecologist and environmental scientist, Dr Jane Kitson (Ngãi Tahu, Ngãti Mamoe, Waitaha), led the 2012 Ngã Pae o te Māramatanga (NPM) project on kanakana/lamprey and the use of harvest mātauranga to monitor population trends.

The unique and unusual kanakana, an ancient, boneless eel-like fish, with a sucker mouth, horny teeth and a rasping tongue, is one of many native fish species in need of increased protection measures in southern waterways. About 76% of our freshwater fish are either threatened with, or at risk of, extinction.

In July last year, Environment Southland was awarded \$385,000 from the Government's Jobs for Nature programme to identify, prioritise and remediate fish barriers in Southland's rivers and streams. Environment Southland will contribute \$115,000 from existing biodiversity budgets over five years to the project.

Jane, who has a strong background in ecology and traditional ecological knowledge research, is working with Te Ao Marama Incorporated(TAMI), the environmental arm of Ngãi Tahu ki Murihiku. TAMI is a key partner in the fish passage project.

"Native fish species are connected to us in so many ways. They are part of our identity. It's actually about who we are." Just look at whitebaiting, and its importance to many people in the south, she says.

Through her company, Kitson Consulting, Jane works at the interface of mātauranga Māori and science, assisting organisations to develop and apply enduring environmental solutions.

Mātauranga Māori is an holistic perspective encompassing all aspects of knowledge and seeks to understand the relationships between all component parts and their interconnections to gain an understanding of the whole system.

Jane says it's important to reiterate that although mātauranga has been around for a very long time, it is also a dynamic and evolving knowledge system based on its own principles and frameworks.

The fish passage project is a really positive step because there are some easy wins that can be achieved with the identification, prioritisation and implementation of fish passage around Southland.

She says people are adapting their thinking around human interactions with our environment, and this increased understanding bodes well for the challenges we face as a community.

Environment Southland biosecurity and biodiversity manager Ali Meade says the project has a target of restoring fish passage by removing 250 barriers in streams and tributaries across the region by mid 2025.

It aims to retrofit fish ladders, baffles, spat rope to culverts, or use rocks and pools to raise water levels, to remove in-stream barriers to restore fish passage and increase the sustainability of indigenous fish populations.

"With more passages, fish will be able to move freely between inland streams and the sea, which will help boost numbers of these amazing native species," says Ali. "With more passages, fish will be able to move freely between inland streams and the sea, which will help boost numbers of these amazing native species."

ALI MEADE

Manmade structures in streams such as culverts can disrupt this passage and create a barrier for fish travelling between inland streams and coastal waterways.

"Between 2015 and 2017 our science team mapped over 80 fish barriers within the Southland roading network, and we know that there are also a number of barriers to fish movement on private land in Southland."

Fish passage is mandatory under the new freshwater regulations. The council is working closely with Te Ao Marama to align both iwi and council priority areas, and is also working closely with landowners and catchment groups within the programme.

Identifying the right spots for fish passages, and prioritising installation points, including linking passages, were important initial aspects of the work, Ali says.

Native fish species supported through the work include kanakana, ōkopu, īnanga, common bully, redfin bully, bluegill bully, torrentfish, banded Kokopu, kōaro, and longfin eel and shortfin eel.

Ali says solutions will be tailored to each individual barrier taking into account the native species, stream connections, ecosystem health, and impacts of exotic species.

Murihiku-based ecologist and environmental scientist, Dr Jane Kitson with kanakana (lamprey) in her net.

Surfing gives insights into coastal life

Surfer Marama Pou is as much a part of the beach at Riverton as the rocks, the colourful changing sheds and the sea itself.

arama is in the water whenever she gets a chance. She has been surfing since her father popped her on a board with him at Mitchells Bay when she was just two. Part of a legendary surfing family, she's now passed the surfie gene on to her daughter Keita, 12, and is helping women across the region get into the water, as Southland ambassador for the Aotearoa Women's Surfing Association.

"I started competitively surfing when I was about 15-16 and I was a rep for the Southland and Otago region," she says.

"Every two or three years my parents would pull us out of school for a couple of months and throw us all in the van and that was our schooling. We drove around New Zealand, up the East Coast and down the West Coast learning where we were from and surfing and skateboarding."

Unsurprisingly, looking after our coastline is a priority for Marama and her family.

