

# EnviroSOUTH

December 2016



---

## New councillors

Meet your new Regional Councillors

From page 5

---

## Building a wetland

Turning a wasteland into a home for wildlife

Page 8

---



environment  
**SOUTHLAND**  
REGIONAL COUNCIL

Te Taiao Tonga

# In this issue...

Growing informed, responsible citizens	3
Making our roads safer for everybody	4
Regional Council elections	5
Wasteland to wetland	8
Cruise ship work to continue in new role	10
Community initiative to protect wildlife	12
Strengthening council and iwi relationships	13
Working with people important	14
Safer swimming this summer	15
Expanding sheep dairy industry	16
Updates	18
Time to think about...	19
Out in the field	20

## EnvirosOUTH

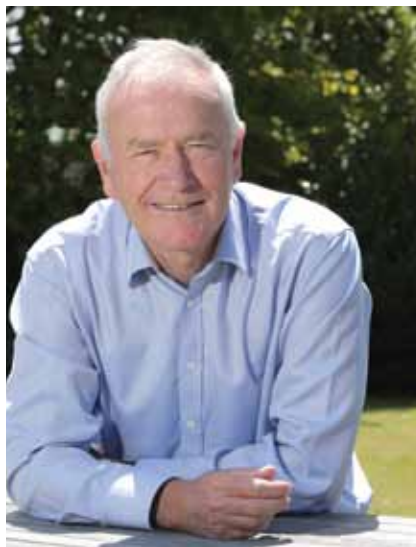
*Envirosouth* is published four times a year by Environment Southland. It is delivered to every mailbox in the region. We welcome your comments on anything published in this magazine.

### Contact Us

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

### Cover

Environmental technical officer Michael McDonald carries out maintenance work on the water level recorder at Waghorn Road, Waituna.



It's still early days for our new council, but there's plenty of work going on.

We welcomed four new councillors and have had a change of leadership with Nicol Horrell elected chairman and Lloyd McCallum, deputy chairman.

We differ from territorial authorities where mayors are elected by the public at large. Regional councillors elect their chairman and deputy.

Nicol is an experienced councillor with a solid understanding of the complexity of challenges faced by the council.

Our 'Big 3' priorities are set out in the council's Long-term Plan 2015-2025 – water, air and biodiversity – and work is currently progressing on the proposed Water and Land Plan, the Regional Pest Management Plan and the Fiordland Marine Pathway Plan.

For sure, our new council will have some fresh perspectives and new ideas about these priorities and how we tackle them.

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



My new role as chairman of Environment Southland is a demanding one, but a responsibility I am prepared to accept and ready to take on.

The council has a wide range of responsibilities and core functions, but fulfilling the Government's National Policy Statement for Freshwater (NPS) is undoubtedly our biggest challenge.

There's a great deal of public interest too, as the 900-plus submissions on our proposed Southland Water and Land Plan demonstrate.

The elections brought change to the council, making it clear that there is concern in the community about the way we are delivering on this responsibility.

While I want to ensure we maintain a stable council that demonstrates continuity, I am also keen to explore, with new and existing councillors, how we make the gains we need to, to best serve the people of Southland.

**Nicol Horrell**, Chairman, Environment Southland

# Environment Southland



*A vibrant organisation actively enhancing the experience of living and working in a sustainable Southland.*





▲ Otatara School teacher Gillian Donnelly and Limehills School student Ruby Anderson take a closer look at nature during a macro photography course at the 2016 Enviroschools Hui in Fiordland.

# Growing informed, responsible citizens

Changing the way science is taught is the goal of Otatara School teacher Gillian Donnelly.

**G**illian is one of 17 participants in this year's Science Teaching Leadership Programme, which aims to improve science learning and engagement in schools nationwide. She joined Environment Southland for four months this year.

Administered by the Royal Society of New Zealand and funded by the Ministry for Business, Innovation and Employment, the programme allows years 1-10 science teachers to gain hands-on science experience in a host organisation, so they can give a real-world context to how science is taught in their schools.

"The science education I had at school was intimidating," says Gillian, who has 13 years of teaching experience and currently teaches a class of 10 year olds.

"Nowadays science in schools is more about teaching the children to think like a scientist – there isn't a list of things they must know at the end of the year. It's more about how they engage with science including skills, attitudes and values."

Gillian's work will benefit both Otatara School and Environment Southland.

"Our school is focused around environmental learning, and we want our kids to know more about their responsibilities and what they can do as critical, informed and responsible citizens to help the environment," says Gillian.

"I've been thinking about ways to teach the children about water quality issues. Otatara is right in the middle of the bush, and we've got the beach and the Oreti River close by. The children will want to continue to be

outside, use our rivers and catch crayfish in their holidays, so protecting waterways is really important for them."

Environment Southland environmental scientist James Dare says aside from physical labour, Gillian's placement enables her to get a real understanding of the issues we are facing in Southland and develop more effective ways to teach this to her classes.

In the next phase of the programme, Gillian will return to the school to implement the new ways of teaching science. But for her, it doesn't end there.

"I'm interested in driving my whole classroom programme from science. So start with science and use that to drive the reading, writing, maths, arts."

