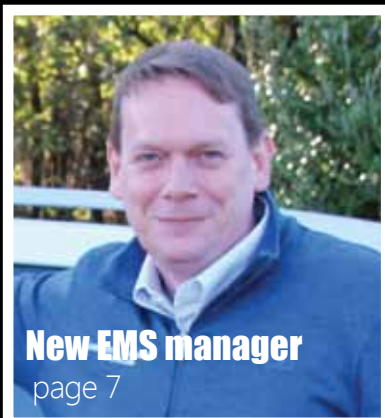




# Enviro South

AUGUST 2015



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**environment  
SOUTHLAND**  
*Te Taiao Tonga*

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## Envirosouth

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

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Cover – Malcolm and Margaret MacKenzie won the Councillors' Special Award for their commitment to the environment, including work on their East Limehills farm and the many community groups they are part of.

# Rewarding and engaging

**I**t never ceases to amaze me how many great people there are here in Southland doing wonderful work and making a difference to our environment. Every year we showcase some of them at our annual Southland Environment Awards ceremony.

We recently held our 20th awards ceremony; quite a milestone, and things have changed a bit over the years. At our first one back in 1996 there was one award and about eight nominees, this year we had 33 nominees across seven categories that include individuals, organisations, farming and business.

Perceptions of environmental practice have changed too, from a 'nice to do' to something the majority of us recognise as being integral to the regional economy and our quality of life.

What hasn't changed though, is the commitment, hard work and innovation demonstrated by nominees. They work hard, often flying well under the radar and not seeking any recognition. These people are Southland's environmental champions; showing leadership in our communities, not because they have to, but because they want to and we are proud to acknowledge them.

In recent weeks we have been hosting drop-in sessions in communities around the region to get people's views on how we can maintain water quality. Southland's water is not good in some places and we are looking for solutions to halt any further decline.

We know that by improving some practices on the land and on-farm we can make a difference, but we need input from communities about what is practical and we are keen to hear about any ideas that you believe will work.

The process and issues are all outlined in our engagement document, *Towards a new plan – water and land*, which includes questions and space for your ideas and feedback. It's available on our website along with other supporting information and the timetable for drop-in sessions.



Ali Timms – Chairman,  
Environment Southland

I urge you to take a look and when you're ready, to send in your views and ideas – the closing date is 31 October. In the meantime, come along to one of our drop-in sessions where you can talk with councillors and staff about your ideas and views.

Eventually the Council will notify a water and land plan. Its aim will be to maintain water quality while we do all the research – science, economic, social, cultural – that will feed into the limit setting process (for discharges and abstractions) required by the government.

Water quality is our biggest priority and the Council is committed to taking the time to get it right and to finding Southland solutions. It's an approach that Southlanders endorsed, by and large, through our consultation on Southland's Big 3 (water, air, biodiversity) for our Long-term Plan 2015-2025.

# Changes ahead for everybody

It is very easy to write off water quality issues as solely a rural problem, but the truth is they're not. Solutions to maintain and improve Southland's water quality will affect all of us in some way.

People and businesses in urban areas will, in time, also be affected by changes currently being signalled through Environment Southland's *Water and Land 2020 & Beyond* project.

Environment Southland has been discussing discharges from wastewater treatment facilities, stormwater networks and landfills with city and district councils. Managing this is particularly challenging for Invercargill, where both the sewage treatment plant and a former landfill sit alongside the New River Estuary.

Through their infrastructure strategies, all Southland councils have signalled the key areas where upgrades to wastewater and stormwater networks will be required. Currently, the city and district councils hold 17 wastewater discharge consents; nine of these are discharges to water. These discharges have to meet strict guidelines and are monitored regularly.

It is important that the wastewater and stormwater networks are kept in good working order because wastewater

discharges can contribute large amounts of nitrogen and phosphorus to waterways.

As a minimum, councils and urban-based businesses must operate good management practice if we are to maintain and improve water quality.

We know industrial and residential wastewater discharges to waterways contribute an estimated total nitrogen load of less than 10% and an estimated total phosphorus load of less than 25%. While the bulk of the nitrogen and phosphorus contamination comes from other sources, there's no denying that discharges from urban centres are also affecting water quality, and ultimately our ability to swim, fish or gather kai in some places.

Urban gutters and drains are connected to stormwater networks that are designed to accommodate rainfall, helping it to quickly drain into our rivers and streams to avoid flooding.

Stormwater networks aren't connected to treatment facilities – so if water entering these networks contains sewage, oil, grease,

or other waste substances (even soap from car washing), they can negatively affect water quality, fish and other animal and plant life in the and around a river or stream. It might not look or smell good either.

## What do we mean?

### **Contaminants**

*There are four contaminants associated with human activity that affect water quality; nitrogen, phosphorus, sediment and bacteria (E.coli). Nitrogen and phosphorus are necessary nutrients for farm productivity, however they cause contamination when found in excessive amounts.*

### **Load**

*The total amount of a contaminant transported to a river, lake or estuary.*

# Managing water in Southland

**WATER AND LAND**  
2020 & BEYOND

## What you need to know

**W**e've reached an important stage in our *Water and Land 2020 & Beyond* project – here's where we are at so far.

### *What is Water and Land 2020 & Beyond?*

The *Water and Land 2020 & Beyond* project is a partnership project with Ngāi Tahu ki Murihiku to address Southland's water quality and quantity issues. Southland has variable water quality; we have areas with good water quality, but we also have places where water quality is not so good and declining.

Our approach to managing Southland's water and meeting the government's requirement to set catchment limits – for discharges to and abstractions from water bodies – is different to other areas. We are taking the time to learn more about our region: engaging in a comprehensive three-year research programme and talking to communities to find Southland-specific solutions.

