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Envirosouth

Environment Southland News

June 2012

Issue 27

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environment SOUTHLAND
Te Taiao Tonga

From the Chair

By the time you read this, our Councillors will be about to consider 148 submissions on our Draft Long-term Plan.

There are some constant themes – widespread support for our proposal to make improved water quality our top priority; both support for and opposition to the proposal to increase the dairy differential rate; extensive support for the proposal to create a new walkway at Titiroa and a mixed bag of views on whether we should put some money into the rebuild of Stadium Southland to enable it to be used as an emergency facility for civil defence.

There were also some submissions that came out of left field, such as the 29 requests that we do more to safeguard Hector's and Maui Dolphins.

It's hard to know whether we should be pleased or disappointed at the number of submissions we received this year. The last time we adopted a 10-year plan we received over 200 submissions, so 148 could suggest a decline in interest, given we distributed over 40,000 copies of the summary to residents and ratepayers. Or it could mean that most people support what we're proposing, and don't feel the need to put pen to paper. Either way, it's been a huge job to prepare programmes and budgets for the first three years of the Long-term Plan, involving long hours for staff and several workshops for Councillors. The current requirement to plan in such detail for three years can probably be justified but having to project the requirements and budgets over a further seven years seems an unnecessary burden.

Each submission will be considered carefully, and everyone who has taken the trouble to give us their views will receive a reply to say what the Council has decided as a result of what they said.

Chairman Ali Timms.

Ali Timms
Chairman
Eastern-Dome Constituency
(03) 248 7222

Cover picture:
Staff prepare to tow a monitoring platform out onto Waituna Lagoon.

What's coming up?

JUN 29

Long-term Plan adoption
Submissions have closed for the Council's Draft Long-term Plan and it will be adopted later this month. In this 10-year plan, efforts to halt and reverse the continuing decline in water quality across the Southland region will get a significant boost in funds and staffing in the next three years.

JUL 18

Proposed Regional Policy Statement
Submissions are now being welcomed on Southland's Proposed Regional Policy Statement. The full document is available on our website, www.es.govt.nz where there is also a guide to help you make a submission. Read page 14 for more information.

JUL 19

Green Screen Environmental Short Film Awards
Entries for the Green Screen Environmental Short Film Awards have now closed and judging is underway. Well done to all those who submitted a film. The gala awards night is being held on Thursday 19 July at Centrestage in Invercargill, so we look forward to seeing all our budding young filmmakers there.

JUL 25

Southland Environment Awards
Judging of the nominees in this year's Southland Environment Awards is now complete and it's just a few more weeks until the awards night reveals the winners. Read more about this year's nominees on page 13.

SEP 26

ShakeOut
Civil Defence aims to have one million participants in the New Zealand ShakeOut earthquake drill, the first ShakeOut drill held nationwide in any country! Check out page 12 for more information and details of how to register.

Buddleja found on the Waiau

A second crop of Buddleja (pronounced buddlia) has been found on the banks of the Waiau River this season, concerning Biosecurity staff at Environment Southland.

Buddleja, a tall, woody shrub, likes to inhabit disturbed stony, rocky, gravely ground like river beds and has become a problem in other parts of the country.

Biosecurity Officer Amy Lagerstedt says the unusual thing about this find was that it was on the wrong side of the river for seed to have spread with the current or wind. "We're concerned that there might be more out there that we don't know about, so would welcome anyone fishing on the Waiau that spots some of this plant to give us a call".

Buddleja is also known as butterfly bush as it attracts lots of butterflies, and is a common garden plant throughout Southland. Amy says the species they are concerned about is Buddleja davidii, which has white or purple flowers in January, can grow up to two metres tall and has vast amounts of very fine seeds (about 3 million on an average plant).

Biosecurity staff are concerned that this plant has the potential to spread quickly and become a problem on a similar scale to gorse and broom.

When you're out fishing on the Waiau River, please keep an eye out for Buddleja and give us a call if you spot this problem plant.

Buddleja has the potential to spread quickly and could become as big a problem as gorse if not controlled on Southland's river beds.

Art competition selects cover

The creative talents of three young Southlanders have helped bring the concepts of the Proposed Regional Policy Statement to life.

Sarah Sarfaiti's pencil drawing of Southland's environment was chosen to illustrate the cover of the document, which was released for public comment last month.

And paintings by fellow Invercargill teenagers Olivia Cousins and Fliss Crossley-Pritchard adorn the back and inside back cover.

Their artwork was chosen from over 20 entries in a competition run by Environment Southland earlier this year.

Sarah Sarfaiti's winning artwork.

Gas in groundwater provides clues for scientists

An Environment Southland scientist and a university student have been "sniffing" for a radioactive gas to obtain valuable information about the influx of groundwater into Waituna Lagoon.

During the past few months Groundwater Scientist Clint Rissmann, with the assistance of University of Canterbury PhD student Jonathan Davidson, have been taking samples from across the Waituna catchment to investigate the presence of the naturally occurring gas, radon-222, possibly a first in Southland.

Clint says the existence of the gas, and the amount of it, can help determine the interaction between groundwater (from aquifers) and surface water in the lagoon and surrounding waterways.

He says the work will help confirm work already done to examine the groundwater seepage into the lagoon.