# Making our roads safer for everybody

Drivers travelling around the Southern region this holiday season can expect to see some visible changes on the roads, as part of the Visiting Drivers Project.

Increased signage, more rumble strips and billboards with the key message “New Zealand roads are different” are being rolled out across the region under the project, which aims to improve road safety for both visiting drivers and those sharing the roads with them.

The billboards are part of a campaign in Southland, Otago and the West Coast to explain to visiting drivers, particularly those from overseas, that New Zealand’s roads are different from what they’re used to and they should adjust their driving accordingly.

Posters, digital and social media are also being used in the campaign to communicate key safety messages about driving on New Zealand roads.

Environment Southland transport planner Russell Hawkes, who is part of the project

group, says domestic and international tourism has a huge part to play in the Southland economy but keeping everybody safe on the roads must remain a priority.

The Visiting Drivers Project was established in 2014 and is focused in Otago, Southland and the West Coast, where international visiting drivers make up a large proportion of the traffic in summer.

The project involves a range of short, medium and long-term initiatives to strengthen all parts of the roading system – safe vehicles, safe speeds, safe roads and roadsides and safe users.

Incorporating representatives from central and local government and the private sector, the partnership approach has identified many ways of targeting drivers

with key messages about the risks and challenges of driving on New Zealand roads.

Russell says while the project is largely aimed at visitors, local drivers also have a role to play in keeping everybody safe.

“Many of the additional safety features on the roads are of benefit to everybody using them, not just tourists. Good driver behaviour and tolerance on the roads will also make a big difference.”

Southern drivers can expect to see more changes as the project continues, with additional safety improvements planned and initiatives implemented to reach tourists at each stage of their holiday, from planning, booking, in-flight, arriving in New Zealand and when they are driving on our roads.



▲ One of the many new signs drivers will see around the region.





# 2016 Elections

▲ Recently elected Environment Southland Councillors: (L-R) Neville Cook, Rowly Currie, Grant Hubber, David Stevens, Lyndal Ludlow, Eric Roy, Robert Guyton, Nicol Horrell (Chairman), Maurice Rodway, Ross Cockburn, Lloyd McCallum (Deputy Chairman) and Jeremy McPhail.

Environment Southland has a change of chairman and deputy, and four new councillors following the 2016 local government elections in October.

Former deputy chairman Nicol Horrell was elected chairman by the council and Lloyd McCallum was elected deputy chairman.

Chairman Horrell says, "There's a lot of talent around the table which has potential to form a strong team to meet the challenges we will face over the next three years."

The new councillors are Eric Roy and Lyndal Ludlow for the Invercargill-Rakiura constituency, and David Stevens and Jeremy McPhail for the Eastern Dome constituency. Find out more about them on the following pages.

Four sitting councillors were re-elected unopposed: Nicol Horrell (Western), Lloyd McCallum (Southern), Grant Hubber (Hokonui) and Ross Cockburn (Fiordland).

A further four councillors were re-elected in the Invercargill-Rakiura constituency: Robert Guyton, Maurice Rodway, Neville Cook and Rowly Currie.

## Farewells

### **ALI TIMMS** *Eastern-Dome*

Ali, a former farmer and self-employed physiotherapist, was first elected to Environment Southland in 2001 and was the chairman from 2006 to 2016.

She chaired the Southland Mayoral Forum, provided leadership to the Southland Regional Development Strategy, was on the Visiting Drivers Governance Group, and served on a wide range of regional council committees and at the national level.

Ali was not re-elected to the council. She continues her personal commitment as the chair of the Mid Dome Wilding Trees Charitable Trust.

### **JAN RIDDELL** *Invercargill-Rakiura*

Jan, a sheep farmer, served on the council for two terms (2010–2016), and previously from 1989 to 1995.

She was on several committees and chaired the Organisational Performance and Audit Committee during her last term. Jan was also the council's appointee on the Waiau Working Party (chair for 25 years).

Her interests include: the Waiau Fisheries and Wildlife Habitat

Enhancement Trust, the Nature Heritage Fund Committee, and the Forest Hill Foundation.

### **MARION MILLER** *Invercargill-Rakiura*

Marion was a councillor for three terms (2007–2016), and previously served as a councillor and chair (1989–1998).

She was on several committees and chaired the Southland Heritage & Building Preservation Trust.

Some of Marion's interests include: being a former Southland Environment Awards judge, Southern Pastel Artists, Cadastral Licensing Services Board, a former Visiting Justice of the Peace at Invercargill Prison.

Marion stood down from the council in October 2016.

### **PETER JONES** *Eastern-Dome*

Peter, a sheep farmer and contractor, was a councillor for two terms (2010–2016).

He was involved in several council committees and served on the Southland Conservation Board.

Peter was not re-elected to the council.



## Lyndal Ludlow Invercargill–Rakiura

---

Lyndal Ludlow grew up in Invercargill and after a stint overseas and time working in the North Island, returned to live in Southland in 2002.

A former teacher, Lyndal recently began working part-time for the Cancer Society in an events and marketing role. Prior to this she coordinated the 2014 and 2016 Relay for Life fundraiser and has been involved in yarn bombing and organising past Invercargill Santa Parades.