### *How will it roll out?*

The *Water and Land 2020 & Beyond* project is a three-phase project. Phase 1 has been about encouraging the adoption of good on-farm management practices and this work will continue throughout the project.

We're now at an important stage in Phase 2: the development of a Water and Land Plan for Southland. Its aim is to halt any further decline in water quality. The idea is that it will simplify existing rules, identify permitted (allowed) activities and introduce some new rules – mostly around good on-farm management practices.

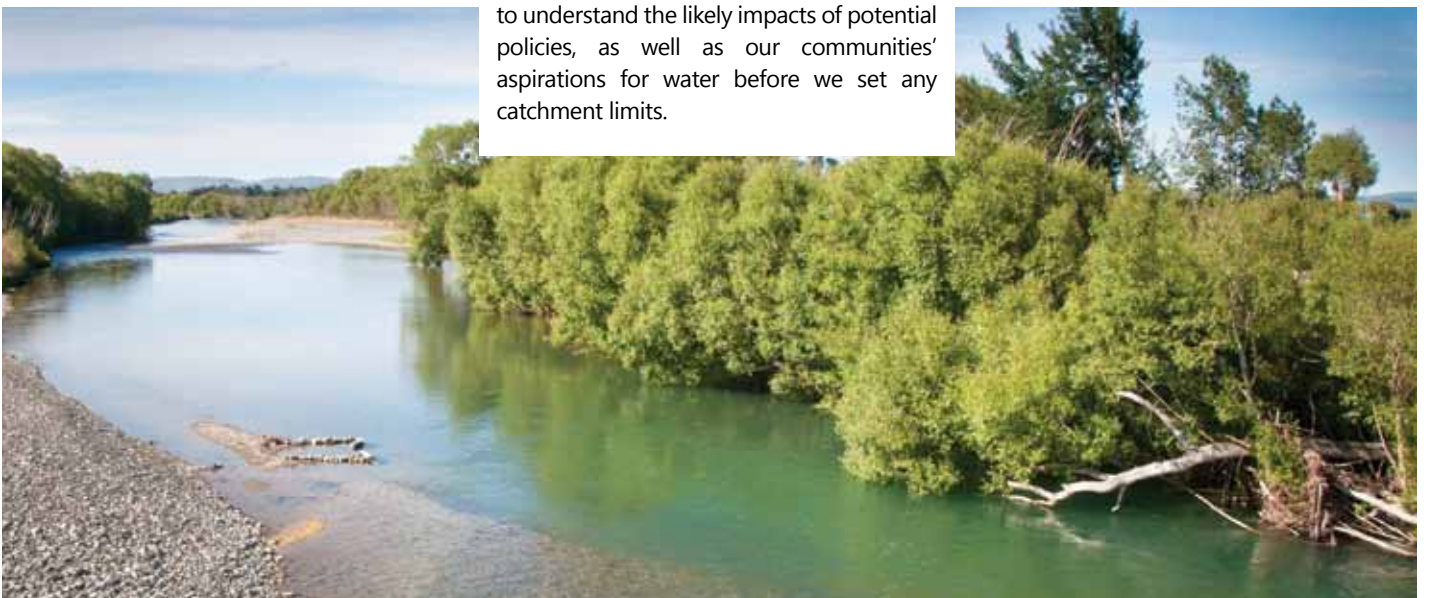
At the same time, we're also working on the research for Phase 3, which will focus on the setting of catchment limits.

Phase 3 will bring together all the research we are undertaking to help us understand our region, through science, economic, social and cultural work streams. We want to understand the likely impacts of potential policies, as well as our communities' aspirations for water before we set any catchment limits.

### *Why are we doing this work?*

We know Southland has water quality and quantity issues which, as a regional council, are our responsibility to manage. As well, the government has formed a National Policy Statement for Freshwater Management, which requires regional councils to maintain or improve overall water quality within a region, ultimately setting limits on discharges to and abstractions from our water bodies.

Regional councils must assess the quality of their waterways, establish objectives to improve or maintain those waterways and work with the community to find ways to work together to ensure we are able to achieve those objectives.



## Where are we at now?

An engagement document, *Towards a new plan - water and land*, has just been released. It outlines the Council's thinking and highlights some key changes that could improve water quality.

Our suggested proposals are based on the best science available, but we need to know from you whether these ideas are practical and will work on the ground; or whether you have some different solutions for improving water quality.

We're holding a number of drop-in sessions across the region from now until October, where you can come along, ask questions about the proposals and discuss your views on them.

Check our website for dates and locations near you, [www.es.govt.nz](http://www.es.govt.nz).

## How does this fit into the catchment limit setting process?

The Water and Land Plan is phase two of the *Water and Land 2020 & Beyond* project. This plan will be the base document for where catchment limits will eventually sit.

For now, programmes like the Southland Economic Project and the science programme will be breaking new ground to provide us with Southland-specific information on our natural systems and the economic impacts on people and businesses. We will then be in a better position to understand how limits could be applied and what impact they might have on our region.