"I grew up with an appreciation for what's above the water and under the water... when I was a kid we learned how to snorkel and dive under the water and forage for seafood and fish and all that kind of stuff. So, you kind of learn to respect the environment a bit more because you know what's going on underneath there," she says.

Being in, around and on the water so much, she's witnessing changes to both the coast and the marine habitat.

"During Covid-19 I walked the beach every day because it was the only thing we could do because we weren't allowed to surf," she says.

"I took photos every so often and actually captured some of the erosion just in Taramea Bay."

Bigger tides also drag sand away or expose formations beneath the sea, which changes the way waves break, she says.

Pods of Hector's dolphins now make regular appearances along the coastline, and Orca are sometimes seen at certain times of the year from Colac Bay.

"You can see other whales and other marine life that you never used to see, so it says a lot about the environment, but it also says it's the reason why we should look after it."

Marama credits surfing and the sea for helping her recover from a potentially devastating stroke just four years ago.

"You wouldn't be able to tell now," she says. "My whole right side collapsed and I was temporarily paralysed.

"I didn't have any rehabilitation so surfing was one thing that helped me get back on my feet again."

"Surfing is just about having fun. If you take all your worries to the sea then why are you there? It's just a way of letting go of everything and not having to worry. Living in the moment. Being a part of the sea."



New role to help

Working with people and passing on knowledge is something that well and truly resonates with Mike Trent.

n his new role as Environment Southland principal advisor, Māori, Mike sees an opportunity to help steer Environment Southland in the right direction and broaden the knowledge of staff and councillors, with a particular emphasis on Te Ao Māori me tōna tirohanga (the Māori world and perspective).

"I think 'Kaiurungi' seems to be a pretty good description of what I do. Urungi as a verb means to steer, generally a waka (canoe, conveyance), and helps to navigate the waters – basically keeping the waka on track like a rudder."

The role is a natural next step for Mike, as working with iwi and tangata whenua has been a large part of his career.

He spent many years working in the fisheries sector for the Ministry for Primary Industries. There he worked alongside nominated tangata tiaki/kaitiaki and the four Ngãi Tahu ki Murihiku Rūnanga as well as whānau groups.

Mike joined Environment Southland as a senior investigator in the compliance team in 2017. Soon after, he began facilitating a regular weekly te reo and tikanga session with his colleagues to introduce and promote Te Ao Māori to compliance staff, and also to aid them in their work and personal growth.

In 2019, Mike was seconded into an iwi liaison role, which meant working between and supporting both Environment Southland and Te Ao Marama Incorporated (TAMI), which is responsible for mana whenua interests with regard to resource management, along with other aspects related to local government in Southland.

"Helping people gain a bit more of an understanding and perspective in relation to Te Ao Māori can only be beneficial, especially in local government. There are always people who will show some hesitancy, for various reasons, but generally, nothing is particularly insurmountable if parties don't want it to be – it's about understanding what the barrier is and finding a way to get past it together."



▲ Mike Trent, Environment Southland's principal advisor, Māori is helping to share knowledge about Te Ao Māori in Southland.

steer the waka

The principal advisor, Māori role is about supporting staff to understand the responsibilities, considerations and obligations towards Māori in legislation such as the Resource Management Act and the Local Government Act. But more broadly, Mike wants to make sure knowledge and understanding of Te Ao Māori is embedded into the organisation.

"I'm not here to be the 'Māori face' of Environment Southland. What I'm here to do is to act more as a guide for staff, executive team and councillors so that te taha Māori (Maori aspect) is woven into the fabric of the organisation as a natural process.

"In order to move forward, we must be open, honest and have respect and understanding for each other's culture."

MIKE TRENT

"In order to move forward, we must be open, honest and have respect and understanding for each other's culture. Māori have had to do that to live in the society that we have. To make that partnership real, it makes sense that we need to have the same effort for understanding, respect, openness and honesty for Māori culture."

Dean Whaanga, Kaupapa Taiao Manager at TAMI, says Environment Southland and Ngāi Tahu ki Murihiku have been working together for more than 20 years. The principal advisor, Māori role shows a maturing and continued trust in that relationship.

"The Treaty of Waitangi is about partnership; we should all be clear about what this means. This role will allow the team at Environment Southland to strengthen their cultural understanding and create more opportunities for us to work together.

