

# Compliance Monitoring Report

2023-24



environment  
**SOUTHLAND**  
REGIONAL COUNCIL

Te Taiao Tonga

# Contents

<b>Foreword</b> .....	<b>1</b>
<b>Introduction</b> .....	<b>2</b>
<b>Agriculture</b> .....	<b>3</b>
Agricultural audits.....	3
Dairy farm inspection overview.....	3
Dairy effluent inspections .....	4
Dairy top performers .....	4
Groundwater quality sampling .....	5
Synthetic nitrogen.....	5
Wintering pads.....	6
Winter grazing.....	6
<b>Coastal and marine</b> .....	<b>7</b>
Coastal structures.....	8
Coastal surface water activities in Fiordland .....	8
Bluff Harbour ports.....	9
Whitebait stands.....	9
<b>Industry</b> .....	<b>10</b>
Industry monitoring .....	11
Electricity generators .....	12
Fertiliser .....	13
Forestry.....	15
Landfills.....	16
Manufacturing.....	17
Meat processing plants.....	19
Milk processing plants.....	24
Mining.....	26
Minor industries.....	28
<b>Sewage, stormwater and water supply</b> .....	<b>30</b>
Gore District Council .....	31
Invercargill City Council .....	34
Milford Sound Tourism Ltd .....	37
Southland District Council .....	38
<b>Water abstraction</b> .....	<b>42</b>
<b>Incident response</b> .....	<b>45</b>
<b>Enforcement</b> .....	<b>47</b>
<b>Glossary</b> .....	<b>49</b>



# Foreword

The 2023-24 Compliance Monitoring Report provides an overview of Environment Southland's compliance, monitoring and enforcement activities.

It serves as both an internal and external report card of sorts, providing us with a check of how well we're going with assessing the range of activities people hold consents for, and it's a useful tool for individuals, businesses and councils to compare and assess their own performance or develop plans.

Our team has been pulling this report together annually for over 25 years, and in that time there has certainly been a lot of change.

What hasn't changed is our commitment to ensuring strong environmental outcomes, and working with our community to educate and advise on how to minimise the impact their activities might have on Southland's environment.

This year the team continued to expand on that education-first approach. They implemented a new notification system, giving farmers a heads-up about an upcoming dairy discharge consent inspection with a text the day prior. This approach has been really well received and has allowed the team to increase their one-on-one interactions with farmers on-farm, leading to positive conversations.

The dairy top performers programme also continues to build. Developed in 2020, this programme aims to acknowledge dairy farmers who have consistently good compliance. It's a voluntary programme with strict eligibility criteria, and numbers of those participating continue to grow.

During the past two years, we have strengthened the programme for monitoring water quantity. This extra data from monitoring both high rate and low rate water take consents means we have a better understanding of the pressures in particular areas when it comes to water availability, but it also provides a wealth of information for our communities and individuals who are managing businesses and using water.

The team carried out 783 dairy discharge consent inspections, 66% were graded as fully compliant, 25% low risk non-compliance, 8% moderate non-compliance and 1% significant non-compliance. While there were fewer inspections this year, it's pleasing to note that significant non-compliance is at its lowest level, down from 3% last year.

This is a pleasing result, and one that reflects the effort farmers are putting in to improve their practices and meet their consent conditions.

Results from our industry inspections also show positive gains, with many continuing to make system improvements and work closely with our team when things don't quite go to plan. These sorts of relationships are vital for ensuring we can achieve the improvements to our environment we all want.

From a legislative perspective, ongoing change continues to put increased demand on the resource management team, making the regulatory function more complex.

Since the end of this reporting period, we've seen our wettest spring on record. This has caused ongoing challenges on-farm and across the region's roads with surface flooding.

Our team has seen some really good examples of farmers managing their irrigation and effluent ponds, given we've received nearly double the amount of rain expected in some places across the region.

Reaching out if you need support or advice is so important, and there are a range of agencies who can answer questions, including our team.

The resource management team have been supporting farmers through this challenging time and adjusting their work programmes. This will no doubt be reflected in next year's report.

We will continue to review how we manage this to achieve the environmental outcomes we are all striving for.

**Nicol Horrell**  
Chairman Environment Southland

**Neville Cook**  
Chairman Regulatory Committee

# Introduction

The following report provides an overview of Environment Southland's compliance, monitoring and enforcement activities across the region for the 2023-24 year.

Compliance, monitoring and enforcement (CME) are important parts of the regulatory function of regional councils throughout New Zealand, to ensure responsibilities under the Resource Management Act 1991 (RMA) are effectively implemented. For the purpose of this report, CME means:

- ▶ Compliance – adherence to the RMA, including the rules established under regional plans (operative and proposed), National Environmental Standards and meeting resource consent conditions
- ▶ Monitoring – the activities carried out by Environment Southland to assess compliance with the RMA, and responding to complaints from the public about potential breaches
- ▶ Enforcement – regulatory actions taken by Environment Southland to respond to non-compliance with the RMA.

This document provides a summary of performance against primary consents, which cover dairy farming, local authorities and industrial operations, as well as smaller consents for the likes of coastal structures and whitebait stands.

Similar activities are combined to give a broad overview on the activity, rather than reporting on individual conditions or circumstances.

Major industrial consents, on the other hand, are identified and are reported separately. This is because of the complexity of the activity and volume of contaminants the industry uses or discharges. The industries reported here often employ environmental assessment teams in-house, or use third party contractors to ensure they complete the requirements of their consent.

All compliance assessments are given a grading, adapted from Ministry for the Environment guidelines.

---

## Compliance Grade

---

	<b>Full compliance</b> – Compliant with all relevant consent conditions, plan rules, regulations and national environmental standards.
	<b>Low risk non-compliance</b> – Complies with most of the relevant consent conditions, plan rules, regulations and national environmental standards. Non-compliance carries a low risk of adverse environmental effects or is technical in nature (For example, failure to submit a monitoring report).
	<b>Moderate non-compliance</b> – Non-compliance with consent conditions, plan rules, regulations and/or national environmental standards where the non-compliance was deemed to have had some environmental consequences and/or there was a moderate risk of adverse environmental effects or there was a frequent recurrence of low risk or technical non-compliance.
	<b>Significant non-compliance</b> – Non-compliance with consent conditions, plan rules, regulations and/or national environmental standards where there were significant environmental consequences and/or a high risk of adverse environmental effects.

---



# Agriculture

---

## Agricultural audits

During the past year we have continued to map a number of permitted activities on farms, including offal holes and silage stacks, while adding additional consents, such as intensive winter grazing, to our programme. This provides us with good information, to understand the number of permitted activities taking place.

We introduced a new system for notifying farmers of our intent to undertake a discharge consent inspection, with a text the day prior. This has been largely well received and has allowed us to have increased interaction with the farmer on site.

## Dairy farm inspection overview

The resource management team undertakes inspections of dairy farms to ensure compliance with the conditions of discharge consents that allow farms to irrigate dairy shed effluent to land.