This work will help us test 'what-if' scenarios. For example, if the community places a high value on collecting shellfish in their local estuary, we need to know what level of water quality is acceptable to achieve that and what effect this might have on the urban and rural areas, plus what it could mean for our schools, healthcare providers and way of life. Understanding the impacts of these potential decisions is incredibly important before determining any policy to achieve limits

## Have your say

*It's easy to tell us your views on our ideas for managing water in Southland.*

*Come along to any of the drop-in sessions (dates and venues are available on our website [www.es.govt.nz](http://www.es.govt.nz)) or read the engagement document online and complete the questionnaire.*

## Stay up-to-date

*To stay up-to-date with the Water and Land 2020 & Beyond project, subscribe to our e-newsletter.*

*Visit [www.es.govt.nz](http://www.es.govt.nz) and sign up.*

## WATER AND LAND PLAN TIMEFRAME

SEEKING YOUR VIEWS

NOW – OCTOBER 2015

PROPOSED WATER AND LAND PLAN CONSIDERED

EARLY 2016

PROPOSED WATER AND LAND PLAN NOTIFIED AND FORMAL SUBMISSION PERIOD BEGINS

EARLY 2016

FORMAL SUBMISSION PERIOD CLOSES

MID 2016

HEARINGS AND FORMAL ADOPTION OF THE WATER AND LAND PLAN

LATE 2016



# New manager for EMERGENCY MANAGEMENT SOUTHLAND

## What is Emergency Management Southland?

*Emergency Management Southland is a stand-alone entity who, on behalf of the four councils in Southland, delivers their responsibilities for Civil Defence Emergency Management under the Civil Defence Emergency Management Act 2002 to the Southland community.*

*Emergency Management Southland operates from the Emergency Operations Centre at Environment Southland.*

A degree in aeronautical engineering and an early career at Rolls Royce is not the usual background for an emergency management controller, but newly appointed Englishman **Angus McKay** brings all that and much more.

Angus has recently moved south from Auckland, ready to undertake the challenge as manager/group controller for Emergency Management Southland.

Born in Sheffield, England, he had a strong interest in flying and decided an aeronautical engineering degree was the way to go – once there, he discovered it was really just maths, maths and more maths.

Starting his career in the aerospace division of Rolls Royce, it was only a few years before he was looking for something more challenging and he joined the Police force.

“I was young and keen and the Police seemed like an exciting place to be.”

Based in Manchester, he worked as a constable on the beat, before being promoted and redeployed to a dangerous and crime-filled area of the city.

“For the first six months, there was a shooting every day and it was a pretty scary place. The only way to get out was to transfer to a different unit, so I moved into the firearms section and that felt more safe than where I had been.”

In 2003, the New Zealand Police were recruiting from the UK when Angus, his wife Denise and their two children decided a fresh start on the other side of the world might be in order.

Originally deployed in Auckland, Angus was expecting the worst, based on the information provided by his colleagues, but he discovered it was nothing compared to his previous position in the UK.

Before long he was the Sergeant in charge at the Wellsford Police Station, a real highlight of his career, but once he turned 40, he decided it was time to reassess his future.

“I realised at 40 that I was too old to be running around after bad people. Like many who leave the Police force, I had lots of experience but few qualifications, so I set up my own security company.”

After a few years, he sold the company and was looking for his next challenge, when a job in Civil Defence in Auckland came up.

Starting as a duty officer, Angus made his mark as head of operations and was one of the alternate controllers for the area.

During his time, he faced some significant and varied emergencies, including the Great Barrier storms and the Penrose power outage.

More recently he was involved in the fruit fly event and major lockdown that accompanied it, and this was an opportunity to be involved from a different perspective, in a support role.

He always knew 2015 would be a year of change, as the youngest of his two children moved on to university, and the opportunity to take on the manager/group controller role in Southland was too tempting to ignore.

With big shoes to fill, Angus is looking forward to expanding on the “incredible work” done by previous manager Neil Cruickshank, who was held in high regard at a national level for his emergency management work.

“Neil is part of the reason this job was so attractive, his work nationally is well recognised.”

Angus sees getting to know the large Southland area as his first big challenge and is really looking forward to getting out and about, talking to the people.

With Civil Defence moving from its traditional role into a more comprehensive emergency management focus, he’s excited about the work ahead.

Ongoing projects looking at landslips in Milford Sound and identifying the hazards across the region and ways in which they can be mitigated are top of the agenda. And he’s looking forward to being out and about more than he was in Auckland.

“It’s really all about the boots on the ground, the talking to people.”

**Left: New Emergency Management Southland manager Angus McKay.**

# UPDATES

## Lamprey/kanakana need your help

Lamprey/kanakana are the oldest animals in New Zealand, predating the dinosaurs, and considered a taonga (treasure) by Ngāi Tahu. Their migration back into Southland rivers is a special natural phenomenon which is largely unseen elsewhere in New Zealand.

Very little is known about them, but we do know they're in trouble. Their numbers have been decreasing and since 2011. They have been afflicted with an unknown disease, termed 'Lamprey Reddening Syndrome', with symptoms of haemorrhaging (red markings on skin, fins, along the body and eyes), which usually kills the infected fish.

Monitoring is currently underway and your help is needed. If you encounter kanakana, please send in your sightings (with location, numbers, and whether it has signs of LRS or not) to:

text/call 0275247864,  
email jane@kitsonconsulting.co.nz, or complete the online survey at [www.facebook.com/NZlamprey](http://www.facebook.com/NZlamprey)



## Have you signed up?

Have you signed up to Emergency Management Southland's text alert service yet?

It's as simple as texting **START** to **219**. Then you'll be all set up to receive texts alerting you to emergencies such as extreme weather warnings, earthquakes and severe floods.

As well, the messages will direct you to further information.

A standard text charge will apply to the initial sign-up text, but then texts are free to receive and you will only be charged if you choose to reply to them.

Alert information will continue to be provided on the Civil Defence website and Facebook pages and when appropriate, emergency information will be broadcast on radio stations.

Visit [www.civildefencesouthland.govt.nz](http://www.civildefencesouthland.govt.nz) for more details or give the Emergency Management Southland team a call on 03 211 5115.



## Effluent dump proves its worth

The stock truck effluent disposal site at Five Rivers has been well utilised since its opening, with approximately 90,000 litres of effluent removed over a busy three-week period around gypsy day, and another busy time anticipated as stock are returned from their winter grazing.