"It may also be useful in helping to decipher the origins of nutrients inputs into the (Waituna) lagoon."

He says despite the menacing notion of the gas being radioactive, there was in fact little to worry about.

In concentrated doses the gas can be harmful to human health, however the radon-222 that exists in Waituna groundwater is at lower levels and poses no health risk, he says.

In fact preliminary findings have shown radon-222 levels between 3000 and 40,000 becquerels (the unit used to measure radioactivity) per cubic metre of water, which Clint says is about one-fifth of the World Health Organisation guidelines for groundwater limits.

He says the testing represents a significant step towards better understanding the hydrological relationships in the Waituna catchment.

The gas is produced from the decay of radioactive minerals within rocks which over time is released into groundwater.

As a consequence groundwater is typically higher in radon than surface water, so if there's higher than expected readings of dissolved radon-222 gas in the surface water it indicates a groundwater contribution.

"Sniffing" for the gas doesn't require a keen sense of smell on the scientists' behalf, it is simply the term coined for the sampling method used to capture the gas, he says. Samples are gathered via a pump and hose - with water sucked from the bed of the lagoon or nearby creek - and samples are quickly sealed and whisked away for laboratory testing at the University of Canterbury.

From the moment the radon-222 gas is extracted, it starts to deteriorate so haste is imperative to capture a valid result, however the rate of decay is factored into the lab testing, he says.

Clint says the testing regime in the Waituna is ongoing and there's even scope for the method to be used to help examine surface water quality across the region in the future.

University of Canterbury PhD student Jonathan Davidson sampling the radioactive gas radon-222 from a bore in the Waituna catchment.

Groundwater studies provide insights into water quality

The influence groundwater has on Waituna's creeks and lagoon has been poorly understood until now. A technical report covering the results of a several investigations in the Waituna catchment over the past year has just been released and provides some interesting insights.

The studies were particularly helpful in understanding the role that groundwater plays in terms of water quality in the lagoon. Principal Scientist Karen Wilson says two key areas were investigated: groundwater discharge into the Waituna Creek, and direct seepage of groundwater into the lagoon.

She says a lot of equipment and technology was used in the investigations including benthic flux chambers on the floor of the lagoon to measure seepage; installing monitoring bores around the lagoon margin; extensive monitoring of bores across the catchment for water quality sampling; measuring flows and water quality in Waituna Creek; surveying water levels across the catchment and installing data loggers to measure groundwater level, electrical conductivity and water temperature.

Farmers were very helpful, allowing their bores to be sampled numerous times for the programme.

One of the overall key findings was that groundwater plays a relatively minor, but still very important role in the transport of nutrients to the lagoon. When compared with estimated surface water loads, groundwater inputs may contribute approximately 10-18% of the cumulative nitrogen and phosphorus loads into Waituna Creek.

Other key findings include:

- Hydrological properties suggest that the Waituna Lagoon Catchment can effectively be separated into three zones, the Northern, Mokotua Infiltration and the Southern Zones.
- The Northern Zone has relatively good groundwater quality. The thick brown soils provide some buffering for groundwater from intensive land use. However poor siting of bores or poor well head protection can contaminate groundwater.
- In the Mokotua Infiltration Zone, groundwater quality is relatively poor due to the rapid infiltration of soil water with little or no dilution of soil zone contaminants leaching from intensive land use. Groundwater also drains rapidly from this area into Waituna Creek and appears to contribute significantly to the deterioration in the water quality of Waituna Creek, south of Mokotua. Modelling indicates groundwater has an average residence time of 1-2 weeks, which is extremely rapid.
- In the Southern Zone, recharge to shallow groundwater systems occurs relatively rapidly (hours/days) via the soil zone. Phosphorus (P) concentrations are up to 50 times higher than oxygen rich groundwater in the north of the catchment. This is likely to reflect the leakiness of P from organic soils, a naturally higher solubility and mobility of P in these conditions and a potentially significant P input from the underlying lignite measures.

Karen says these studies have thrown up several further questions, and more work is to be done to more accurately determine the boundaries of the zones across the catchment.

The Groundwater Technical Report and other reports on Waituna science are available from our website www.es.govt.nz.

The monitoring platform was towed out into the lagoon before being anchored into place. The platform will provide real-time data about water quality and weather conditions.

Earthquakes in groundwater

The enormous and potentially destructive forces that are sent rippling through the skin of the planet are regularly emerging in a most unlikely place – Southland aquifers.

The region's aquifers, or groundwater reservoirs, appear to be a complex and, as yet, not completely understood natural sensor that responds to the throb of the pressure released when the earth's tectonic plates smash together, producing an earthquake.

Environment Southland Principal Scientist Karen Wilson says the seismic movements have been detected in the aquifers since the Council's groundwater monitoring programme began in 2000.

The response in the monitoring equipment displays a change in an aquifer's water level, fluctuating both up and down.

The 5.5 magnitude earthquake, centred near Tuatapere on 12 May triggered about a 30mm deflection in the Wendonside aquifer level almost immediately.

However the Edendale aquifer also responded, which Senior Environmental Technical Officer Dianne Elliotte says is highly unusual.

Karen says there appears to be no rhyme or reason as to which of the aquifers will respond to an earthquake, but the deeper aquifers closer to the basement rocks generally respond the most.