Lyndal and her husband Darren have two sons, aged 14 and 11, who are active in sporting and cultural activities. When she has time Lyndal likes reading, knitting, crocheting, cross stitch and heading out for walks on the riverbank with friends.

She is interested in air quality, and has an urban perspective, plus that of a “mother of a young family who is concerned with whether her sons will stay or return to Southland”.

## Jeremy McPhail Eastern–Dome

---

Jeremy McPhail is a farmer and agricultural contractor. He, his wife Annabelle and their three children live on the Waikaka Valley property that has been in his family for nearly 150 years.

“Mum and dad built the house. I’m the sixth generation on this land.”

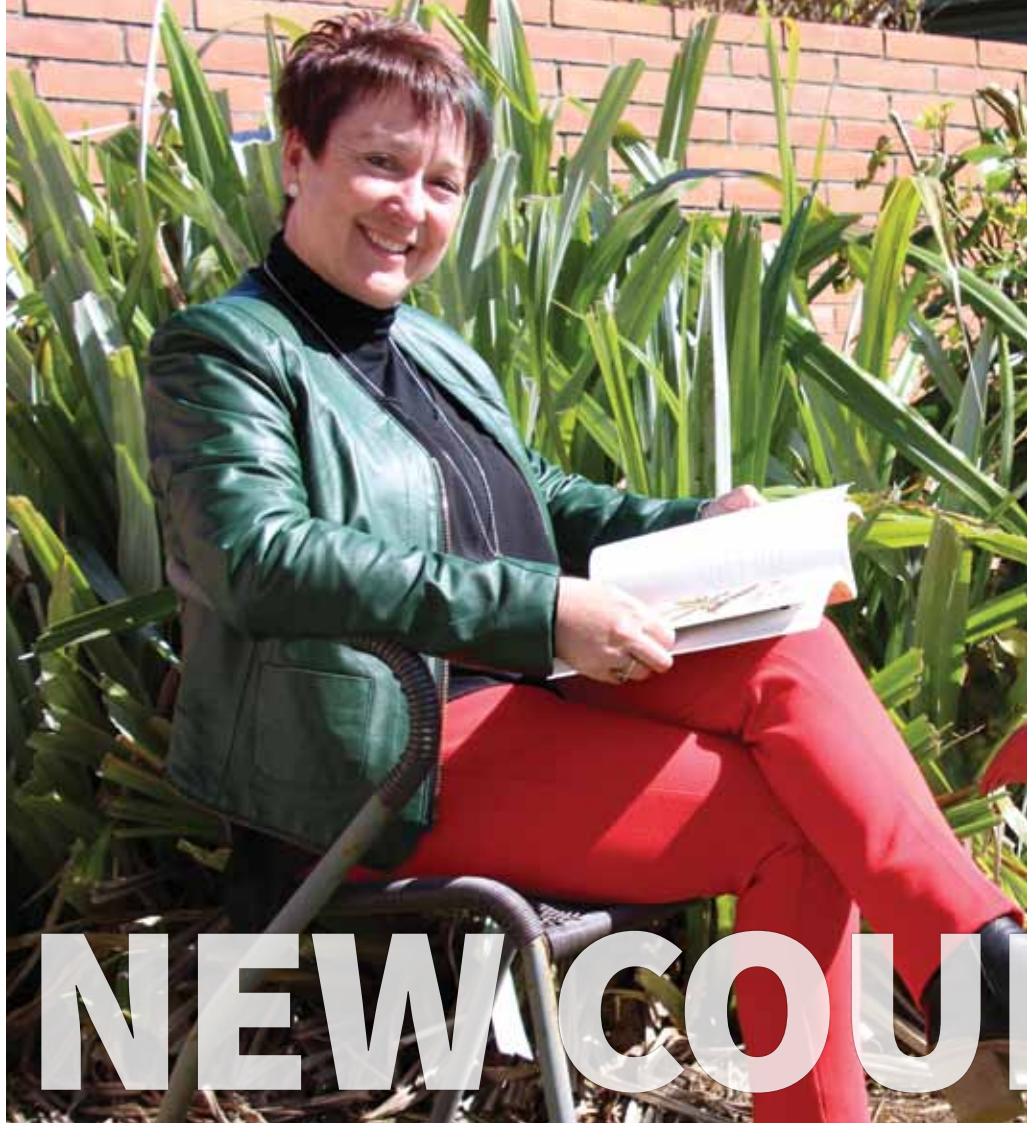
Jeremy is on the board of trustees for St Mary’s Primary School in Gore, the Federated Farmers Eastern Southland executive and involved in the Calvin Presbyterian Church.

He enjoys family activities, is interested in sustainable farming and confesses to having “iron disease”.

“I love my machinery, driving it, seeing it and working with it.”

Jeremy’s father, Neil McPhail, was on the council from 1998-2010.