Environment Southland senior policy planner (transport) Russell Hawkes says use of the site has been impressive and the particularly high volume over the gypsy day period indicates it is ideally located in terms of stock movement.

For the first 12 months, the effluent is being transported back to the Invercargill Wastewater Treatment Plant, so the periods of maximum use and associated quantities can be monitored. Once these are known, alternative maintenance options will be investigated.

## Roading projects approved

The recently approved National Land Transport Programme includes support for a number of roading projects in the Southland region.

Environment Southland senior policy planner (transport) Russell Hawkes says several projects which were part of the Otago Southland Regional Land Transport Plans have now been approved under the national programme.

Projects include the Curio Bay-Haldane Road, Pyramid Bridge, the Edendale Bypass on State Highway 1 and a number of other state highway safety related works.

"This was the first time the Otago and Southland Regional Transport Committees had joined together and one of the purposes was to have a stronger voice at a national level.

"It's pleasing to see that a number of projects supported by the committees have been approved."



# SOUTHLAND ENVIRONMENT AWARDS

20  
Years!

This year we celebrated the 20th anniversary of the Environment Awards. Highly acclaimed guest speaker Dame Margaret Bazley impressed guests with her knowledge and experience. She spoke about the importance of working with the community to improve water quality. Awarded a Dame Companion of the New Zealand Order of Merit in 1999, Dame Margaret has a long history as a senior public servant and was awarded the Sir Peter Blake medal in 2011.

## Councillors' Special Award Making their mark on the environment

Doing the right thing for the environment has been at the forefront of Malcolm MacKenzie's mind during his 65 years of farming at East Limehills.

As winners of the Councillors' Special Award, Malcolm and his wife Margaret have been recognised for their lifetime commitment to running a productive farm where the environmental outcome is taken into account with every decision made.

Dating back to 1900, the 193 hectare sheep farm was originally started by Malcolm's grandfather and it has seen many changes and developments over the generations, while still retaining much of its natural heritage.

Excellent riparian fencing and plantings, top stock management and using environmentally friendly fertilisers wherever possible are just a few of the things Malcolm and Margaret focus their attention on.

The property features a large peat bog which has a QEII covenant and Malcolm has recently constructed a substantial wetland along the eastern side of this to help increase biodiversity.

There is a second remnant indigenous forest QEII block and Malcolm's contribution to the environment doesn't stop at his farm boundaries.

Committed to leaving something for generations of the future, Malcolm is involved with a number of organisations, including the Wastebusters Trust and sharing his knowledge by hosting WWOOFers (Willing Workers on Organic Farms) from around the world.

He fills in his limited spare time growing large numbers of indigenous plants for community groups and propagating trees for Robyn and Robert Guyton's heritage tree project.

In a quiet, unassuming manner, Malcolm and Margaret are making their mark on the environment in a positive way and the benefits of their work will continue long into the future.

Left – Malcolm and Margaret MacKenzie



sponsored by *Environment Southland Councillors*



# Southland Environment Awards

## Awards night – Wednesday 5 August



Riverton Primary School students Riley Mckay (left) and Emily Dewar with a selection of plants presented to all nominees in the Schools category by Milligans Seeds.



Southland Environment Awards 2015 judges Warren Tuckey, Marion Miller, Nikki Tarbutt and Rowly Currie.



AWS Legal representative Fiona Guy Kidd presents Matthew Richards from Jayvor Dairies with the highly commended award in the Farming category.



Councillors' Special Award winners Malcolm and Margaret MacKenzie with councillor Rowly Currie (right).



Fiordland Conservation Trust manager Laura Harry and board member Mark Sutton with their award presented by Paul Norris (right) of Real Journeys.



Representatives from schools involved in the Kids Restore the Kepler project accept the top award in the Schools category.



Invercargill Licensing Trust board member Angela Newell with Erle Dale, who won a Special Award for Local Enhancement.



Fiordland College student Thomas Lundman speaks about his involvement with the Kids Restore the Kepler project, watched by compere James McRobie.

## Farming Award

*Winners* – Mike and Frank O'Brien

The O'Brien farm is an extensive 2,500 hectare sheep and beef property set in Monowai. Boundaries of the property include the Fiordland National Park, as well as 12 kms of the Waiau River, all of which is fenced as part of the Waiau Riparian Project. Protecting the other waterways on the farm is important to brothers Mike and Frank, who work at fencing a minimum of 2kms each year. The property boasts wetlands and significant areas of indigenous biodiversity, all protected through riparian fencing. In 2011 they installed a state-of-the-art water scheme, delivering water via the 9kms of pipe from a spring to troughs across the farm.



Mike and Frank O'Brien

### *Highly commended* – Jayvor Dairies

The Jayvor Dairies property near Edendale is a part of the Fortuna Group of farms, and was recently converted to dairy. Expert advice was sought from a range of areas prior to moving any fence posts. Where possible, native plantings along riparian areas were kept and an additional 3,000 plants have been planted. Important red tussock areas have been fenced and all good management practices relating to nitrogen loss are being used. This farm is home to the beginning of the Waihopai River, so doing the right thing to avoid problems for others downstream is a key priority.

### *Other nominees*

Margaret and Malcolm  
MacKenzie

For many decades, Margaret and Malcolm MacKenzie have farmed their property with a quiet emphasis on looking after the land. Their 193 hectare sheep farm at East Limehills is a fantastic example to others, with good riparian fencing and plantings, top stock management and the use of environmentally friendly fertilisers where possible. The property also features a large peat bog, which is QEII covenanted and Malcolm has recently constructed a large wetland along the eastern side of the peat bog to increase biodiversity.