Both confined and unconfined aquifers seem to be affected: confined aquifers are where the groundwater is in a relatively enclosed space and unconfined aquifers are where water gathers in open pore spaces of overlying soil or rock.

Karen says the earthquakes don't cause vast volumes of water to move – the monitoring suggests that the quakes cause a pressure wave that travels through the water.

Curiously, the aquifers also react to seismic movements from further afield – but not in a predictable way. The Riversdale aquifer responded to the 7.1 magnitude earthquake in Christchurch on 4 September, 2010, but the others didn't.

The recording instrumentation for several aquifers also showed a spike after the devastating earthquake that struck in the Indian Ocean on Boxing Day 2004.

The Southland phenomenon is not unique in New Zealand, with the Northland aquifers displaying similar characteristics; but Dianne says none of the aquifers between the two opposite ends of the country react the same way.

Adding to the intrigue, Karen says the aquifers in the two responsive regions don't share completely comparable characteristics.

To capture a clearer view of the episodes, the groundwater team has changed how they monitor aquifer levels to get maximum and minimum readings as well as averages over 10 minute intervals – all at no extra cost to ratepayers.

Karen says there aren't any plans for wider study into the occurrence, but GNS Science has been looking into it, especially following the series of Christchurch quakes.

In the meantime, the phenomenon continues to whet the scientists' curiosity.

The Riversdale aquifer responded to the 7.1 magnitude earthquake in Christchurch in September.

Farmers get big tick for keeping stock out of whitebait spawning habitat

Farmers have won praise for keeping stock away from waterways and in doing so preserving the spawning habitat of one of Southland's gastronomic favourites.

In March, Council staff made an aerial inspection of inanga spawning areas around coastal Southland – between western Southland and the border with Otago on the east coast. Inanga are one of the five whitebait species, and usually the most commonly caught.

Compliance Officer Robyn Johnston is delighted that the flight turned up no significant non-compliance. The purpose of the flight was to investigate river mouths, and up to 1km inland, to establish whether stock had access to the sites where inanga bred, she says.

Council Aquatic Scientist Andy Hicks says inanga spawn in the freshwater tidal zones of the upper reaches of estuaries. De-vegetation and river bank degradation are being investigated to see whether they may have a detrimental impact on the spawning areas.

In Southland, inanga spawning is thought to occur from January to April, and in areas with vegetation cover for protection.

When stock had access to those areas, they could inflict significant damage on those habitats and, consequently, on the whitebait populations, Andy says.

However landowners seemed to be keeping stock well away from the waters' edge.

Robyn says this was especially promising leading into May when the winter grazing rules became operative, requiring that farmers set up appropriate buffer zones near water to prevent run-off having an impact on the environment.

"It's pleasing to see that on the properties we've inspected from the air, farmers have established good practice methods and we hope that continues," she says.

Restricting stock access to waterways is helping to protect the valuable whitebait spawning habitat.

Funding helps to control pests

When the owners of South Coast Dairy floated the idea of building a dairy farm near Curio Bay, it proved an unpopular plan, with some fearing it could be detrimental to a sensitive environment.

But since they won approval to establish the farm in 2009, the South Coast Dairy co-owners Chris and Lynsey Stratford have taken it upon themselves to at least try to placate the doubters and establish the most environmentally sound property they can.

The 2011 winners of the Farming Award at the Southland Environment Awards have taken progressive steps to enhance the sustainability of the farm – including riparian planting, fencing off waterways and retiring large swathes of land to foster natural regeneration.

"We've always believed that the natural landscape is a real asset to this farm and we've always wanted to protect the environment," Lynsey says.

The Stratfords' latest endeavour came as a result of Environment Southland Biosecurity staff advising them to apply to the Council's Environmental Enhancement Fund for a pest management project on a 29 hectare parcel of podocarp forest.

The successful application funded 50% of the cost of the project, which covered the price of 15 possum traps. The Stratfords paid the rest of the cost "in kind" by installing the traps and carrying out the maintenance work themselves.

They already had more than 20 possum and stoat traps dotted across the farm but the new traps, which are self-resetting, will bolster the battle and make for less upkeep and less time bashing through dense bush to clear and reset them.

Lynsey says the Environmental Enhancement Fund is an ideal way for landowners to get involved in making their properties or activities more sustainable, and it wasn't hard to do. Prospective applicants need to have a clear plan of what they wanted to achieve and how they would achieve it, there was nothing at all daunting about it.

Lynsey says the work being done on her farm is proof that dairying can co-exist with a sensitive environment, although she freely acknowledges others might have a differing view.

"But we're happy with what's being achieved."

Farm co-owner, Chris Stratford, installs the new self-resetting traps which have been partly funded through the Environmental Enhancement Fund.

Students getting hands on learning

Students at Heddon Bush School have been learning about their environment in a hands on way with the support of local landowners and Environment Southland staff.

Starting in 2007, the students adopted a remnant kahikatea stand near their school, which they nicknamed 'Horner's Donut' because of the shape and as a tribute to the family that first fenced off the trees.

Principal Rae Lang calls it a 'project in development' and one that the whole school and wider community are able to be involved in. Last year the students planted over 100 native trees and, with the help of Environmental Education Officer Pat Hoffmann, the school drew up a five-year plan.