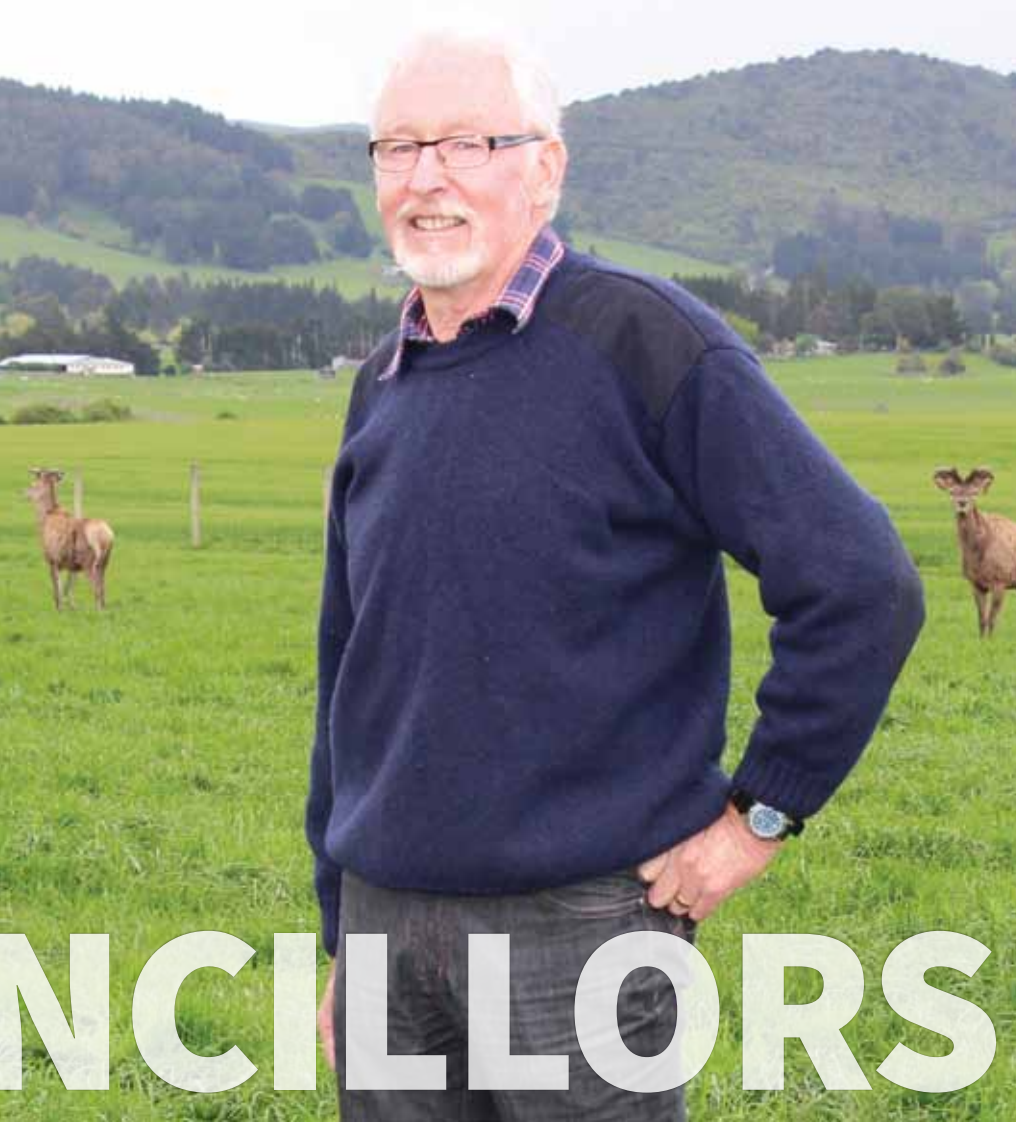
“I’m getting involved now for my family’s future. It’d be nice to think in years to come the future generations will look back and say, ‘they did a good job’”.



# NEW COU







## David Stevens Eastern–Dome

---

David Stevens has been deer farming for 37 years, and recently diversified into grain, on a Balfour property, Netherdale, that has been in his family since 1881.

He produces velvet, which is marketed into Asia for health products, and his annual deer sale attracts people from all over New Zealand. “I’m lucky my job is my hobby.”

Running the business is a team effort with wife Lynley. The couple has three grown children and two grandchildren.

David’s community involvement includes being an active life member of the NZ Deer Farmers Association, the Southland Rural Support Trust, Chairman of Northern Southland Vet Services and hosting Riding for the Disabled each week.

His grandfather was on the former Southland Catchment Board, and David is interested in engaging the community and “putting something in place that’s workable” for the next generation.

COUNCILLORS



## Eric Roy Invercargill–Rakiura

---

Five years ago Eric Roy and his wife Elizabeth sold their farm at Te Tipua and came to live in Invercargill.

Eric is the former longstanding National Party MP for Invercargill. He has many interests including chairing the Windsor Presbyterian Church’s rebuild committee, being a director of Landcorp, and writing a book for his grandchildren about “life’s lessons from interesting people I’ve met.”

He’s also acquired farm holdings in the Te Anau Basin, Roxburgh and Awarua, which are run by a management team. “I’m a Hilux farmer now.”

Eric and Elizabeth, who have four grown children and 13 grandchildren, host up to 10 tailored hunting and fishing adventures from their Te Anau property for charities each year.

“I like to create a bit of a legacy and leave things better. I like trying to find good practice solutions.”

# Wasteland to wetland

Find out why this Southland farming couple turned a dirt bike track into a wetland.