Allan and Kathryn Marshall,  
Glenfern Farm

Glenfern Farm is a 1,000ha sheep and beef farm owned by the Marshall family. Three kilometres of the Waikawa River flows through the property and a significant amount of it has been fenced to exclude stock. Allan and Kathryn have been very proactive about managing some 40-50kms of native bush and the riparian zones. Thanks to the family's ongoing care and protection of these high value areas, biodiversity is thriving and the bush is thronging with birdlife.

John and Mel Somerville,  
Arawata Deer Farm

John and Mel Somerville's property is a great example of a low-impact deer farm that is benefitting from a long-standing proactive approach. Farming to the conditions has been key to protecting the soft soils on undulating terrain. Stags are wintered inside barns, which is unique in the industry; and they have a current nutrient budget to help understand what the farm is capable of. The majority of the waterways and gullies are fenced off and there's plenty of shelter that uses both exotic and native plants.

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# Southland Environment Awards

## Schools Award

### Winner – Kids Restore the Kepler

The Kids Restore the Kepler project has been running for five years and is fast becoming New Zealand's best practice model for community conservation education. There are two components to the project: restoration and preservation of birds through rat, stoat and possum control; and education involving over 450 kids aged from two to 18 from all of the five learning centres in the Te Anau basin.

Kids Restore the Kepler focuses on 3000 hectares of the Kepler Backyard Birdsong restoration project.

Students are involved in every aspect of the project including physical work on site, website creation, construction, logo design, and studying different species.

Kids Restore the Kepler is ambitiously aiming to have predator control in place for the entire 3000ha by 2017/18.



Students from Kids Restore the Kepler project check out tracking tunnels in Fiordland.

### Other nominees

#### Riverton Primary School

Riverton Primary School is actively engaging in the environment through their 'Riverton ROX!' programme. Students are kept busy maintaining trap lines to catch rats and possums in Moore's Reserve and carrying out planting projects. While enjoying the practical side of the programme, students are also learning more about the environment through their whole curriculum and are creating links with other groups and organisations involved in their local environment.

#### Longford Intermediate School

The children at Longford Intermediate realise they only have a short time to make their mark at the school, but are excited to see how it will look in the future. The list of projects already achieved in the three years since Longford Intermediate became an Enviroschool is impressive. They include a worm farm, planting heritage fruit trees and oak trees for shade, careful recycling of all paper and cardboard, a whole school composting system, a vege garden plus an important learning pathway linking the school with the kindergarten.

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Department of Conservation  
Te Papa Atawhai

### Special Award for Local Enhancement

#### Erle Dale, Wyndham and Districts Community Rest Home

At 87 years old, Erle Dale is not sitting idly in his room at Wyndham Rest Home. This vibrant and active man is constantly coming up with ideas to enhance the physical environment he shares with other rest home residents. In the past six years, he has transformed the outdoor area, supported by Margaret McKelvie and other local volunteers. The home now has its own ready supply of fresh vegetables, herbs, fruits and berries, all grown by Erle in the ever-expanding garden. He's also created a meditation garden, where residents can take time out, and has numerous plans for the future.



ILT Invercargill Licensing Trust  
Your City. Your Trust.

# Southland Environment Awards

## Community Group Award

### *Winner* – Waiau Riparian Project

The Waiau Riparian Project, run by the Waiau River Liaison Committee, has been working with funding from Meridian Energy and landowners since 2010 to fence off land along the tributaries of the Waiau River. With the funding shared 50/50 between landowners and Meridian, over \$135,000 has been spent, fencing 22kms of tributaries. Judges were impressed with the project and the significant amount of work that had already been achieved, noting that fences were set well back, in some cases, protecting areas of native vegetation and enhancing biodiversity.



Peter Horrell, chairman of the Waiau River Liaison Committee

### *Highly commended* – Riverton Heritage Harvest Festival

The annual Riverton Heritage Harvest Festival is a celebration of Southland's home harvest. Nearly 4,000 visitors travelled to Riverton from as far as Christchurch this year to experience the festival. Hundreds of visitors walked away inspired by the back-to-back workshops on topics ranging from 'how to feed your family on a ¼ acre' to practical advice in beekeeping and willow-weaving.

### *Other nominees*

#### Invercargill Vegan Society

The Invercargill Vegan Society is going from strength to strength, due in large part to the hard work of those behind the scenes like Jordan Wyatt. The society has a strong belief that veganism has a significant role to play in improving the environment, by reducing animal agriculture, which is a source of greenhouse gases.

#### South Alive

South Alive is a strong community organisation with a large group of committed volunteers whose vision is to make South Invercargill a better place to live, work and play. Since their inception, they have undertaken a large number of challenging projects, many with an environmental focus.

#### Wastebusters column

They never dreamt it would last 10 years, but the Wastebusters column in *The Southland Times* has recently finished after a decade of educating people about what to do with their waste. Written by Carolyn Dean, the column has covered everything from how to dispose of nappies to recycling old spectacles and even composting human remains.

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# Southland Environment Awards

## Commercial Award

### *Winner* – Ken Murch Contracting

Ken Murch runs his own waste and recycling business and is a leader in his field in New Zealand. He was keen to do something to help the environment and the farming community, so he elbowed his way into a contract with Plasback in 2007. Setting himself up from scratch, Ken originally collected bale and silage wrap, but has expanded this to include feed bags, containers and chemical drums as well.



Ken Murch

### *Highly commended* – Fiordland Lobster Company

The Fiordland Lobster Company definitely treasures its environment. The company has partnered with the Fiordland Conservation Trust and Ngai Tahu to fully fund the return of the little spotted kiwi back home to Dusky Sound. For a company firmly focused on exports, being able to fund a project that involves returning such an important and iconic species to Fiordland is very special.