"Mike brings a strong mātauranga Māori component to the role. Mike will be able to korero (speak) with the team and create a safe yet strong culture, while building confidence. He'll be able to support staff at Environment Southland to identify the opportunities that exist to work with iwi.

"Tena koe Mike, he mihi nui, he mahitahi, mauri ora te rangatira."

Natural curiosity drives Mike to learn more about a wide and diverse range of subjects. He is often reading, researching and studying topics he's interested in. On his days off, you'll find him in his tunnel houses at Gorge Road, where his family hydroponically grow watercress and strawberries along with a variety of other vegetables and fruit, often experimenting with new ways to grow.

He started with one tunnel house, adding others over time and now it's turned into a small business, which frequently sells out of its Southland-famous sun-ripened strawberries.

He's keen to encourage others to join him and learn more about the world around them.

"I don't profess to be anything special and I don't see myself as that. Sharing knowledge is my way to contribute in a positive way to the organisation and in turn, the wider community."

About Mike

Ko Ngātokimatawhaorua te waka

Ko Nukutawhiti te tangata

Ko Rotokakahi te awa Ko Hinerakei te maunga Ko Ohaki te marae Ko Te Urunga Mou tonu rāua ko Maru O Te Huia ngā Whare Hui,

Ko Te Puna O Te Ora te Whare Kai

Ko Te Uri o Tai te Hapu Ko Ngapuhi, Ko Te Rarawa, Ko Te Aupōuri ngā iwi

Southland the big SIT course

Connections between Environment Southland and the Southern Institute of Technology's (SIT) School of Environmental Management are proving a winner with graduating students gaining key regional council roles.

he wider region is also benefitting with students staying in the south after finishing their SIT studies.

SIT School of Environmental Management programme manager Dr Christine Liang says Environment Southland plays several integral roles in the success of the school's courses from staff involvement as advisory board members, course content advice and guidance, guest lectures, field trips, staff research, and the provision of summer student internships.

SIT offers a Bachelor of Environmental Management and a Graduate Diploma in Environmental Management.

The advisory board helps her team stay current and aware of the latest industry changes and trends.

"It's so valuable, because as academics we're mostly in the classroom," Christine says.

The summer internships are hugely beneficial to students and the reputation of the school, she says.

"We're really honoured to have that partnership."

SIT students compete with the brightest minds in the country studying the same area and more than hold their own, Christine says.

It's crucial to have regional council staff reinforcing material taught in the classroom.

She says Environment Southland is also extremly supportive with resources and staff time, and the connections also create fantastic networking opportunities.



winner from

A great example of this was when two Bachelor of Environmental Management Year 3 students, Brennan Mair and Xinxin Zhang, were selected to present at the 'Weathering the Storm' conference in Invercargill in December 2019. This highlighted the quality research taking place locally at undergraduate level, in SIT's Bachelor of Environmental Management programme.

"It was great they had the backing of Environment Southland for that conference and for showcasing their work," Christine says.

School of Environmental Management Distance learning facilitator Dr Tapuwa Marapara (who has also spent time at Environment Southland) supervised Brennan's research, which involved building a water sampling device that can be attached to a drone for use in freshwater locations where extracting the water sample is difficult.

Tapuwa says the connections between the two organisations help ensure students are prepared for what's needed in the industry.

"Creation of farm environment plans is an example of an area of study that is integrated into the course, as they are becoming more and more important as a tool to assist with farm operation."

It's great to have people from the regional council available to assist students, he says.

"They are great role models and give the students a first-hand perspective on what's needed at each level. We do have quite a few students who've gone on to full employment with Environment Southland."

Environment Southland acting consents manager Bruce Halligan says it's a real asset having an environmental management school based in Southland as it's a good fit for the work the regional council and other environment-focused organisations undertake.

"The course is tailored towards the local job market, meaning people are coming through and getting into jobs and staying local, spending money, and buying houses."

That's a real win-win for Southland as retaining people after studying is one of the major goals of attracting students south for tertiary education, he says.

"It's a really positive story."

One of the course graduates who now works at Environment Southland is Sol Kim. He is a consents officer.

"I have to be familiar with a wide range of topics to ensure that I can competently assess a broad range of applications from various industries," he says.

His studies at SIT provided a strong foundation for further learning, he says.

"Also, a lot of the staff here are SIT graduates so I was able to easily form links on a personal, social front."



▲ Environment Southland consents officer Sol Kim at the Waikiwi Stream.