Sue and Andy Verhaegh didn't think much of the waterlogged paddock that was part of their 161 hectare dairy farm when they bought the place near Riverton some 16 years ago.

"It was 2.5 hectares of pure waste, even the sheep struggled to find their feet," says Andy. "It was too wet to farm and there were a lot of old tree stumps through it."

There wasn't much they could do with the boggy field.

"My son and I ride motorbikes, so we made a dirt bike track out of it."

Many hours were spent riding bikes over jumps, until their son left home. Around that time, Sue attended a Dairy Women's Network conference where she talked to Environment Southland staff about

riparian planting. Shortly after, she made an appointment with land sustainability officer David Moate.

"David did a Focus Activity Farm Plan for us, and when he saw our bike track he suggested we might want to put in a wetland. Long-term we want to build a house nearby, so we thought, why not start doing something that looks neat?"





Grasping the opportunity, Sue and Andy got a digger driver to bulldoze the jumps and create bunds for a wetland pond. Fish and Game Southland manager Zane Moss designed the pond with nesting islands for birds, helped with planting and oversaw the construction – a free service that’s well-used across Southland.

The project quickly started taking shape. Within about a year the wetland provided significantly improved drainage and soil retention.

“It’s really satisfying providing an environment for wildlife, and we hope birds and fish will come here naturally. It’ll be nice coming here and knowing that we’ve done all this.”

Andy says he’s grateful for the support received from Rabobank and Fish and Game.

Sue and Andy also received funds through Environment Southland’s Farm

Enablement Grant, which is open to farmers with a Focus Activity Farm Plan to implement recommendations, as well as a contribution from the Environmental Enhancement Fund towards plants and pest trapping.

“We were always going to do it. When you’re farming the time is never right to spend a lot of money, but it’s part of our personal plan and where we see ourselves living in five years’ time.”

David Moate says the project is an example of how organisations working together with farmers can achieve great outcomes for both farming and biodiversity in Southland.

Andy sums it up like this:

“There was a space that was totally unproductive and with some help we turned it into something really neat. We enjoy our family farm, and we’re proud of what we’ve achieved.”



Before



During



After

▼ Andy Verhaegh and land sustainability officer David Moate at the finished wetland.





▲ Former harbourmaster Kevin O'Sullivan spent one of his final weekends on duty ensuring boaters were keeping safe in Te Anau over Labour Weekend.

# Cruise ship work to continue in new role

Former harbourmaster Kevin O'Sullivan has spent more time on cruise ships than most people could dream of, but when he considers the best way to holiday, cruising the Mediterranean is still at the top of his list.

Kevin handed over the harbourmaster reins to Lyndon Cleaver in September, before heading off in December to take on his next challenge – which in many ways is a continuation of the work he started in Southland. Until August this year Kevin was the chair of Cruise New Zealand, and his new role as executive officer, based in Auckland, will see him working full time with the cruise ship industry, as an advocate for New

Zealand as a cruise destination with a strong focus on the environmental aspect of the industry.

The cruise industry has been a highlight of Kevin's time at Environment Southland and he credits strategy and corporate planning manager Ken Swinney with the foresight in the early days to establish a system which allowed the region to benefit significantly from cruise ship revenue.

“The industry has grown hugely over the years, with 89 visits this year, including a visit in December by the largest cruise ship ever to visit New Zealand waters – Ovation of the Seas.

“The industry is really good to work with. They are used to tough regulations and are well aware their business basically lives or dies on their environmental obligations.”





▲ Former harbourmaster Kevin O’Sullivan took charge during a number of oil spill exercises and events, involving representatives from many different organisations.

The development of the harbourmaster role and his work on the National Oil Response team have been highlights of Kevin’s time at Environment Southland, including a stint working on the high profile Rena response.

He’s confident there’s plenty more work to do supporting the cruise ship industry in his new role and dismisses claims he will be filling his time sipping lattes.

“My wife and I are building on a small property near the South Manukau Harbour, so hopefully I can get myself a small boat and get out on the water a bit simply for pleasure. I’ve also discovered a group of men in the area at work restoring an old vessel, the Admirals barge off HMS Achilles, so I might manage to get involved in that too.”

## Meet Southland’s new harbourmaster

Newly appointment harbourmaster and maritime manager Lyndon Cleaver spent 20 years in the Navy, but still loves nothing more than getting out on the water.

Lyndon has worked alongside former harbourmaster Kevin O’Sullivan for five years and is looking forward to tackling the challenges his step up to the senior role brings with it.

Born and raised in Riverton, Lyndon describes himself as always having been a bit of a water rat and is passionate about seeing people enjoy the many opportunities our waters offer while staying safe.



## Stay safe on the water this summer

Under the Navigation Safety Bylaws, boaties have a few obligations and if you are the skipper, responsibility for all those on the boat lies with YOU.

### Lifejackets

If you’re the skipper of a boat six metres and under in length, it’s your responsibility to make sure everyone on board wears a lifejacket, the right size and type.

### Communications

All boats must carry at least two means of communication in case of trouble.

### Ski lanes

Water skiing or towing a ski biscuit can be great family fun, but can also turn dangerous very quickly if you or others don’t know the rules for boating in the towing access lane.