### *Other nominees*

#### Invercargill City Council – Thomsons Bush

A management plan adopted in 2004 has helped give Thomsons Bush a new and revitalised look. The bush area attracts a number of community groups who regularly contribute to planting and weed control work, which means Invercargill City Council staff can prioritise their work around other activities such as possum and rat monitoring and control.

#### Clean Green Effluent Company

Since 2012, the Clean Green Effluent Company has expanded its work in designing and installing effluent systems, and now has a greater focus on utilising greenwash and reducing the volume of water used by dairy farms. By filtering liquid through a weeping wall, the recycled greenwash is clean enough to be pumped through a series of nozzles to clean external yard areas, before going through another treatment process.

#### Rayonier Matariki Forests

In 2014 Rayonier Matariki Forests designed and installed two purpose-built, low-level stream crossing over tributaries of the Acton Stream, located in West Dome Forest. Careful consideration was given to the crossings, as the areas they were designed for are flood-prone, have low profile stream margins and contain healthy aquatic life. The two crossings are expected to support over 8,000 truck movements. Without them, the sediment loss and subsequent damage would have been substantial.

#### Peter Mason (Meridian)

Meridian Energy's White Hill Wind Farm, where Peter Mason works, has been home to two pairs of breeding falcons before it was constructed in 2006. Falcons are a threatened species that is particularly vulnerable to pests. Peter is a key player in ridding the site of a variety of predators including possums, stoats, ferrets, rats and feral cats, in order to increase the breeding success of the falcons.

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# Southland Environment Awards

## Individual Award

### *Winner* – Aaron Wilson

Balfour farmer Aaron Wilson is a man with a vision for farm sustainability. He converted the family farm to dairy in 2007 and now has a goal to be fully self-contained. Several years ago, Aaron started looking at fodder beet to use in the shoulders of seasons to combat low grass growth. About three years ago, Aaron initiated the Balfour Water and Land Group. He believes farmers generally want to do the right thing, but need to be involved to have influence over future changes.



Aaron Wilson

### *Highly commended* – Clive Geddes

Castle Downs swamp is a piece of land jointly owned by Clive Geddes and his long-time mates. Initially enjoyed for duck shooting, it now boasts an abundance of birdlife thanks to Clive's commitment to trapping predators. He started about four years ago after his wife saw a stoat run past the window. It surprised him, made him think, and then take action. Clive started with six traps and now has more than 40 – catching over 200 stoats in the past three years.

### *Other nominees*

#### Queens Park Wood Sculptures – Frank Wells

When a large number of huge macrocarpa trees needed to be felled in Queens Park, Frank Wells made sure they were put to good use and returned to the park for the public to enjoy. With some of the trees over 90 years old, they were massive and Frank took them off site and turned them into works of art at his chainsaw mill.

#### Ross Ramsay

Dedicated to the environment, Ross Ramsay is committed to teaching others the value of looking after our natural resources. He wrote the original SIT Environmental Management course with Trish Lindsay and believes it's important for student learning to extend beyond the classroom.

#### Lloyd Esler

Lloyd Esler's involvement in community and environmental groups and projects is legendary in Southland – from high school social studies fairs, to field trips for young and old, and the hands-on work of land care groups. His background and enthusiasm lead to eager sharing of his knowledge and expertise, inspiring others to the wonders of nature and the importance of protecting it.

#### Chris Freer (Blue Mt Pest Control)

Chris Freer has killed more possums than he cares to remember. Chris started trapping possums when he was just 17, and he is now making better use of the possum skins to help others. He has begun manufacturing a line of joint supports and therapeutic back belts from possum pelts.

#### Ray Willett

Nearing his 80th year; age is just a number to Ray Willett. His fitness would rival a much younger man's, but he needs it to continue his volunteer work – checking, clearing and resetting a 10-kilometre stretch of stoat traps every week on the Milford Track. Ray began catching stoats in the late 1950s when he says it was the most significant pest control being done in the national park.

#### Sue Miller

When Otama farmer Sue Miller realised possums were demolishing her vege patch and roses, she decided it was time to take action. Sue took matters into her own hands, contacting the biosecurity team at Environment Southland and becoming the driving force behind getting a Possum Control Area (PCA) set up in her area.

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## Achiever Award

### *Winner* – Fiordland Conservation Trust

The Fiordland Conservation Trust is innovative and proactive. Its aim is to promote collaboration on biodiversity projects in Fiordland, tackling projects that might not otherwise be done because of lack of funding or professional support. The trust is also helping businesses and communities to get involved in a range of ways:

- Keeping predator numbers low in the Sinbad Sanctuary project with Southern Discoveries.
- The translocation of the little spotted kiwi with Fiordland Lobster Company.
- Continued support for the Kids Restore the Kepler project.
- The successful transfer of robins onto pest-free Indian Island.



The Fiordland Conservation Trust works with a number of partner organisations on projects in the region.

### *Highly commended* – Paul Gay

Nearly every week for the past 40 years, Paul Gay has dedicated his time to educating Southlanders on every aspect of nature, from pest plants through to unusual creatures and their habits. Paul has prepared over 2,000 articles for his weekly column, 'Natural World' in *The Southland Times*, and he's not stopping yet. This is just one of his many contributions to helping educate Southlanders about the environment. He's also spent many years as a teacher, and recently reached a milestone of 40 years as the chairman of the Deep Cove Outdoor Education Trust.

### *Other nominees*

Mihimoana Gardens,  
Sandy and Pita Dawson

Sandy and Pita Dawson originally used their half acre section in Clifton to grow vegetables for supply to a community organisation that regularly provided a cooked lunch for people with mental health issues. After several years, the service no longer required the supply and the couple have transformed their property into a garden of remembrance to commemorate their son who lost his life in the 2011 Christchurch earthquake. Pita hopes it will become a place where people come and enjoy the environment, making the most of the sense of peace and tranquillity he has created.