◆ SIT environmental management students practice water monitoring on the Aparima River – Anita Osborne, Brennan Mair, Marcus Tūwairua, Rhett Tran, Nancy Zhao with Environment Southland senior environmental technical officer, Stacey Stuart and team leader monitoring and evaluation, Darren May.

Taking a wider view to river catchments

More people will soon be able to advise the council about the river catchments where they live and work – and that will be an interesting exercise, says Waituna Catchment Liaison Committee chairman Ewen Pirie.

he Catchment Liaison Committees have a new terms of reference that provide for greater scope, more flexibility and the potential to advise the council on catchment-scale interventions.

They replace River Liaison Committees and will look beyond the river works, land drainage, erosion control and flood management bordering waterways they have traditionally focused on. Their advice can now extend to emerging issues, including biodiversity, cultural values, water quality and quantity, ecological health and soil health.

Ewen, who farms at Oteramika, says Waituna is reasonably, "new on the block", as far as liaison committees go.

"All the other liaison committees on the main rivers have been there for many years," he says.

"We have only just come into being in the last few years and our involvement at this point in time has only really been on a maintenance cleaning regime every 3-4 years within the main channel and we don't work the whole catchment."

River Liaison Committees were established in 1979 in conjunction with Federated Farmers. Today, there are eight Catchment Liaison Committees – Te Anau Basin, Oreti, Mataura, Makarewa, Waiau, Aparima, Waimatuku and Waituna.

The committees are made up of representatives, which are, ideally, evenly spread throughout each river catchment and are elected annually by their communities.

They advise and assist Environment Southland in the development of annual maintenance works programmes and budgets, and they provide an important local contact for each river community regarding special river and land drainage management issues.

Environment Southland land sustainability officer Sam Dixon says liaison committees were already wanting and trying to do more. Broadening their scope gives them that and it also aligns well with the whole-of-catchment approach being taken by Environment Southland.

"Their scope encompasses the ability to advise council on the entirety of the catchment, the entire physical environment. Land and water is very important and we know it's interconnected. This means land issues can also be talked about.

"We know a lot of our compounding issues aren't coming from the people who border the river. So we need to ensure those further up the catchments are at the table to talk about the issues and possible solutions," says Sam.

"We will also need to take a good look at how the work can be funded for the future in a way that is fair and transparent to everyone."

Ewen believes that probably one of the biggest issues is that people don't see past their own back door as far as water is concerned.

"Certainly in the Waituna, a lot of the issues that we've got are in the very lower reaches of the Waituna and the people that live in the headwaters of it, until quite recently, didn't even realise where their water went or that they were part of Waituna."

He hopes people from throughout the catchment will start to get involved.

"We've [Waituna Catchment Liaison Committee] floated the idea of a maintenance bank restabilisation rate, but we've had very little feedback from within the catchment at this stage," says Ewen.

"It's all going to be an interesting exercise as to where things go over the next few years."



■ Waituna Catchment Liaison Committee chairman Ewen Pirie on the banks of the Waituna Creek, which runs through his Oteramika farm.

Long-term Plan Yoursay Te Mahere Wā-Roa

2021-2031

Our Long-term Plan sets the scene for the next ten years. This is also an opportunity for everybody to provide feedback on our plans. There will be a variety of ways to do this and we will let you know about these soon.

MAY

Consultation

This is your opportunity to find out more about our Long-term Plan and provide feedback (submissions) on the proposals included in it.

Council hears submissions

Those who have indicated they wish to speak to council about their submissions are invited to do this.

Deliberations

Councillors will consider all the feedback received and make decisions on the final Long-term Plan.

Extraordinary council meeting

Council will adopt the Long-term Plan.

Check out our website to stay up-todate with the Long-term Plan process.

www.es.govt.nz



HAVE

Updates



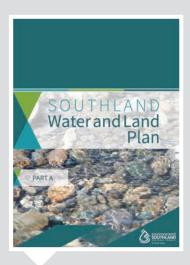
Outdoor burning

As we head into the cooler months, a reminder that outdoor burning is prohibited within the Gore and Invercargill airsheds over this period.

All outdoor burning, except for leisure activities like barbecues, braziers and hangi, is prohibited between 1 May and 31 August.

Winter is the time when our air quality is at its worst. Cold, still air and smoke from home heating devices means pollution lingers and impacts on the health of all Southlanders, particularly our most vulnerable (our children and elderly people).