Dairy shed effluent is a combination of water and effluent created from the milking shed and platform during clean down. It is an excellent natural liquid fertiliser, containing nitrogen, phosphorus, potassium, magnesium, sulphur and trace elements essential for grass growth. Normally a farm would have to pay for these nutrients to be applied to pasture.

It is important for the person in charge of the system to match the irrigation depth to the capability of the pasture to utilise the nutrients. Over-application of effluent can result in:

- ▶ killing pasture – especially where effluent has ‘ponded’ on top of the soil
- ▶ pollution of groundwater – by seeping through the soil profile into groundwater aquifers
- ▶ pollution of nearby streams and rivers – where it runs off paddocks into waterways
- ▶ ineffective use of nutrients – by the seeping of the nutrients past the root zone, before the plant can utilise them.

Following an inspection to determine a dairy farm’s performance against the conditions of their consent, there are four outcomes, as referenced in the grading section in the introduction.

## Dairy farm effluent discharge consent inspections

During the 2023-24 season, staff completed 783 dairy discharge consent inspections. Of these, 202 were aerial and 581 were on-site inspections.

We found 516 were fully compliant, 194 were graded low-risk non-compliance, 61 were graded moderate non-compliance, and 12 were graded significant non-compliance.

If an inspection results in a grade of 10 (significant non-compliance), a reinspection is often conducted. One reinspection was completed for the 2023-24 year with the remainder either not required or scheduled in the upcoming season.

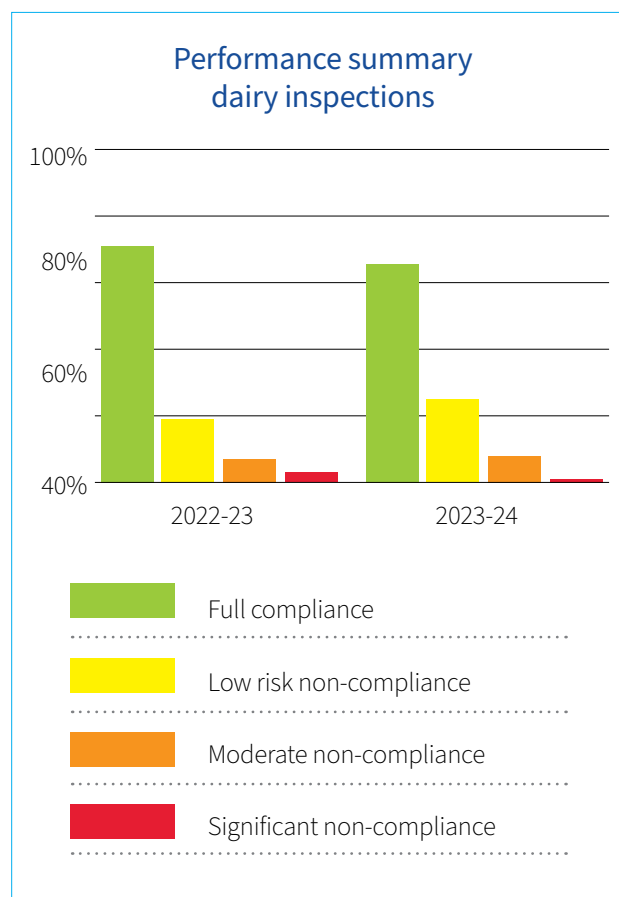
We faced staffing challenges in the 2023-24 season which, combined with additional monitoring requirements, meant our focus was ensuring as many properties as possible received at least one site visit. Aerial inspections were slightly up on the 2022-23 season, but still significantly down on the 2021-22 season as we endeavoured to interact directly with staff on-farm as much as possible. This provides an opportunity for education and advice to our farmers.

## Dairy top performers

The dairy top performer programme was developed in 2020 to acknowledge dairying operations that had a good compliance rating.

To be eligible for the dairy top performer programme each consent holder must:

- ▶ have no health and safety warnings
- ▶ have 5 years full compliance on all of their resource consents
- ▶ be fully compliant with all legislation including national environmental standards
- ▶ have no unreasonable outstanding debt to Environment Southland.



The first year saw the recipients receive a letter thanking them for their efforts and encouraging them to keep up the good work and over the subsequent years the programme has continued to develop and grow.

In the 2023-24 season, all consent holders who were eligible were asked if they wished to participate in the voluntary programme. Participation means they would no longer receive routine monitoring of their dairy consents. Instead, these consent holders would self-monitor and return their inspection data with 15% of those returned selected at random for a quality assurance visit by a monitoring officer.

In 2023-24, 89 consent holders participated and returned their forms and all, except one, of the completed quality assurance checks, were fully compliant. The one property that was non-compliant was removed from the programme.

## Groundwater quality sampling for dairy farms

Groundwater is water that has made its way down through the soil to underground areas called aquifers.

Aquifers are subsurface geological formations consisting of sand, gravel or rock which 'hold' water.

Aquifers in Southland tend to be shallow. In many places the water level is only 1.5 to 5.0 metres below the ground.

Groundwater provides an important source of drinking water for people and livestock in Southland. It is also used for irrigation and dairy shed wash down, and it can be the primary source of water in streams over summer (baseflow).

However, what we do on top of the land (land use) can affect the quality of the groundwater sitting below. Nitrate contamination of groundwater is common in Southland due to excess nitrogen in soil from fertiliser and effluent. This is a key issue, affecting the health of people and livestock that use groundwater, and when nitrate contaminated groundwater enters streams in summer, it can cause problem algal and plant growth.

Groundwater quality sampling is a tool used to monitor compliance with dairy effluent discharge consents. The purpose of this programme is to monitor measurable changes over time in groundwater quality in the areas where effluent has been applied.

Water samples are collected from shallow bores near the effluent disposal field and are then analysed for a number of parameters including nitrate and *E.coli* levels. The results generated from a period of between five to ten years can give a reasonable indication of the effects effluent application is having on groundwater. If deterioration is noted, further investigation will be required to determine the land-based activity contributing to the change.

## Synthetic nitrogen reporting

In August 2020, the Government announced changes to the National Policy Statement for Freshwater Management (NPS-FM), the National Environmental Standards for Freshwater (NES-FW) and changes to the Resource Management Act, which introduced a limit to the amount of nitrogen that can be applied to land.

From July 2021, if the use of nitrogen fertiliser on pastoral land exceeds 190 kg/ha/year, then a consent is required. This cap does not apply to arable or horticultural land use.

The National Environmental Standards require any person operating a dairy farm to report to Council each year on their nitrogen fertiliser use. This reporting includes information on the types of fertiliser used, the rate of application and the location and date of application.

The standards in the National Environmental Standards are in addition to the permitted activity criteria in the Southland Water and Land Plan and any discharge of fertiliser still needs to meet the conditions in Rule 14.