- Do not swim or park vessels in the access lane.
- Travel in an anticlockwise direction using the most direct route from the access lane.
- Returning vessels have the right of way.
- Remember to keep an eye out for anybody else in the water.

If you are planning on enjoying some waterskiing over the summer, remember it takes three to ski – a boat skipper, the skier and an observer (who must be at least 10 years old). The observer will play a crucial role in ensuring everything is going to plan, while the skipper can focus on safely guiding the boat.

For more information visit our website [www.es.govt.nz](http://www.es.govt.nz) to check out our Navigation Safety Guidelines and Bylaws.

# Community initiative to protect wildlife

The establishment of a Wildlife Protection Zone at Omaui is one of the ideas proposed as part of the development of the new Regional Pest Management Plan for Southland.

The Omaui Landcare Trust has been carrying out pest control work over 200 hectares of native bush in the Omaui area since 2013 and would now like to build on this by setting up a site-led programme to protect the area's native wildlife.

Biosecurity manager Richard Bowman says site-led programmes target a particular site with specific values and usually focus on eradicating or reducing the numbers of particular pests to protect these areas.

In the case of Omaui, the proposal will look at continuing control of pests such as rats, possums and mustelids, while also putting

in place objectives and rules to manage other pests such as feral cats, magpies and deer. Some rules around domestic animals, such as cats and goats, could also form part of the proposal.

Omaui Landcare Trust trustee John Collins says a wildlife zone could provide huge benefits for the native biodiversity of the area.

"We would see an increase in native fauna, birds, lizards and insects, along with healthier flourishing native forests.

"It would also improve the environment for residents, with less possum damage to private gardens and the sights and sounds of increased birdlife."

Mr Bowman says Stewart Island is another area where a site-led programme may be appropriate and discussions have been held with the community there about what this could look like.

Proposals for site-led programmes will form part of the draft Regional Pest Management Plan, which is currently being developed. This plan will set the scene for pest management in Southland for the next 10 years and will be released for public consultation in 2017.







# Strengthening council and iwi relationships

After 20 years in his role as Kaupapa Taiao manager at Te Ao Marama Inc, Michael Skerrett is particularly proud of his involvement in setting up a model in Southland that has ensured iwi views are a strong and valued part of council decision-making.

In September Michael retired, leaving a legacy that is the rival of many other regions around the country.

In 1996, Te Ao Marama was formed to consider resource management issues relevant to local iwi. To support this work, the four Southland councils and runanga worked together to form a Charter of Understanding, which officially established the relationship between councils and iwi. Membership to the charter has more recently been expanded to include Otago

Regional Council, Queenstown Lakes District Council and Clutha District Council. Michael acknowledges this charter and establishing these relationships as some of his most significant achievements.

His other highlights include seeing Te Ao Marama as a partner on the development of the Water 2010 series (Environment Southland's state of the environment reporting); having input into a number of plans and policies from all the councils; and establishing the joint iwi-policy analyst role with Environment Southland. "This role has been so important in getting our policy position well understood and provided for in the proposed Southland Water and Land Plan."

Another highlight for Michael is the way oil spills have been handled. He says when the

fishing trawler, the Dong Won ran aground on the Te Wharepuitaha Titi Islands, his input was accepted and valuable. "It was a really good outcome and we learned a lot from working together."

Retirement for Michael doesn't sound very relaxing, although he suggests he'll be 'around home' a lot more. He plans to continue on several boards, and is looking forward to supporting the marae to grow. However he seems most excited about the possibility of spending the whole muttonbird (titi) season down on the islands. With a strong connection and passion for titi, he's thrilled that he'll have a bit more time there. "I'll be able to cut tracks and maintain the hut, rather than rushing to do everything in a few weeks of annual leave."

# Working with people important

BY ANDREW MORRISON



Central Government is dealing with complex problems. There are no simple answers to complex problems.

**H**ousing shortages or housing affordability doesn't get fixed by imposing a new set of regulations, introducing a new tax or a new welfare payment.

When describing problems it's also easy to generalise about a certain sector of society as if it belongs only to them. Every person within that sector has a unique set of personal circumstances and each one of them, a unique solution to their own problems.

It's exactly the same when it comes to working with farmers and water quality. Each farmer in Southland has a unique set of circumstances to deal with. No two combinations of animals, soils, geography,

debt levels, information, age, family or production is the same. It shouldn't be a surprise then that a unique set of management practices is going to be the best way of managing each farm's environmental risks.

That's why farm plans make really good business and environmental sense. The key to a successful plan is identifying what unique resources you have on your farm and understanding the steps you want to take to manage those in a way that will meet both your production goals and our communities' expectations about good environmental management.

Beef + Lamb New Zealand encourages farmers to make a start on developing

their unique plan, through its Land and Environment planning workshops. These are a great chance to work with other farmers and a skilled facilitator.

Andrew Morrison is a farmer and director representing the Southern South Island for Beef + Lamb New Zealand. He has been part of a group providing advice about the industry to Environment Southland.

## Farm Environmental Management Plans

Farm Environmental Management Plans are now a requirement for many farmers. We are working with DairyNZ and Beef + Lamb NZ to ensure that the Sustainable Milk Plans and Land Environment Plans they offer meet the new requirements set out in the proposed Southland Water and Land Plan. Similarly, the Focus Activity Farm Plans offered by our land sustainability team are also being updated.