Rae says the plan will help to make the project manageable but worthwhile, and sets up a timetable for the pupils to follow, suggesting times for weeding and further plantings.

Part of the role of the school's prefects is to look after 'Horner's Donut' and to lead and drive the project, getting other students and parents involved.

The kahikatea are old trees and quite exposed to the wind so although they produce seeds, the strong winds and lack of shelter means the seedlings don't survive. Pat says the seeds won't mature without better shelter and that's why what the school is doing is so important. "The native plants will act as a nursery for the young kahikatea seedlings, providing them with adequate shelter so they can grow up and mature," Pat says.

The school has been successful in gaining a grant from Environment Southland's Environmental Enhancement Fund and will use that funding to purchase the next round of plants.

Environment Southland Environmental Education Officer Pat Hoffmann demonstrates how to plant a seedling before the Heddon Bush students plant over 100 in Horner's Donut.

Students, staff and parents plant native seedlings in a kahikatea forest remnant.

Floodwarning: 64 years of service

Imagine it's the dead of the night, pelting with rain and your job is to get close enough to a rapidly rising river to gauge its flow and level.

That's exactly what Environment Southland hydrologists do whenever there is a threat of a flood; no matter whether it's a long weekend, Christmas Day or the middle of the night.

Southland's floodwarning system has been in operation since 1948, first instituted by the Southland Catchment Board and now, 64 years later, even though there's been a quantum leap in technology, the primary objective remains the same.

Senior Hydrologist Chris Jenkins says the chief function of the eight-strong team charged with floodwarning duties is to first recognise the signs and then act to warn the community of impending trouble.

It's varied as it is unpredictable: there's no "flood season" as such. The time of the year matters little, nor does the location, with a flood possible in any corner of the province.

"Unfortunately for us, floods don't keep a reliable timetable", he says, so it's imperative the team has the capability to respond at any time.

Of course the team does usually get a few hints. MetService gives a "heads-up" with its weather watches and warnings, delivering a window of opportunity for Chris and his team to check their equipment, making sure everything is ready to go.

Even in "peace time" when there is no imminent threat, the Council monitors rivers across the region via telemetry devices that feed data back to the Environment Southland offices electronically, in some cases as often as every 15 minutes.

But as river levels rise to pre-determined trigger levels an alarm will sound, then the cogs of a response really begin to turn.

Chris says once the flag goes up the frequency of monitoring increases, a floodwarning message is posted on the Environment Southland website and the people that need to know – within the organisation and emergency services – are advised about what might lie ahead.

As the intensity of a flood increases, so too does the need to advise the public that floodwaters may soon be lapping at their doorstep. Pre-recorded radio messages are broadcast on several local stations to alert the community.

Even with the telemetered monitoring equipment, there's no option but to send staff out into the field to gauge floodwaters because that still generates the most dependable information when

Hydrologists brave the weather to gauge the river flow.

gear could be damaged – or even submerged.

Chris says a lot of the decisions to be made during a flood come down to judgement calls – sometimes they prove correct other times not so, but the team always errs on the side of caution.

"It's much better to be proved wrong by being cautious, than the alternative."

But after working at the Council for 26 years, Chris likes to think his experience counts towards making the right call more often than not. During his time with the team he (tongue-in-cheek) suggests he's developed a "spidey-sense" about the likelihood of a flood, but as you'd expect, the information he really relies on is the hard data.

"Sometimes everything can point to flood conditions but they don't materialise and sometimes they can come out of the blue."

Although Chris says the threat of a sizeable flood can create a hum around the office, the excitement is quickly tempered by the less glamorous aspects of the response as well as the potential consequences.

Floods require him and his team to work long hours, at times out on river banks or on bridges in weather that can only be described as offensive, either dangling a flow gauge into the tumbling muddy torrent. At other times they will be staring at a computer screen for hours on end, interpreting data.

But the floodwarning system is a vital service for the community and its importance is wholly appreciated by the staff, Chris says.

So if it's been bucketing rain for a lengthy period of time you can be sure the Council hydrologists will be on task to keep the community informed – you might even spare them a little sympathy…

You can see instantly if Environment Southland is issuing floodwarnings by checking the front page of our website, www.es.govt.nz.

We have an arrangement with both commercial radio networks to broadcast a generic floodwarning message on More FM – 89.2FM, Classic Hits – 98.8FM and Hokonui Gold 94.8FM (for floods in the Mataura catchment).

You can check river levels in all the major catchments for yourself at any time by looking at the Rivers and Rainfall page on the website, or calling the automated telephone service on (03) 211 5010.

Technology has changed in the 64 years that Southland has had a floodwarning system.

Emergency information just a click away

Emergency Management Southland has revamped its website to help keep Southlanders better informed about what to do in a Civil Defence emergency.

The entire site has been refreshed and provides better access to resources about what to do in an emergency and how to prepare for the unexpected.

Emergency Management Southland Manager Neil Cruickshank says the new site has an abundance of valuable material including links to all of the important organisations that will be involved in an emergency response.

"It's a one stop shop for everything you need in an emergency."

The new website has been designed to deliver information about an emergency as it happens, he says.

The organisation has also increased its online presence via social media platforms Twitter and Facebook that will also supply news, tips, details of upcoming events and they will also serve as a multimedia source in emergency responses.