### In the 2023-24 reporting year:

- ▶ Three synthetic nitrogen reports were over the limit (very minor exceedances) and advice and education was provided to all
- ▶ 110 consent holders had not supplied their data. These are being followed up and a grading of non-compliant will be issued, along with a non-supply fee for those who fail to submit their data
- ▶ 789 data sets were supplied and graded as fully compliant

## Wintering pad consent inspections

Resource management staff undertook inspections of the purpose-built sites used to feed and house cows over the winter period commonly known as wintering pads, wintering barns, calving pads, feed pads and loafing pads.

Before monitoring these purpose-built facilities, officers phoned everyone with a consent for a new facility that hadn't been built the previous season. This allowed us to update our records and streamline our monitoring programme.

### Reporting falls in the middle of the winter monitoring period.

As at 30 June 2024, resource management officers had completed 144 inspections during the 2023-24 financial year of the various types of consented wintering pads.

Of these, 96 were fully compliant, 35 were low risk non-compliance, 11 were moderate non-compliance and two were significant non-compliance.



## Winter grazing monitoring

Intensive winter grazing is a farming practice where livestock is grazed on paddocks planted with forage crops. The most common forage crops are fodder beet, brassicas, cereals and maize.

When done poorly, it can have serious negative effects on the environment and animal welfare.

Intensive winter grazing regulations were introduced in the National Environmental Standard for Freshwater (NES-F) as part of essential freshwater reforms and were amended in April 2022 to make them more practical for farmers and improve environmental outcomes. The updated regulations came into effect from 1 November 2022 to allow farmers time to plan and prepare for winter 2023.

For most of New Zealand there were two ways to comply with the rules, either operate as a permitted activity or have a winter grazing consent. Environment Southland developed a third option, and created a deemed permitted activity for winter grazing for those properties that could not meet the permitted activity rules because of the slope condition.

Each year the compliance team have a standard approach towards monitoring winter grazing, which consists of:

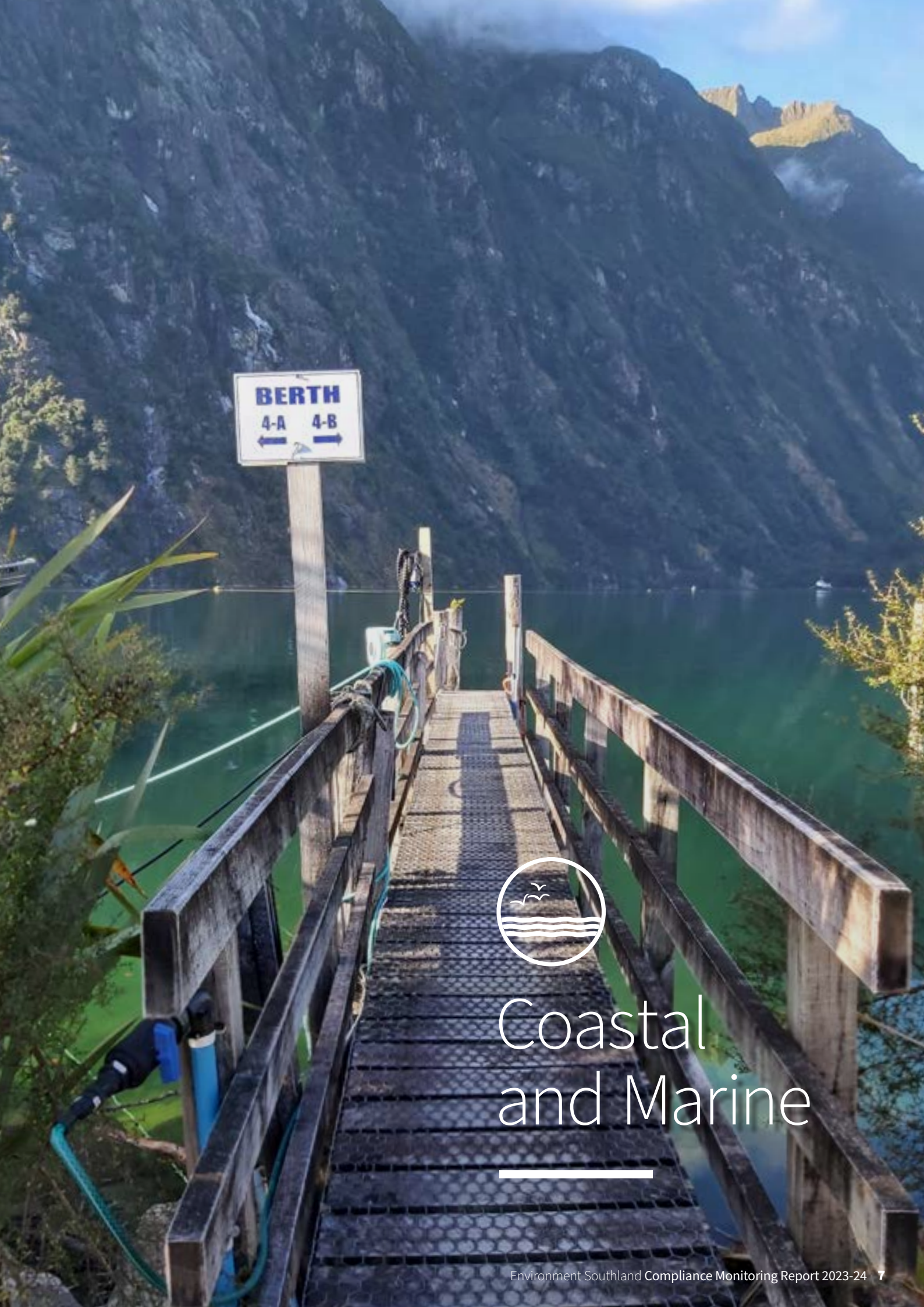
- ▶ Developing an annual strategy and plan for our response
- ▶ Participation in the organisational engagement activities (field days, industry group meetings)
- ▶ Up to three wintering flights (one each in June, July and August)
- ▶ Looking out for non-compliance while completing routine monitoring in the community
- ▶ Responding to complaints reported via our pollution hotline

During the 2023-24 winter grazing season (up to 30 June 2024) the resource management team:\*

- ▶ Followed up on 18 referrals from the catchment integration team from their proactive roadside monitoring – 11 received letters of advice, seven needed no further action
- ▶ Received 11 winter grazing related complaints (through the pollution hotline, online and via staff). Of these there were two confirmed breaches.

*\* This reporting period is part way through the winter grazing season. Full season outcomes will be reported to Council once the season ends.*





**BERTH**  
4-A 4-B  
← →



# Coastal and Marine

---



## Coastal structures

Environment Southland currently inspects coastal structures in Fiordland, along the south coast and on Stewart Island. These include wharves, boat ramps, boat houses, moorings, barges and navigational aids.

We aim to visit these every one to two years.

Last October the team undertook a significant trip to Fiordland to map moorings and identify those for which we didn't hold records. Moorings are allowed as a permitted activity, but they are required to be notified to Environment Southland and must contain clear identification of the owner.