More guidance to help you prepare your own plan will be available in the coming months. Sign up to our water and land e-newsletter for updates – go to [www.es.govt.nz](http://www.es.govt.nz)





# Safer swimming this summer

Looking for a good place to cool off and dip your toes into this summer?

**M**ake sure you check out the updated map on Environment Southland's mapping service Beacon, before you head out to the river or beach.

Making the right decision on the best spot is now even easier with the new-look map. It provides water users with a one-stop-shop to check on the latest weekly water quality results throughout summer.

Environment Southland monitors both river and beach bathing spots weekly. These results are displayed online and also used to provide an overall grade of a particular swimming spot, which is calculated from five years of data.

Environment Southland's marine and freshwater scientist Nick Ward says the best swimming spots are usually higher up on the rivers where the water is less affected by towns and intensive farming. "We know that, at times, some sites in

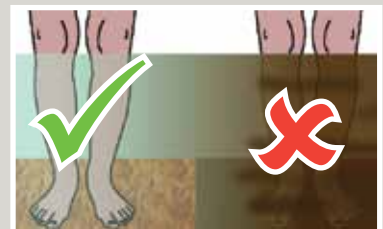
Southland have high levels of bacteria, which can make us sick. By paying attention to the recent weather patterns and checking the results on the map, swimmers can make good decisions about where to swim and reduce their risk of getting sick."

Over summer (December to March), Nick works with Public Health South, iwi and the city and district councils to inform communities if there is a problem with high bacteria levels.

As part of the Southland Science Programme, Environment Southland is leading a Human Health Project, which aims to build a better understanding of the effect of poor water quality on human health. Nick says part of the project is focusing on disease-causing contaminants in rivers. "This includes looking at the sources of contamination, how they affect our health and what we can do to minimise their effects in the future."

## Tips for safe swimming

- ▶ Stand in knee-deep water – can you see your toes?
- ▶ If yes, it should be safe for swimming.
- ▶ If no, you could be at risk of getting sick if you go swimming.



## Other tips

- ▶ Avoid swimming during and 2-5 days after heavy rainfall.
- ▶ Swim away from stormwater outlets.
- ▶ Swim away from streams and areas with possible runoff from intensive agriculture.



**BEACON**  
online maps

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

Your one-stop-shop for  
environmental information



▲ Antara Ag East Friesian-Poll Dorset cross ewes arrive for milking at the company's Brydone property.

# Expanding sheep dairy industry

An expanding sheep dairy industry is being looked at as an innovative and environmentally sustainable addition to the Southland farming landscape.

**T**he Southland Regional Development Strategy (SoRDS) Business Extension Team has been weighing up the place of sheep dairy as one of a range of possible incremental developments in existing primary industries.

Strategy consultant Geoff Henley, who has worked closely with team leader and Winton sheep and beef farmer Peter Gow, thinks a more significant sheep milk

industry could be part of Southland's pastoral patchwork.

The environmental footprint of sheep milk is lighter than that of dairy cattle, meaning it could be a logical option for a more significant industry to develop alongside traditional dairying and other land uses.

Figuring out the optimum use of pastoral land in Southland is a key challenge and the environmental footprint of each

respective primary industry is part of that decision-making process, Geoff says.

A lot has been achieved in Southland through the efforts of Blue River Dairy pioneer Keith Neylon and others associated with the Invercargill sheep-milk processing plant, he says.

Blue River exports infant sheep-milk formula to China, and has produced feta and halloumi cheeses, and ice cream.



A major focus now is to develop the milking ewe population in Southland to keep pace with demand for infant formula. Neylon's company Antara Ag is leading the way. About 14,000 ewes are run across three farms, with plans to increase this to around 100,000.

Neylon says Southland could become the world centre of dairy sheep, but needs to show a sense of adventure to achieve it.

Highly nutritious sheep's milk is becoming a more attractive dairy option for Asian consumers with lower lactose tolerance.

AgResearch is studying sheep dairying's potential, with initial research reinforcing the industry's lower environmental footprint when compared to dairy cattle.



▲ Antara Ag staff member Lauren McLeod milking sheep at the company's Brydone property.

▼ Antara Ag staff member Cloe Legge milking sheep at the company's Brydone property.



## SoRDS

The Southland Regional Development Strategy (SoRDS) was launched in October 2015 as a joint initiative between councils, iwi, business and community organisations.

It is an economic and social development strategy and action plan with the primary aim of increasing Southland's population to 105,000 by 2025 (about 10,000 more people); and 110,000 by 2030.



Southland Regional  
Development Strategy  
TE IWI ME ORANGA RAUEMI

# Updates



## Home heating

From 1 January 2017, open fires can no longer be used within the Invercargill and Gore airsheds.

This is part of the new home heating rules in the Regional Air Plan, which was adopted by Environment Southland as a move towards improving air quality and meeting the Government's health-inspired National Environmental Standards for Air Quality.

Also from 1 January 2017, wood and multi-fuel burners installed prior to 1 January 1997 begin their phase out. They can continue to be used in Invercargill until 1 January 2019 and Gore until 1 January 2020 for burning wood only.