"The people that follow our feeds will be able to receive the most up to date emergency information," Neil says.

Look up www.civildefencesouthland.govt.nz; links to the organisation's Twitter and Facebook pages are also available on the site.

The new look Emergency Management Southland website.

Sign up for ShakeOut

Southlanders are being urged to sign up and take part in what promises to be the largest earthquake drill in New Zealand's history – the New Zealand ShakeOut.

On Wednesday 26 September at 9.26am people across the country will drop, cover and hold to mimic the right action to take in an earthquake.

Emergency Management Southland Advisor Craig Sinclair says the drill provides the perfect opportunity for anyone to take stock and identify how ready they are.

It doesn't matter whether they're at home by themselves, at work, at school or out shopping. "It's all about making sure people know the correct action to take."

So far about 250 people in Southland have signed up to ShakeOut, including Riverton Primary School, Glenham School and Emergency Management Southland staff, he says.

"We hope that as we get closer more and more people will join in."

The target nationally is for one million people to be part of the exercise, Craig says.

All it takes to register is to visit the ShakeOut website www.getthru.govt.nz and go from there, he says.

"Participation could only take a couple of minutes, practicing Drop, Cover and Hold; an organisation could hold a full evacuation or evaluate business continuity procedures."

ShakeOut has its roots in California in 2008 and was launched as an effort to inform the public about the importance of earthquake readiness.

About 5.4 million people participated in the first Californian exercise, growing to 8.4 million last year and in the meantime ShakeOut has spread further afield – including New Zealand.

Gala night in store for the Southland Environment Awards

The nominations are in, the judges have done their work and all that remains is to proclaim the winners in this year's Southland Environment Awards.

There is a record number of nominees across the seven categories of the awards, and the judges have criss-crossed the region from Stewart Island to Te Anau, Pukerau to Tuatapere to visit them all.

We'll be announcing the winners on Wednesday 25 July at a special function in Invercargill.

This year's awards night will have a new dimension, with the inclusion of the Southland Conservation Awards for the first time. Environment Southland is partnering with the Department of Conservation to bring together the environment and conservation awards into one event.

Our guest speaker is Sam Johnson, leader of the Student Volunteer Army and last year's Young New Zealander of the Year.

Information about how the public can get tickets to this special event will be published in our *Enviroweek* advertisement in *The Southland Express* and *The Ensign* in the next couple of weeks.

The nominees in the 2012 Southland Environment Awards are:

Individuals
- Rewi Anglem, Gore
- Tracker Black, Bluff
- Ken Calvert, Myross Bush
- Alice Casey, Otatara
- Barbara Cunningham, Mataura
- Desmond Horrell, Mandeville
- Edith Jones, Manapouri
- Peg Leach, Winton
- Estelle Leask and Chris Andrews, Bluff
- Bob and Ina McNeill, Invercargill
- Paul Roff, Otautau
- Martin Sliva, Te Anau
- Frank Wells, Invercargill

Community Groups
- Conservation Volunteers NZ, for work at Waituna
- Eastside Baptist Church, Invercargill
- Fiordland Marine Guardians
- Gore and Districts Amenities Trust
- Hokonui Tramping Club
- Kepler Challenge Mountain Run Trust, Te Anau
- Mataura Community Garden
- Mid Dome Wilding Trees Charitable Trust
- Otatara Landcare Group

Schools
- Alice Casey, Otatara Primary School
- Fiordland Kindergarten
- Pukerau School

Farming
- Warrick and Wendy Day, of South Hillend
- Lincoln Moffat, of Eastern Bush
- Nathan Parris, of Clifden
- Southern Star Farms, of Waituna

Commercial
- Automotive Solutions, Invercargill
- Downer NZ Ltd, Te Anau
- Hokonui Rūnanga, Gore
- SIMS Pacific Metals, Invercargill
- Westpac, Invercargill

Innovator
- Ken Calvert, Myross Bush
- Clean, Green Effluent Co, Invercargill
- Barbara Cunningham, Mataura
- Dancing Star Foundation, Stewart Island
- Eastside Baptist Church, Invercargill
- Frank Wells, Invercargill

Environmental Achiever
- Tracker Black, Bluff
- Fiordland Marine Guardians
- Kepler Challenge Mountain Run Trust
- Peg Leach, Winton
- Estelle Leask & Chris Andrews, Bluff
- Bob and Ina McNeill, Invercargill
- SIMS Pacific Metals, Invercargill

Stumped! Frank Wells worked with the Invercargill City Council Parks and Reserves Department to create Southland's first "stumpery" at Queen's Park. Frank is one of the 34 nominees in this year's Southland Environment Awards.

RPS released for submissions

Submissions are now open on the document which will guide significant resource management planning decisions in the region for the next ten years or more.

The Proposed Southland Regional Policy Statement 2012 (RPS) is the second regional policy statement that the Council has prepared. Once it has been through the public consultation process and becomes operative, it will replace the current RPS that has been in place since 1997.

Senior Resource Planner Aaron Leith said the Proposed RPS had been in preparation for more than three years, with an unprecedented amount of input from the community influencing its development from the earliest stages.

Comments from the community had been taken into account as each section was drafted. There had also been extensive consultation with the other three councils in Southland, along with Te Ao Marama – the Ngāi Tahu resource management agency – and key stakeholder groups, whose input had been invaluable.