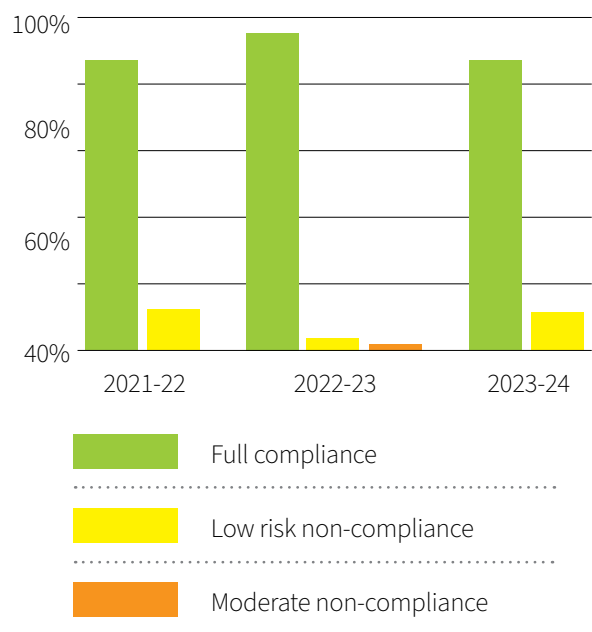
We mapped 39 unrecorded moorings which required follow-up, and, in some cases, we have been unable to locate an owner.

## Coastal surface water activities

Coastal consents are required for most commercial surface water activities in Fiordland.

These commercial activities are usually charter operations taking passengers on day trips and multi day trips within Fiordland. Environment Southland receives and assesses activity logs detailing the routes and activities, and assesses these against the conditions within the consent.

Commercial surface water activity logs in Fiordland



There is a high level of compliance in the logs.

While undertaking our other work in Fiordland, such as monitoring structures, we also inspect any vessels we encounter.

## Bluff Harbour ports

The two main port facilities in Southland operate out of Bluff.

South Port manages Southland’s import and export industries including aluminium, timber, fisheries, dairy, meat, wood chips, stock food, cement, alumina, fertiliser and petroleum products.

New Zealand Aluminium Smelters (NZAS), based on the Tiwai Peninsula, services and manages the import and export operations of aluminium and aluminium feed stocks.

Discharges associated with the loading, unloading and storage of cargo within the Bluff Harbour area are managed by means of individual agreements. The agreements describe a series of systems, ensuring the management of port activities are compliant with the Resource Management Act 1991.

### Incidents reported

South Port	2021-22	2022-23	2023-24
------------	---------	---------	---------

There were no confirmed complaints or self-reported incidents related to the South Port agreement

NZAS Wharf	2021-22	2022-23	2023-24
------------	---------	---------	---------

There were no confirmed complaints or self-reported incidents related to the NZAS agreement

## Whitebait stands

Environment Southland is responsible for whitebait stands under the Regional Coastal Plan and undertakes an annual inspection of these each year. Huts associated with the stands are controlled by the Southland District Council, while the Department of Conservation controls the whitebait fishery.

The Regional Coastal Plan has set a maximum number of whitebait stands allowed in Southland at those that were occupied at 15 February 1997. Any new whitebait stands are prohibited.

Whitebait stands are inspected during whitebaiting season each year. Inspections are completed early to mid-season, which allows owners additional time for repairs.

During the annual inspections, any illegal stands are left with a notice attached to the stand for the owners to contact Environment Southland.

Whitebait stands are inspected for compliance with consent conditions, such as each stand displaying a unique stand number, displaying the consent holder’s name, being built to the consented length and in a good state of repair.

This year the team found non-compliance with a number of stands not displaying their stand number and some not being in good repair. A stand is required to be in good repair as they need to be safe for other members of the public to be on.



# Industry

---

## Industry monitoring

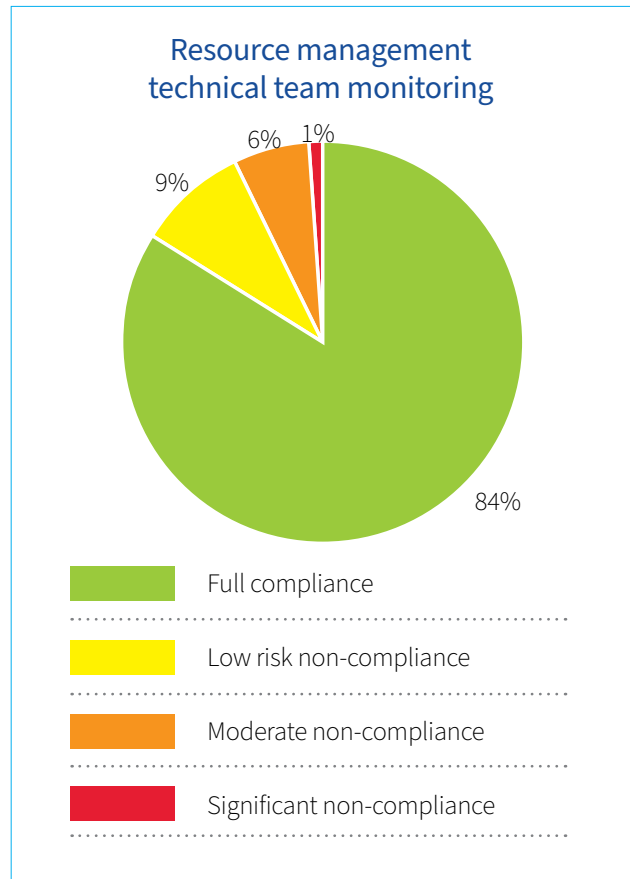
The resource management technical team are responsible for monitoring industrial consent holders, local authorities and water abstraction.

These consents often have a degree of complexity and reflect the specific, often unique, processes that occur at each site.

There is often significant self-monitoring and reporting requirements in each consent.

The team reviews monitoring reports and data and undertakes site audits to ensure consent holders manage environmental effects in accordance with consent conditions, national regulations and regional plans.

Our team undertook 2528 consent compliance assessments including inspections, data assessments and report reviews.



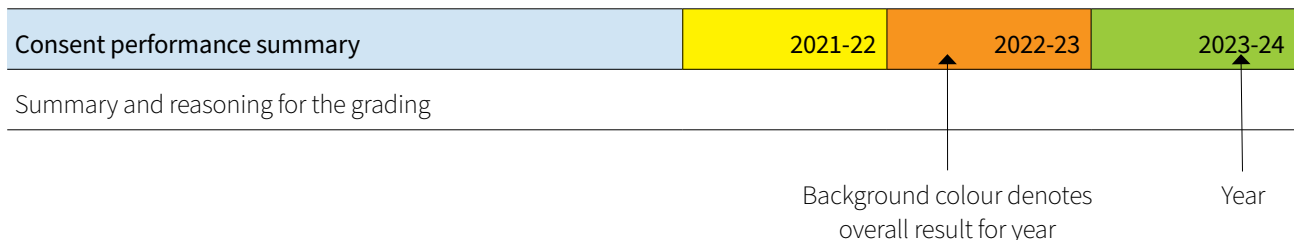
The following sections detail the performance of major consent holders and, in some cases, groups of consent holders against the conditions of their resource consents.