Southland Community Nursery  
Education Centre, Chris Rance

Chris Rance is a long-time proponent of the environment. Together with her husband she runs the community nursery on their Otatara property where they have been restoring native forest and enhancing indigenous biodiversity for many years. In recent times she has been the driving force behind the development of a purpose-built, community education centre at the site, which is proving highly successful with teachers, schools and community groups.

Chris Morison

When Chris Morison moved to Te Anau he discovered wasps were plaguing the tourist town, affecting businesses, outdoor dining experiences and ecosystems. An experienced pest controller, Chris quickly rallied some community networks to help locate nests and has successfully destroyed over 80 wasp nests – all in his own time and at his own cost.



# Living and breathing *air science*

It's something we breathe in and out all day long and rarely give a second thought.

**F**or Owen West, air is even more than an essential life force, it's a career.

As an air quality scientist at Environment Southland, Owen's focus is firmly on the region's air quality – what pollutes it, where, when and to what extent; and how we work towards meeting the government's National Environmental Standards for Air Quality.

With a Master of Science Degree (with distinction) from Otago University, Owen majored in geography, looking at the atmospheric conditions and topographical factors that contribute to variations in air pollution.

His interest in air quality was further piqued during holiday work at Marlborough District Council, working with the compliance team on a boiler monitoring programme.

He later became interested in particulate air pollution in Alexandra and used that as the basis for his Master's degree.

With limited opportunities for air quality scientists, Owen went on to work in the consents team at Marlborough for over three years. In 2012 he moved to Southland to take up a new air science role as part of the increased focus the Council was taking to meet government standards for air quality.

He played a significant role in preparing our State of the Environment Report, Southland's Air / Ngā Hau o Murihiku, a community publication that includes information, context and case studies. His scientific expertise has also been integral to informing the development of the Proposed Regional Air Plan for Southland.

"If we don't gather the necessary information about the quality of our air, we place ourselves at risk of being unknowingly exposed to harmful pollutants."

With a relatively small number of air quality scientists around the country, being in contact with his peers is important for Owen and his work. He regularly catches up with members of the National Air Quality Working Group and a Technical Group, to share knowledge and consider new monitoring technology.

Owen is encouraged by the direction air quality is heading in the Invercargill and Gore airsheds. Southlanders are now more aware of the issues around poor air quality and are making appropriate changes where they can.

"Invercargill and Gore both have the potential to make some really good gains which will benefit everybody."

When Owen is not busy analysing our air quality results and working with the planning team to develop strategies to improve it, he makes the most of the region's outdoor opportunities.

As club captain of the Oreti Surf Lifesaving Club, Owen can be regularly found out on the beach training or keeping swimmers safe, while still managing to find time for his other passion – crossfit training.

With his enthusiasm for outdoor activities, Owen knows the benefits of breathing clean air and is pleased to be part of the team working towards improving air quality in Southland.



Environment Southland air quality scientist Owen West.

Environment Southland's Proposed Regional Air Plan for Southland received considerable feedback. Hearings were held in Invercargill and Gore, and the panel, comprising an independent commissioner, councillors and an iwi-appointed commissioner, have been considering the submissions.

The panel's decisions, including any changes to the proposed rules, are expected to be formally adopted later this year. Information on the new rules will be widely distributed.



[BreatheEasySouthland.co.nz](https://www.breatheeasy.co.nz)



**N**early 1,500 fish, crayfish and eels were returned to their watery homes during the recent drainage maintenance programme in the Waituna area.

As part of our work to reduce flood risk, improve water quality and reduce sediment entering the Waituna Lagoon, the three-yearly programme of drainage maintenance was carried out on the Jordan, Maher and Armstrong tributaries of Waituna Creek, and the main stem.

“We employed someone to follow along behind the digger as it worked to clear the tributaries of weed and sediment. We do this in a few areas where we know fish life is abundant and the drainage maintenance can have significant effect,” catchment manager Noel Hinton says.

About 1,500 fish were returned from 14.7km of waterway, making it well worth the effort. “The number of fish returned was quite impressive.”

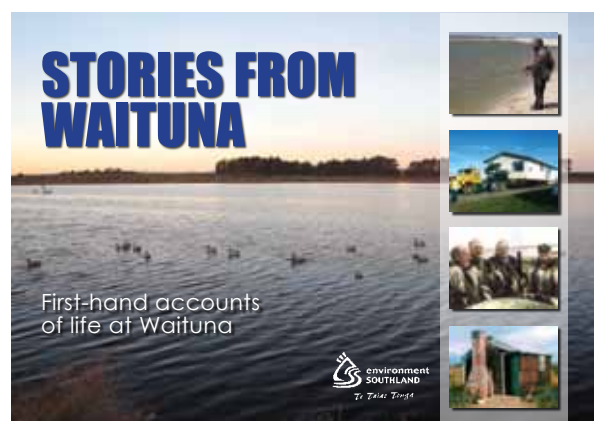
Noel says there are a number of ways that drainage outfall can be maintained, but for this area it was important that the fish were returned to the water.

Drainage maintenance is often done with heavy machinery. Noel says last time these tributaries were maintained a weed bucket was used, which tends to have a lesser effect on the aquatic life within the waterway. However, it meant a large amount of sediment was disturbed, discolouring the waterways and making its way down to the lagoon.

“We wanted to avoid that this time by removing both the built-up sediment and weed growth from the system, and also protect the fish life that is abundant in these tributaries.”

## Web book – *Stories from Waituna*

**A** web book has been created to provide a glimpse into the early days of the Waituna catchment and lagoon, before scientific monitoring began.