Please contact Awarua Synergy on 0800 WARMSOUTH (0800 927 676) to find out what assistance is available to help you make the change to cleaner heating options or go to [www.BreatheEasySouthland.co.nz](http://www.BreatheEasySouthland.co.nz) for more information.



## Quick access to environmental data

Feel like there are just too many clicks to see our monitoring data?

There's a quick way to access it from your smartphone or tablet, by creating a shortcut on your home screen.

- On Android, look for the 'Add to homescreen' function in your browser.
- On Apple devices, tap the Share button on the Safari browser's toolbar.
- On Windows 8, 8.1 and RT, you can make the website appear as a tile on your Start screen by pulling up the app bar, tapping the star icon and then the pin icon.

For detailed instructions, go to [www.es.govt.nz/access-envdata](http://www.es.govt.nz/access-envdata).



## River Awards

Environment Southland chairman Nicol Horrell accepted an award for the Mataura River from Gareth Morgan of the Morgan Foundation at last month's New Zealand River Awards. The river was judged the most improved river in Southland.

The awards are run by the NZ Rivers Trust and the Morgan Foundation and recognise long-term improvement in a specific water quality indicator. This year the macroinvertebrate community index (MCI) was chosen as the indicator, as this gives a good picture of general river health.

NZ River Awards manager Andrew Gawith says the awards accentuate the positive by recognising the most improved rivers in each region.

The Lower Mararoa River Restoration project was one of three finalists in the River Story Award and although it didn't take the top prize, the judges had high praise for the project and were very impressed with the community involvement and work carried out.



# Time to think about...

## DECEMBER 2016

### **DON'T LET THE CHRISTMAS GRINCH**

**RUIN YOUR SPUDS** – While harvesting your Christmas potatoes, keep an eye out for potato wart, a nasty looking fungus that turns your potatoes to mush.

**CHECK, CLEAN, DRY** – If you are out and about in our rivers and lakes this summer season, remember to clean check and dry all of your fishing and boating equipment to ensure you don't spread any unwanted freshwater pests.

**DARWIN'S BARBERRY** – Heading to your holiday home this summer? Keep an eye out for Darwin's Barberry and make sure you deal with any you find.

**NODDING THISTLE** – Residents should destroy all nodding thistle before seeding on their land. At this time of year plants that have made it through to flowering should be targeted.

**MAKING SILAGE** – Silage stacks need to be 50m away from any waterway, wetland or potable water abstraction point. Silage should not be stored on land that can become wet from springs, seepage, high water tables or stormwater runoff.

## JANUARY 2017

**MUSTELIDS** (ferrets and stoats) – These animals have just been through their annual spring/summer breeding season so now's the time to set some traps around those duck ponds, streams, bush areas or chicken coops before they do damage to other wildlife.

**RAGWORT** – Residents should destroy all ragwort within 50 metres of boundaries before seeding. At this time of year plants that have made it through to flowering should be targeted.

**CULTIVATION** – If you are cultivating sloping ground, it is good practice to avoid leaving a fine seedbed. Surface roughness is vital, with a range of aggregate sizes, which will promote better infiltration, reducing surface runoff and erosion.

## FEBRUARY 2017

**FIREWOOD** – It's a great time to start thinking about your firewood supplies for winter.

**FORAGE CROPS** – Make sure you check your fodder beet crops for any signs of the invasive weed velvetleaf which was

discovered on a number of Southland properties last season. Also take care when placing baleage onto your fodder crop paddocks, to keep them away from waterways and critical source areas.

## Down on the farm



By **GARY MORGAN** Environment Southland principal land sustainability officer

Spare a thought for the honey bee, who is in serious trouble due to declining numbers.

In New Zealand about \$3 billion of our GDP is directly attributable to the intensive pollination of horticultural and agricultural crops by bees.

Bees also contribute indirectly through the pollination of clover, sown as a nitrogen regeneration source for the land we farm. The bee is being attacked by an increasing number of bee pests and disease and they can also succumb to certain insecticides and pesticides. There has been a shortage of quality bee pollen for bees to eat.

What we all need to do is plant more bee friendly plants in our gardens and on our farms. There is a large range of exotic and indigenous trees and shrubs that will provide pollen and nectar throughout the spring and summer months. These bee friendly plants can be planted in our shelterbelts, around our woodlots and along our riparian buffer zones.

The Land Sustainability team can provide bee-friendly planting options for Southland conditions, so give us a call or visit [www.fedfarm.org.nz](http://www.fedfarm.org.nz) and search 'Trees for Bees'.

*Information courtesy of Federated Farmers 'Trees for Bees.'*

# Out in the field



▲ Staff from organisations across Southland took part in the Civil Defence exercise Tangaroa in August. Environment Southland staff Courtney Keen (left) and Paula Burke (right) discuss welfare plans with Emergency Management Southland advisor Jayne McAllister.



▲ Environmental technical officer Michael McDonald checks the level of a water height gauge at Waituna following maintenance adjustments, while Nathan Hughes and Lucy Just record measurements.



▲ Compliance officer Michelle Te Maro samples water in the Waihopai River in September, following a report of a yellow layer sitting on the surface. The substance was the result of a spring pollen bloom.