This includes discharges to water, land and air, coastal consents and water abstraction consents.

Commentary is provided on incidents that may have occurred, any actions that may have been taken to remedy and mitigate the effects of non-compliance and avoid it occurring in the future, as well as any enforcement action taken by Environment Southland.

For each industry, a table provides an overview of any environmental incidents that have occurred on the site. A second table provides an overall assessment of performance against consent conditions.

Both tables provide a rating in the form of a four-stage traffic light system based on the grading system detailed in the introduction. A comparison between the 2021-22, 2022-23 and 2023-24 years is also provided:



## Electricity generators

### Meridian Energy Limited

Meridian Energy Limited operates the largest hydroelectric power station in New Zealand at West Arm, Lake Manapōuri, within the Fiordland National Park. Electricity is generated using water stored in Lakes Te Anau and Manapōuri. The stored water from the lakes is controlled using structures at the outlet of Lake Te Anau and the Lower Waiiau River. The water used to generate electricity is discharged through two tunnels to Deep Cove in Doubtful Sound. Compliance performance was assessed against the current resource consents.

Meridian Energy Limited holds 20 resource consents relating to the operation of the Manapōuri Power Scheme. The primary consents are to:

- ▶ dam and divert the waters for hydro-electric power generation
- ▶ take and use water for hydro-electric production, and for domestic supplies
- ▶ discharge treated sewage to land
- ▶ discharge stormwater to land
- ▶ carry out bed disturbance
- ▶ discharge contaminants to air
- ▶ discharge water and contaminants to the coastal marine area
- ▶ occupy Lake Manapōuri and coastal marine area with wharves.

<b>Complaints and self-reported incidents</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
---	----------------	----------------	----------------

There were no confirmed complaints during the monitoring period of 2023-24.

<b>Consent performance summary</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
------------------------------------	----------------	----------------	----------------

A low-risk non-compliance was recorded on the consent to dam and divert Lake Manapōuri and waters of the Waiiau and Mararoa Rivers. Meridian reported two events, in July 2023 and September 2023, where flow recorded downstream of Lake Manapōuri control weir did not equal flow in the Mararoa River. These events increased turbidity readings in the river slightly above the threshold permitted, though each were of short duration (0.5 – 2 hours).

Meridian and Environment Southland concluded the turbidity would have a low-level impact on the receiving waters, and no further action was taken by Environment Southland.

Meridian submitted annual reports reporting on hydrology, water quality and freshwater ecology, riverbank erosion and eel migration for the 2023-24 period meeting the requirements of the consent. No concerns were raised in relation to these reports.

## Pioneer Energy Limited

The hydroelectric power station at Monowai is owned by Pioneer Energy Limited. The company operates a number of power stations across New Zealand.

Pioneer Energy Limited holds 17 resource consents.

The primary consents related to the operation of its Monowai Power Scheme are to:

- ▶ take surface water
- ▶ use, maintain and alter an existing earth dam
- ▶ discharge water to water
- ▶ discharge contaminants to land
- ▶ dam and divert the waters of the Monowai River
- ▶ use, maintain and modify fish passage at locations in the Monowai River.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

No confirmed complaints or self-notifications were received during the 2023-24 period.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

During 2023-24, Pioneer Energy was issued with a letter of direction requiring telemetry of the water used in the power station. Pioneer Energy has not yet complied with this requirement. Pioneer Energy was compliant with all other monitored consents during the year.

## Fertiliser

### Ballance Agri-Nutrients Limited

Ballance Agri-Nutrients Limited operates a fertiliser manufacturing facility at Awarua, to the south of Invercargill.

Ballance Agri-Nutrients Limited holds three resource consents for its fertiliser manufacturing plant at Awarua. The primary consents are to:

- ▶ discharge stormwater from a fertiliser manufacturing facility to water
- ▶ take groundwater for fertiliser processing
- ▶ discharge contaminants to air from the manufacture of fertiliser and associated activities.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

No confirmed complaints or self-notifications were received during the 2023-24 period.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

Ballance Agri-Nutrients was compliant with all monitored consent conditions for its stormwater discharge consent and air discharge.

A non-compliance was recorded for not supplying its water meter verification report. Ballance Agri-Nutrients has followed this up and has completed verification of its water meter.

## Fernhill Limeworks Limited

Fernhill Limeworks Limited operates a limestone quarry at Kauana, north of Winton, and holds two resource consents for the purpose of operating a limestone quarry. The consents are to:

- ▶ discharge treated stormwater to water
- ▶ discharge contaminants to air from limestone crushing, drying and handling.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

No confirmed complaints or self-notifications were received during the 2023-24 period.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

Fernhill Limeworks Limited was fully compliant with all requirements of its consent during the 2023-24 period.

---

## Ravensdown Limited

Ravensdown Limited operates a limestone quarry at Dipton and holds three resource consents.

Two of these consents are for the purpose of operating a limestone quarry at its Dipton site. The consents are to:

- ▶ discharge stormwater from a fertiliser storage and loading yard to land
- ▶ discharge contaminants to air from limestone crushing, drying and handling.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

In September 2023 a stormwater sump overflowed due to pump failure, which led to dirty stormwater being discharged to a stream during an unusually heavy rain event.

Environment Southland has had constructive discussions with Ravensdown. Contingencies are to be put in place to avoid recurrence.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

Ravensdown was compliant with all monitoring and reporting required by its consents.

One breach in their stormwater consent, where dirty stormwater discharged to a stream, is noted above.

---



# Forestry

## Forestry operations in Southland

The National Environmental Standards for Commercial Forestry (NES-CF) previously Plantation Forestry, came into effect on 1 May 2018.

The NES-CF are regulations under the Resource Management Act 1991 (RMA) which apply to any forest of at least one hectare that has been planted specifically for commercial purposes and will be harvested.

### It aims to:

- ▶ maintain or improve the environmental outcomes associated with managing plantation forestry activities
- ▶ provide efficiencies and greater certainty in the management of these activities
- ▶ provide consistent rules across the country by setting planning requirements for certain specified activities.

## Environment Southland’s approach to forestry

Environment Southland has an organisational approach to monitoring the NES – Commercial Forestry.

Notifications are received and logged into our system by the regulatory administration team.

The administration team refer to the land sustainability officer supporting the forestry company.

The land sustainability officer then assesses the notification and completes a site visit if necessary. We received 208 notifications in 2023-24.

Where the land sustainability officer has any concerns, or identifies breaches relating to the activity, it is referred to the resource management team for investigation.