At last month's launch, Chairman Ali Timms said that the new Proposed Regional Policy Statement identified the community's aspirations and the actions required to achieve success. "It encourages people to work together and by recognising the connections between elements in the natural world and our place within our environment and encompasses the Ngai Tahu philosophy of "ki uta ki tai" – from the mountains to the sea."

There are 15 major topic areas in the Proposed RPS, and people can make a submission on anything that interests them. The full document and other information is on the Council's website, www.es.govt.nz and is also available on CD. Hard copies are available for purchase. Environment Southland's planners have prepared a guide to help people make a submission, and this is also on the website.

Submissions on the Proposed Southland Regional Policy Statement 2012 close on 18 July 2012.

Rural land and water quality are two of the major topic areas in the RPS.

Coastal issues are also a major topic area in the RPS.

NEW LOOK!

BRUCIE'S BUDDIES BULLETIN

OFFICIAL NEWSLETTER FOR BRUCIE'S BUDDIES

Hello Buddies,

Here's a new look for Brucie's Buddies...in Environment Southland's magazine Envirosouth! We've changed things a little bit to have a mix of regular bulletins as well as a section in Envirosouth. There'll still be articles about the environment and local events, pictures of me visiting different parts of Southland, and fun activities. Don't forget to look for more photos and links on my webpage at www.es.govt.nz/for-schools/bruce-c-gull. There's also a competition there called the Super Six Quiz. It's for club members only; so if you're not a member, see the following page for how to join.

I know that my buddies like to receive their own mail, so you'll still receive your very own bulletin twice a year, and get a birthday greeting from me. And remember that I love to hear from my buddies! You can email me at bruce.c.gull@es.govt.nz, or write to me at:

Bruce C Gull
Environment Southland
Private Bag 90116
Invercargill 9840

I had a great birthday party at Daffodil Bay; lots of cool things to do and see, a yummy lunch, and I enjoyed meeting lots of my buddies. There are photos in this edition. There's also a story about students who've begun a planting project on a farm over the road from their school.

Winter is here, and you'll also find suggestions to keep warm and some activities for days when it's a bit too cold or wet to play outside.

Best wishes,

Brucie

IN THIS ISSUE

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GO TO THE WEB FOR Membership to Brucie's Buddies Club

BRUCIE GULL

WHO AM I?

WHERE HAVE I COME FROM?

A few years ago I was flying around Southland and a big gust of wind sent me crashing to the ground. After I dusted myself off some nice people told me I was at a place called Environment Southland. Funnily enough they were wanting someone to help spread the message to young people about looking after the environment – and I told them "I know just the bird; me!".

At first I began to help another of the Council's friends, Rubbish Woman, teaching people about the 3Rs – *Reduce, Reuse, Recycle*.

Now I'm flying solo and I'm involved in so much more! They even gave me a desk and nest at Environment Southland. Sometimes you might see me out and about, soaring the skies and skimming the sea, looking out for the environment and catching up with my buddies like Albert T Ross or Ellie Eel.

BRUCIE'S BUDDIES CLUB

I have my own club, called Brucie's Buddies, for kids aged four to 14. Environment Southland runs it for me, and it's free! Join me as we learn about our environment, see the places I visit, and best of all be my buddy – it's lots of fun!

WHY BE MY BUDDY?

Being a Brucie Buddy gives all sorts of special opportunities;

- An invitation to my birthday party, held at a different place every year. It's always fun and you learn stuff too.
- There are competitions, on my webpage and also in the bulletin, with prizes for buddy members.
- Personal birthday mail, everyone likes to get something in the mail on your birthday and you'll get a birthday greeting from me.
- Bulletin sent to buddies twice a year. (It has news, quizzes and activities about the environment.)

MEMBERSHIP

Maybe you, or someone you know, would like to join. See my web page www.es.govt.nz/for-schools/bruce-c-gull to join online, or you can fill out the form below and send it in.