Outside the airshed, outdoor burning is permitted, but if you are considering burning, make sure you are aware of the rules and do not create a smoke nuisance. It is also important to check the current fire status of the region with Fire and Emergency New Zealand.



Plan update

The proposed Southland Water and Land Plan has become partially operative from 1 March 2021.

Appeals to the objectives, except objective 16, of the proposed plan have been resolved through the Environment Court, and the court has now directed the council to make changes to this section of the plan.

Several policies, as required by the National Policy Statement for Freshwater Management 2020, have also been included in the changes to the plan. These relate to natural inland wetlands, rivers and fish passage.

Further aspects of the plan remain under appeal and are going through the Environment Court process.



Environment Awards

This year the Environment Southland Community Awards celebrate 25 years of recognising Southland's environmental champions.

Nominations for the awards open on 21 June and there are multiple categories to enter including rural, business and community. You can choose to nominate yourself or others who you know are doing great things for Southland's environment.

As well as cash prizes to be won in each category, the awards provide a wonderful opportunity to showcase the environmental work and commitment of people in our region.

Keep an eye on our Facebook page and website for more information and details on how to nominate yourself or someone else.

Time to think about...

MAY

MUSTELIDS & RATS - While getting the duck pond ready for shooting season, consider setting and checking traps for mustelids and rats.



CHECK, CLEAN, DRY - When moving your boat between waterways this duck shooting season, remember to Check, Clean and Dry all your gear to ensure you don't spread any unwanted freshwater pests.



BETWEEN WATERWAYS

ROUGH HORSETAIL - Now's a good time to spot and control rough horsetail. This weed can grow up to 2m tall and invade wet areas, causing flooding.



M JUNE

RABBITS – Winter is the most effective time for rabbit control before they start breeding again in spring. Check our online Southland Pest Hub for advice, or call the biosecurity team.



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/eef for more information on how to apply.



III JULY

WALLABIES – The animals, not the rugby type, are capable of causing huge impacts on Southland's biodiversity and economy if they get established here. If you happen to see or suspect a wallaby in Southland, report it to us immediately.

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 online Southland Pest Hub or call the biosecurity team for advice.

SOUTHLAND PEST HUB

To find out more about pest animals and weeds in Southland, including control advice and the latest rules, visit our online Southland Pest Hub at www.pesthub.es.govt.nz. Or call the biosecurity team on 0800 76 88 45.

On the farm



By KARL ERIKSON Principal land sustainability officer

Our land sustainability officers, in conjunction with our farm plan service, can now offer advice to farmers about the things they can do to reduce their greenhouse gas (GHG) emissions.

Land sustainability services have tended to focus on soil conservation and more recently, on good management practices that look to improve fresh water quality and biodiversity.

Services for specific and practical land management advice on greenhouse gas mitigation, like tree planting, had usually been offered with an intention to improve water quality or soil erosion processes.

So, what may be some options to reduce greenhouse gas emissions (with benefits for water quality and biodiversity) on Southland farms?

- Riparian management plans tree planting to capture carbon and reduce run off of contaminants entering water
- Shelter belt tree planting plans tree planting to capture carbon and reduce soil erosion
- Farm woodlot/forestry plans tree planting to capture carbon with water quality benefits
- Overseer nutrient budget advice GHG profiles within Overseer can be explained to farm owners
- Advice on nitrogen fertiliser use to ensure efficiencies i.e. timing and application amounts to reduce denitrification and production of nitrous oxide gas (a powerful GHG) and leaching of nitrate below the root zone
- •` Advice to improve soil organic matter, and therefore, carbon stores in soil.

Now is the time to plan for how greenhouse gas emissions can be reduced on your farm and Environment Southland's land sustainability staff are here to help.

Out in the field



Coastal and marine environmental scientist Sorrel O'Connell-Milne and harbourmaster Lyndon Cleaver on board the Kewa earlier this year. As part of a trip to Rakiura Stewart Island, staff undertook training using side-scan sonar and drop camera images to assess benthic (seabed) habitats in Southland.



↑ Environmental education facilitator Josh Sullivan shows children some of the fascinating macroinvertebrates found in the Mataura River during the On the Fly Mataura River Festival in February.



↑ Biosecurity officer Becky Goodsell is checking the effectiveness of weed control on the pest plant buddleia at The Divide in Te Anau.