The regulations cover eight core commercial forestry activities that have potential environmental effects:

- ▶ Afforestation (planting new forest)
- ▶ Pruning and thinning-to-waste (selective felling of trees where the felled trees remain on site)
- ▶ Earthworks
- ▶ River crossings
- ▶ Forestry quarrying (extraction of rock, sand, or gravel within a plantation forest or for operation of a forest on adjacent land)
- ▶ Harvesting
- ▶ Mechanical land preparation
- ▶ Replanting.

Commercial forestry operators are required to submit written notices and plans for afforestation, earthworks, river crossings, forest quarrying, harvesting, replanting, wilding species and slash traps.

## Identified breaches

During the 2023-24 financial year there were six potential breaches of the NES – Commercial Forestry referred for investigation.

Of these, three were confirmed, two received letters of advice due to the minor nature of the breaches, and one resulted in a formal warning.

## Landfills

### AB Lime Limited

AB Lime Limited operates an agricultural fertiliser and lime business, a dairy farm and a Class A landfill business on a site approximately 4km east of the Winton township.

This section focuses predominantly on the landfill. New consents were issued in July 2021 which have subsequently been given effect to.

AB Lime Limited holds 11 resource consents relating to the landfill and lime quarry. The primary consents are to:

- ▶ discharge solid waste onto or into land
- ▶ discharge contaminants into air from refuse disposal facilities receiving greater than 100,000m<sup>3</sup>/year of uncompacted solid waste
- ▶ discharge up to 200m<sup>3</sup>/day of leachate onto or into land within the landfill footprint for the purposes of recirculation
- ▶ discharge contaminants into air from combustion processes where combustible refuse matter is flared
- ▶ discharge stormwater to a tributary of the Lochiel Stream
- ▶ use masking agents to disguise odour
- ▶ take 500m<sup>3</sup>/day of surface water
- ▶ discharge contaminants to the air from the extraction of limestone from an open quarry.

<b>Complaints and self-reported incidents</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
---	----------------	----------------	----------------

There were no confirmed complaints or incidents reported during the 2023-24 period.

<b>Air discharge consent performance</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
--	----------------	----------------	----------------

AB Lime landfill was compliant with all monitored consent conditions for the 2023-24 period.

AB Lime manages landfill gas production which occurs during the decomposition of waste within the capped or buried fill. Gas is monitored regularly for its volume and composition. The monitoring and collection of gases and subsequent flaring is undertaken to manage odour, control gas migration, manage climate effects and reduce the risk of fire within the landfill.

<b>Other consent performance</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
----------------------------------	----------------	----------------	----------------

AB Lime monitors groundwater adjacent to the landfill via wells. The chemical composition of groundwater is compared with landfill leachate. There was no indication of leachate contamination of groundwater in the 2023-24 groundwater quality monitoring.

Leachate is channelled to a holding tank and is trucked offsite for further treatment to the ICC wastewater plant prior to discharging to the coastal marine area.

In March 2024, AB Lime was directed by Emergency Management Southland to accept waste from the closed community landfill at Bluecliffs, which was at risk of erosion into the coastal marine area at Te Waewae Bay, and part of an emergency response. AB Lime complied with all consent conditions relating to this event.

There has been no groundwater abstraction by AB Lime for this reporting period and no recirculation of leachate into the landfill. AB Lime achieves a high degree of compliance with its consents and constructively pursues improvements within its systems.

## S J Timpany Contracting Limited

S J Timpany Contracting Limited operates a landfill at Otatara, accepting solid waste, asbestos and contaminated soils. The site also has a holding pad, which allows for sample testing of contaminated soils and the encapsulation of contaminants prior to acceptance.

S J Timpany Contracting Limited holds a consent to discharge clean fill and solid waste to land. In May 2024, S J Timpany Contracting Limited was issued with a new consent to discharge solid waste to land at the site.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

There were no confirmed complaints or self-reported incidents during the 2023-24 period.

Consent performance	2021-22	2022-23	2023-24
---------------------	---------	---------	---------

The S J Timpany landfill was fully compliant with all monitored consent conditions during the 2023-24 period.

During the period Environment Southland conducted three site visits, all of which were fully compliant:

- ▶ July 2023 (groundwater sampling)
- ▶ October 2023 (groundwater and surface water sampling)
- ▶ March 2024 (groundwater sampling).

No issues were identified during the assessment of consent monitoring reports.

---

## Manufacturing

### Daiken Southland Limited

Daiken Southland Limited operates a mixed density fibreboard (MDF) manufacturing plant, located south of Mataura and holds 11 resource consents. The primary consents are to:

- ▶ discharge contaminants to air from fibreboard processing, including the treatment of wastewater
- ▶ discharge effluent and treatment pond seepage to land
- ▶ discharge untreated stormwater and treated wastewater to water
- ▶ discharge stormwater to land
- ▶ discharge from a tile drain to a watercourse
- ▶ discharge ash to land.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

There was only one self-reported incident by Daiken during the 2023-24 period. This involved a urea spill entering into the stormwater drain and discharging into the Mataura River.

Environment Southland investigated, and an infringement notice was issued to Daiken.

Daiken was in communication with Environment Southland throughout the investigation and has since updated its protocols to prevent future incidents.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

The incident regarding the urea spill breached its discharge to water consent.

Daiken was compliant with all its other consent requirements during the 2023-24 monitoring period.

---

## New Zealand Aluminium Smelters Limited

New Zealand Aluminium Smelters Limited (NZAS) is located on the Tiwai Peninsula at Awarua and holds six discharge and water take consents that require inspecting. The consents are to:

- ▶ discharge contaminants to land where they may enter coastal water
- ▶ discharge treated sewage to land
- ▶ discharge treated effluent to the Coastal Marine Area (CMA)
- ▶ discharge water, including contaminants, to the CMA
- ▶ discharge contaminants to air from the aluminium smelter and related activities
- ▶ take and use groundwater for industrial supply.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

There was one self-reported incident during the 2023-24 period regarding an oil leak that entered the stormwater network before it was discharged into the ocean. NZAS carried out appropriate clean-up protocols and conducted an investigation to determine the cause of the leak to prevent future occurrences.

NZAS was issued with an abatement notice in 2021 for the discharge of contaminants from a contaminated site to groundwater, which was highlighted during NZAS's closure investigations. The actions required by this notice have been completed and on-going monitoring is taking place to determine if the actions taken have been successful.

Consent performance	2021-22	2022-23	2023-24
---------------------	---------	---------	---------

NZAS is required to conduct monthly monitoring of the main stack. From November 2023-May 2024, safety concerns meant this could not be done as usual and alternative monitoring was conducted on contaminants discharged to the environment.

After safety precautions were taken to restore access to the stack, monthly monitoring recommenced in June 2024.

All other consent requirements were met for the 2023-24 period.

---

## Meat processing plants

### Alliance Group Limited

Alliance Group Limited operates two meat processing plants in Southland, one at Lorneville and the other at Mataura.