I'D LIKE TO BE A BRUCIE BUDDY

Name _____

Address _____

_____

Phone _____

Email _____

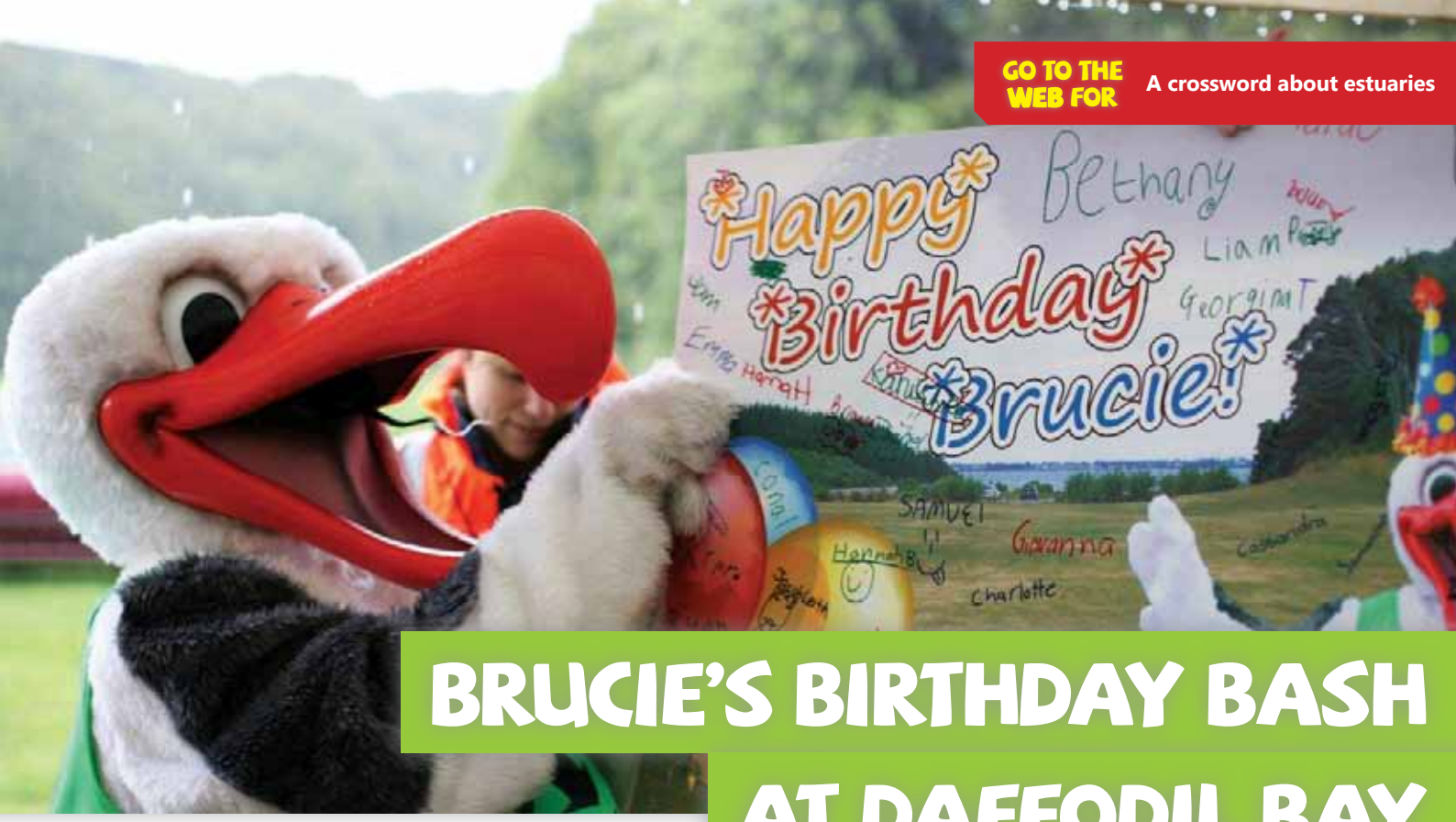
Age _____

Birth date _____

School _____

Send to: Brucie's Buddies
Environment Southland
Private Bag 90116
Invercargill 9840

GO TO THE WEB FOR A crossword about estuaries



BRUCIE'S BIRTHDAY BASH AT DAFFODIL BAY

This year my birthday party was at Daffodil Bay, which is near Invercargill at Sandy Point. It was a great day - lots of enthusiastic buddies, awesome activities, squishy mud, coastal forest and of course a yummy lunch!

The morning was bright and clear, but by the time I got to the party, it was raining. That was a shame because there was a lot to see and explore. Still, the party helpers just kept right on cooking and luckily there was enough room for us all in the big tent.

There were fun activities: Daffodil Bay is part of the New River Estuary and at low tide there is a big area of mudflats. We had a close look at the mud and sand and looked at what lives there – quite a few crabs! Back on land, there was a forest walk, looking at the native trees and plants, and we learned about the damage introduced pests can do. The last activity had my buddies in a race, learning what things you can re-use or recycle and what things you can't.

Here are a few pictures from the party - you can see more on my webpage and on Environment Southland's Facebook page www.facebook.com/environmentsouthland. Also on my webpage is a crossword using words about estuaries. Check it out at www.es.govt.nz/for-schools/bruce-c-gull/ - you might need mum or dad to help you do this – so ask nicely.

WOODLANDS PLANTING DAY

The Waihopai flows alongside the area planted.

Environment Southland has a project called Living Streams that is trying to improve water quality in Southland catchments. A catchment is the area of land from where water flows into certain streams and rivers.

One of the ways to improve water quality is to plant trees and shrubs near a river. Tree roots help to hold river banks in place and they also slow down water that runs off the land. The roots work like a net to catch the soil and other bits and pieces that are mixed in with the water, so that it is not so easily washed into a river.

Recently Living Streams, Woodlands Full Primary School and dairy farmer Michael Knight worked together on a planting project in the Waihopai Catchment. The farm is very close to the school, and the planting area is next to the Waihopai River.

The whole school (about 80 pupils, plus teachers and parents) took part. Environment Southland staff showed everyone how to plant and use plant protectors. Protectors stop young plants from being smothered by grass or weeds, or from being eaten by rabbits. Protectors also help shield plants from weed sprays. The area has also been fenced off to protect trees from farm animals that might eat them or knock them over.

The day was successful with just over 300 plants - a mixture of native species including flax, toetoe, kowhai and totara - put in.

The school will continue to be involved. Pupils will keep checking the plants, adjust plant protectors and pull out any weeds. They will also plan for information signs and seating areas and do some more planting in spring.