The web book offers some rich, first-hand accounts of people’s experiences of the area, which were gathered to gain a broader picture of what the Waituna catchment and lagoon was like between the 1950s to the 1980s. The stories help bring the human context to changing values and concerns about the unique Waituna environment and its ecology.

## Strategy and Action Plan for Waituna now available

A Strategy and Action Plan for Waituna has recently been completed and can now be downloaded from the Environment Southland website.

Many groups continue to make progress in the Waituna catchment and lagoon, working with other agencies and the community. To help coordinate this, the Waituna Partners Group put together a draft Strategy and Action Plan, with assistance from members of the local community. The plan outlines a vision and goals for the catchment and lagoon.

A range of groups and individuals provided feedback on the draft plan earlier this year, which led to changes now in the final document. It is a living plan that will be updated annually, and is supported by a detailed activity plan that sets out how the actions will be achieved and measured.

**To view the web book, or to download a copy of the Strategy and Action Plan and supporting information please go to [www.es.govt.nz/waituna/](http://www.es.govt.nz/waituna/).**

# briefly...

## Potato wart

As winter gives way to spring, planting the vegetable garden is at the forefront of many people's minds. If you're thinking about putting in a potato crop, it's a good time to consider where your seed potatoes have come from.

Seed potatoes can carry the fungal disease potato wart, which could have a serious impact on the New Zealand potato industry if it was to spread. It can be difficult to detect on seed potatoes and gardeners are encouraged not to plant or share saved seed potatoes.

Purchasing commercial grown seed potatoes is one of the best ways to avoid the spread of potato wart. You can find out more about potato wart and what to look out for on our website [www.es.govt.nz](http://www.es.govt.nz)



## Whitebaiting

Whitebaiting season started on 15 August, and there's good news for all whitebait stand consent holders in Southland. The term for stand renewals has recently been extended from 10 to 25 years and, together with an application fee adjustment, this means your consent is now cheaper overall.

Whitebaiting is a popular pastime in Southland, with around 680 of the iconic whitebait stands fringing the banks of the Maitai, Titiroa and Aparima Rivers.

To find out more about whitebaiting in Southland, including a map of whitebait stands and a range of other helpful information, visit [www.es.govt.nz](http://www.es.govt.nz).

## Possum control

Spring is not only a busy time in the garden, it's also a busy time for possums. Possums are big fans of new spring growth and can make short work of roses and young vegetable plants.

This is often a time of year when people notice the impact of possums around their farms and home gardens, with shelter trees taking a big hit from hungry young possums. Senior biosecurity officer Dave Burgess says it's the ideal time for people to consider their options for pest control, including night shooting and trapping in key areas on their property.

Our biosecurity team is happy to advise on the best control methods and can also provide information on setting up a Possum Control Area.

## Beacon

If you are a regular user of our online mapping service, Beacon, you may have noticed some changes. Our information technology staff have been busy working to upgrade Beacon and making it more user friendly.

If you have never used Beacon before, don't be afraid to give it a go and have a look at the variety of information on offer. This includes resource consents, soil types, possum control areas and bathing water monitoring results. Beacon is now more intuitive and easier to use, with a new and improved layout and the option to select a mobile friendly view.

To have a look at Beacon, go to [www.es.govt.nz](http://www.es.govt.nz) and click on the Beacon icon.



# DOWN ON THE FARM

BY GARY MORGAN, Environment Southland principal land sustainability officer

Winter's nearly over and it's a busy time on the farm, with plenty to think about and plan for in the next few months.

- With stock returning from wintering to the home farm, it's time to consider management of your spring paddocks. Be sure to keep stock out of critical source areas like gullies, swales or low lying areas that can mobilise sediment and nutrients into waterways during the wet spring conditions.
- Plan for next year's winter paddocks by choosing which areas of your farm are best suited to this activity and will provide a low risk to water quality. Consider leaving wider buffers on sloping ground with nearby waterways and leaving your critical source areas in pasture.
- Make sure your fertiliser isn't being wasted on saturated soils at times of heavy rainfall or on marginal land.
- Soil testing by an industry expert will let you know exactly what, where and how much fertiliser you need to apply to your paddocks.
- Release spray young shelter and riparian plantings during spring and plan for new plantings now so you can maximise growth establishment during spring.
- Have good fencing and shelter in place for calving/lambing so that stock are not driven into wet boggy areas or waterways to seek protection amongst vegetation and banks.

Environment Southland provides free services through the land sustainability team to help with environmental and shelter planning on your property. Team members are available and ready to come out to visit and prepare a plan to assist you.

# OUT IN THE FIELD

Our staff and contractors are no strangers to extraordinary situations. See what they've been up to lately as they go about looking after our region's natural resources.



Hedgehope School student Flynn Tuffin, Environment Southland education officer Mark Oster and former Hedgehope School principal Keith McKenzie plant a tree to celebrate the school joining the Enviroschools network.



Environment Southland councillors visited three North Island councils during July to see how they were managing some of the big issues. With challenges ahead for water quality management and meeting the requirements of the government's National Policy Statement for Freshwater Management, the trip was an educational opportunity to share ideas and look at practices on the ground.



Staff from Environment Southland and Port Maintenance Bluff spent two days learning to operate the newly purchased Fab Dock. The equipment comprises an inflatable enclosed pontoon with a PVC floor. It is designed to allow on-site treatment of high risk biosecurity situations, such as when vessels are identified as having marine pests like undaria on their hulls.



Anne McDermott of Fiordland Marine Guardians and Kevin O'Sullivan, Environment Southland maritime manager, take time to catch up at the recent Boat Show. Environment Southland's stall highlighted some of the work being done to protect our waters from marine pests and also encouraged safe and responsible boating behaviour.



Follow us on Facebook to get updates on the work Environment Southland staff are doing in our region.