#### Lorneville

Alliance Group Limited holds 13 resource consents for the Lorneville plant. The primary consents are to:

- ▶ discharge treated wastewater to the Makarewa River
- ▶ discharge treated wastewater to land
- ▶ discharge wastewater and stockyard solids to land
- ▶ discharge contaminants to air
- ▶ discharge stormwater into an open drain
- ▶ take surface water from the Makarewa and Ōreti Rivers.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

Environment Southland investigated two complaints of objectionable odour which were confirmed to originate at the Alliance Lorneville site during the 2023-24 period, breaching its air discharge consent. Alliance Lorneville has been proactive in this matter and is working with a consultant to implement changes to the plant to reduce odour emissions.

Alliance Lorneville notified Environment Southland of an exceedance of the limit for carbonaceous biological oxygen demand (CBOD5) in the wastewater discharge on 29 September 2023 and 4 October 2023, breaching consent. The discharge was ceased and wastewater was recirculated through the system and additional aeration was put in place to reduce CBOD5 levels.

Alliance Lorneville investigated these exceedances to mitigate future instances of elevated CBOD5 levels. Discharge of the wastewater resumed on 7 November 2023 and no further CBOD5 breaches occurred for the 2023-24 period.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

An instance of a late supply of a report was recorded.

The return period between applications of treated wastewater to land is required to be not less than 15 days. This condition was breached on two occasions with 14-day return periods. Irrigation also occurred on land that was required to be a non-irrigated control site.

The Water Measurement and Reporting Regulations 2020 require water consent holders to supply records of water abstracted on a daily basis, known as telemetry. In September 2023, Environment Southland issued a letter of direction requiring Alliance to update its systems and meet the requirements of these regulations. Telemetry has now been set up.

All other consent requirements were met.

## Mataura

Alliance Group Limited holds ten resource consents for the Mataura plant. The consents are to:

- ▶ discharge contaminants, including odour, to air
- ▶ discharge treated meat works wastewater to the Mataura River
- ▶ discharge stormwater to the Mataura River
- ▶ discharge cooling water to the Mataura River
- ▶ discharge wastewater treatment solids to land
- ▶ take water from a water race fed by the Mataura River for meat processing
- ▶ take water for cooling from the Mataura River
- ▶ use a weir on the Mataura River
- ▶ take and discharge water for hydroelectric generation
- ▶ take surface water for pelt and hide processing.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

An incident occurred involving paint entering the stormwater system and discharging into the Mataura River, which is a breach of the stormwater consent. The paint was non-toxic and no measurable effects to the environment were observed.

There were eight self-reported breaches of the Dissolved Reactive Phosphorus (DRP) limit in Alliance Mataura's discharge. Four of the eight breaches involved an exceedance with the 95th percentile DRP limit and the other four breaches involved an exceedance with the DRP rolling median and 95th percentile DRP limit.

Environment Southland issued one infringement notice during the 2023-24 period and consistently monitored the discharge reports supplied by Alliance Mataura to determine the progress of decreasing DRP loads.

Environment Southland has yet to conclude its final investigation into these events. However, in the meantime, Alliance Mataura resolved the DRP exceedances issue through maintenance of its wastewater treatment system and has worked closely with the supplier of the disinfection equipment to ensure that it is commissioned at the earliest possible time.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

Alliance Mataura carried out works to its treatment system to decrease DRP loadings and no further breaches have been identified after 7 March 2024. Environment Southland has issued one infringement during the 2023-24 period and an investigation is currently open to determine any further action.

Several breaches of the Measurement and Reporting of Water Takes Regulations and the water consent were identified due to gaps in the telemetered water take data.

There was also a period where data was reported incorrectly. These issues have now been resolved.

During a routine verification, Alliance Mataura found it had two water meters that were not performing within the consent specification of +/- 5%. New meters have since been installed, which are operating as required.

Non-compliance was recorded due to a reporting issue that did not include seven-day averages of the water abstracted over a period as required by the consent.

Alliance Mataura are required by their consent to commission a disinfection unit for their wastewater discharge by 27 April 2024. However, due to supply and logistical issues, the commission date has been delayed until later in 2024.

Alliance Mataura have been in communication with Environment Southland, providing progress updates.

An Environment Southland investigation is currently open to determine if any further action should be undertaken.

All other consent requirements were met.

## Blue Sky Meats (NZ) Limited

Blue Sky Meats (NZ) Limited holds seven resource consents for the purpose of meat processing at its Morton Mains plant. The primary consents are to:

- ▶ take groundwater for a meat processing operation
- ▶ discharge wastewater to land via a spray irrigator
- ▶ discharge contaminants to air from a rendering and blood drying plant boiler plant, and wastewater treatment and irrigation.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

One confirmed self-notification involving a breach of the discharge consent was received during the 2023-24 period. This incident involved overapplication of effluent by the roadside, creating surface runoff. Blue Sky Meats took immediate actions to contain and clean up the effluent discharge.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

Environment Southland has received all required reports and results from Blue Sky Meats within their consented timeframes. Reports have shown that substantial efforts have been made to look after the environment.

Moderate non-compliance was noted for the annual report submitted in August 2023. This non-compliance was related to the discharge of wastewater to land consent, where pH, *E.coli*, dissolved oxygen and temperature exceeded the consented limits on multiple occasions.

Blue Sky Meats took measures to remedy these issues, assuring Environment Southland that exceedances would not reoccur.

## Prime Range Meats Limited

Prime Range Meats Limited operates a meat processing plant on the banks of the Waikiwi Stream in Invercargill and a small meat processing operation and wholesale outlet on the outskirts of Invercargill.

Prime Range Meats Limited holds three resource consents for the purpose of meat processing. They are to:

- ▶ discharge contaminants, including odour, to air from a meat works and rendering plant, and from a wastewater treatment system
- ▶ discharge treated wastewater to land from a meat processing operation
- ▶ discharge biosolids to land from a meat processing operation.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

One confirmed odour complaint was received during the 2023-24 period.

Environment Southland visited Prime Range Meats Limited's site and confirmed that the odour was offensive and in breach of the conditions of the consent. A follow-up visit two days later found no offensive odour.

It was determined that heavy rainfall may have stirred the ponds, leading to the odour incident.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

Prime Range Meats Limited was recorded as non-compliant with its air discharge consent following the odour complaint detailed above.

During the reporting period Prime Range Meats Limited submitted annual compliance reports, inspection logs and particulate emissions on time in relation to its consents.

There is an ongoing process for sludge removal from the dewatering ponds, which is part of the rendering process for waste treatment.

Prime Range Meats Limited has invested in upgrading its pond by removing the sludge and installing Geobags for storage of biosolids prior to removal from the site for application to land. The first discharge of biosolids is scheduled for spring 2024. A Biosolids Management Plan (2024) was submitted as per the monitoring conditions, and a site management plan was submitted to show management of the bio-filter, including maintenance and monitoring, operating procedures and particulate matter emissions.