There could be a stream near where you live, or near your school, where planting could make stream banks stronger and improve water quality. Talk to your family and teachers. For further planting advice, you can call Environment Southland on 0800 76 88 45.

GO TO THE WEB FOR Award winning air pollution short film

AIR QUALITY

Most of us probably think that in Southland, with its wide open spaces and small population, the air quality would always be good. It is most of the time – but in winter time, particularly in Invercargill and Gore, air quality isn't always so good.

That's mainly because of the smoke from the fires that keep us warm at home. Smoke contains tiny unburned pieces of wood or coal called particulate (PM_{10}). Breathing this in can make you feel ill and be bad for your lungs.

You can find out more about the Environment Southland air quality monitoring programme on its website www.es.govt.nz.

HOW CAN WE IMPROVE AIR QUALITY?

Many people love the warmth and feeling a fire gives. Interestingly, the hotter a fire burns, the less smoke there is. A fire burns hotter with dry wood and below are some ways to keep both your fire and air quality in good shape.

- Remind your family to get wood well before winter.
- Stack wood in a place that's sheltered from rain.
- Add wood a little at a time to build the fire up.
- Don't' fill the firebox right up.
- Don't burn plastics – they can give off toxic fumes.
- Don't burn treated, painted, or wet wood.
- A clean chimney helps a fire burn better. Ask if yours has been cleaned recently.

HOLD ONTO THE HEAT!

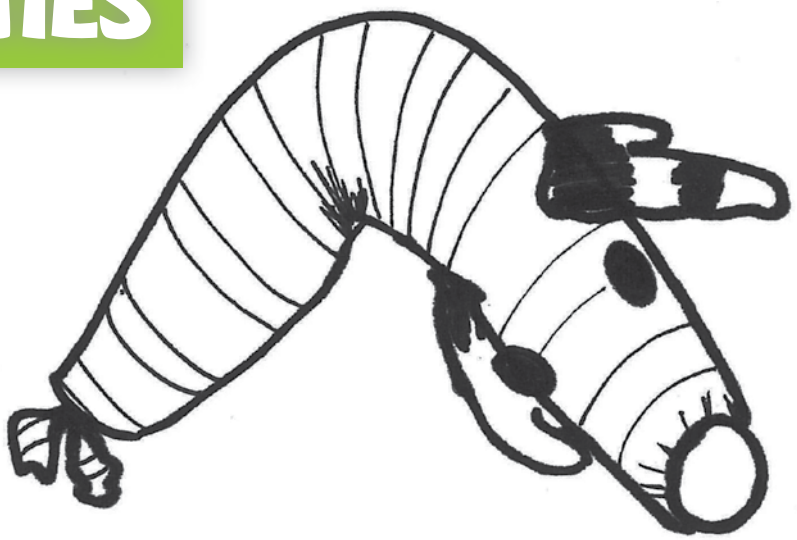
Heat can easily escape through tiny places like spaces under doors and gaps around windows. Keep the heat in by plugging the gaps. Draught stoppers are useful. On the activities page is a simple way to make one, using recycled materials.

TWISTED SMOKE

One of the award-winning films at last year's Green Screen Environmental Short Film Awards, Twisted Smoke, takes an imaginative look at air pollution. Check it out on www.youtube.com/user/environmentsouthland.

WINTRY ACTIVITIES

MAKE A DOG DRAUGHT STOPPER



YOU NEED:

- An old pair of woolly tights. (Ask their owner if you can cut them up first!)
- Two pieces of wool about 1 metre long
- Two buttons
- Needle and thread
- Stuffing - old socks, scraps of fabric, rice, sawdust – whatever you have to hand
- Piece of ribbon about 50cm long
- Old mittens
- Scissors

HOW TO DO IT:

1. Cut one of the legs from an old pair of woolly tights as high up as possible with a pair of scissors.
2. Fill the cut leg of the tights with stuffing so it forms a sausage shape. Leave a bit unstuffed at the end.
3. To make a small tail, use a piece of the wool to wind and then firmly tie around the open end.
4. At the other end, tie another piece of wool around the toe of the tights to make the dog nose.
5. Sew an old mitten on to each side of the sausage, just above the nose, to make the dog's ears. If you don't have old mittens, cut mitten shapes from the fabric scraps.
6. Sew the buttons on to the sausage to make eyes.
7. Tear a strip off some fabric or use a piece of ribbon and tie around the neck to make a collar.

WINTER TEASERS

1. As the year gets older, I become shorter and then I get longer. What am I?
2. What do snowmen eat for breakfast?
3. I'm green when I'm new; red or brown when I'm old. What am I?

Winter teasers answers

1. The hours of daylight in a day.
2. Snow flakes!
3. A leaf.

WEB ACTIVITIES

Check out my webpage for the *Super Six Quiz!* It's exclusively for Brucie's Buddies members, and each entry will receive a prize. You'll find all the answers in this edition.

There's also a crossword on my page to sharpen your brain and spelling skills.

KIDS CARING FOR OUR ENVIRONMENT

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 newsletter, as well as your suggestions for topics you would like to read about in future issues.

The next Envirosouth will be published in September 2012.

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service@es.govt.nz

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www.es.govt.nz
www.facebook.com/environmentsouthland

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Te Taiao Tonga