Despite the non-compliance due to odour, a site inspection indicates the monitoring, management and maintenance of systems are operating in good working order.



## South Pacific Meats Limited

South Pacific Meats Limited operates a meat processing plant at Awarua, approximately 10km south of Invercargill and holds four resource consents for the purpose of meat processing. The primary consents are to:

- ▶ discharge stormwater containing contaminants into the New River Estuary
- ▶ discharge contaminants to air from sludge, a rendering plant and associated processes
- ▶ discharge meat works effluent sludge to land.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

No confirmed complaints or self-notifications were received during the 2023-24 period.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

South Pacific Meats Limited have submitted various reports supported by experts including emissions tests and biofilter audits.

Environment Southland undertook a site visit in August 2023. It appeared that the plant was maintained well, and no issues were raised.

Every six months, South Pacific Meats take water samples downstream from where they are permitted to discharge stormwater from their reticulated stormwater system.

The last two results have shown exceedances of the consented water quality guidelines and therefore Environment Southland asked for further investigation. Each investigation involved further sampling upstream and downstream. Results showed the watercourse had poor water quality and South Pacific Meats were not considered the likely cause for the water quality guideline exceedances.

South Pacific Meats Limited spreads meat works effluent sludges (MES) on farmland pasture. Its latest report indicated over-applications of MES on two paddocks due to an administration error.

This resulted in non-compliances for a number of conditions within their discharge consent, including MES application limits, nitrogen loading limits and operational management plan.

Environment Southland asked South Pacific Meats to remedy the issue and it responded with a report to show alternative methods and technologies. One particular technology looks promising and it is likely that South Pacific Meats will adopt this method to prevent MES application errors in future.

All documentation has been submitted within the timeframes.

## Milk processing plants

### Fonterra Co-operative Group Limited

Fonterra Co-operative Group Limited operates a milk processing facility at Edendale and holds eight resource consents related to dairy processing. The primary consents are to:

- ▶ take groundwater for a dairy operation, and for the purpose of milk processing
- ▶ discharge process wastewater to land, and associated odours
- ▶ discharge treated wastewater, process water, and stormwater to water
- ▶ discharge contaminants and odour to air from the manufacturing of dairy products, boiler operation and wastewater treatment system
- ▶ discharge waste sludge and liquids to land
- ▶ discharge whey by-product to land
- ▶ construct, maintain and use a klip tank structure for the storage of whey and dairy liquids.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

Fonterra had a spill of sulphuric acid which discharged to the Mataura River via its stormwater system. There were several systems in place to prevent an occurrence like this, a number of which failed, leading to the spill. Environment Southland issued an infringement notice and a formal warning in response to the event.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

A number of low-risk non-compliances occurred during 2023-24.

Two non-compliances were recorded against the consent to discharge to air. These were both due to an intermittent fault in the recording of sulphur dioxide in a boiler discharge. The incidents were assessed as low-risk and unlikely to have a negative environmental impact.

Two non-compliances were recorded against a discharge to land consent. These were due to missing analysis of chloride in its wastewater discharged to the Mataura River, which has been remedied with attention to administration detail.

One non-compliance was recorded against a discharge to land consent, due to an exceedance of nitrogen in treated wastewater that was discharged to the Mataura River. The levels exceeded the limits (30g/m<sup>3</sup>) by 8 g/m<sup>3</sup>. Due to the low exceedance over a short period of time, it is expected this event would not have significant impact on the receiving waters.

One non-compliance was recorded after the rolling of a milk tanker and release of milk to land. A clean up was undertaken by Fonterra contractors. Due to the minimal amount of milk spilled, it is not expected that this event had any effect on freshwater systems or critical source areas around the area of the spill.

Monthly irrigation and nitrogen-nitrate reports were submitted within time limits required, as was the annual report for the 2023 season and the combined nitrogen loading was below the consented limit. A tri-annual report on passive sulphur dioxide concentration stack emissions for a three-month period at the Edendale site was compliant. The Nutrient Management Plan for the 2024-25 season was submitted within the required timeframe.

An incident where sulphuric acid was discharged to the Mataura River is detailed in the incidents section above and was a breach of the stormwater discharge consent.

## Mataura Valley Milk Limited

Mataura Valley Milk Limited operates a milk processing plant at McNab, north-east of Gore and holds 10 resource consents related to its dairy processing plant. The primary consents are to:

- ▶ discharge odour and contaminants to air from a milk processing plant and associated facilities
- ▶ discharge treated wastewater to land
- ▶ discharge treated stormwater to natural water
- ▶ construct effluent storage tanks to hold effluent and sludge from milking processes
- ▶ take and use groundwater
- ▶ discharge sludge to land.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

No confirmed complaints or self-notifications were received during the 2023-24 period.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

Environment Southland conducted a site inspection at Mataura Valley Milk's processing plant during February 2024.

The visit highlighted how well the plant is designed to prevent incidents from occurring and stay compliant with its consents.

Preventions include strong barriers around effluent storage tanks, clearly marked drains, fully fenced disposal fields and pipes above the ground for easy access for maintenance.

Full compliance was granted over all consents relating to the inspection.

Reports showed its equipment and practices were up to standard and annual reports including sludge discharge to land and groundwater takes were fully compliant. However, many due-date reminders were provided for a number of reports and were asked for when reports were outside of the consented timeframes.

During 2023, Mataura Valley Milk were scheduled to conduct drop tests on storage tanks, along with a structural report by a suitably qualified person. The drop tests conducted were not to the required standard. Environment Southland granted an extension for the testing to be repeated and a structural assessment report was submitted in August 2024 which showed effluent and sludge tanks are structurally sound.

## Open Country Dairy (NZ) Limited

Open Country Dairy (NZ) Limited operates a milk processing plant at Awarua, to the south of Invercargill. Open Country Dairy holds three resource consents relating to its dairy processing plant. The primary consents are to:

- ▶ discharge condensate and stormwater from a milk processing plant to a farm drain
- ▶ discharge contaminants to the air from a milk processing plant and boilers
- ▶ construct two new wastewater pipelines.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

No confirmed complaints or self-notifications were received during the 2023-24 period.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

Open Country Dairy is prompt with responses and has good communication with Environment Southland. Its reports have been submitted within the timeframes and show that its plant is functioning well and compliant.

Open Country Dairy's stormwater discharge consent requires it to monitor water quality by taking samples. Three out of four consecutive samples exceeded the discharge limit for carbonaceous biochemical oxygen demand (cBOD5) between January and May 2024.

Open Country Dairy investigated the exceedance, and identified a potential cause. Open Country Dairy installed engineering controls to ensure this does not reoccur.

All other sample results during the 2023-24 period show full compliance by being under the consented limits.

## Mining

### Bathurst Resources Limited

Bathurst Resources Limited operates an opencast coal mine in Nightcaps, western Southland, and holds 12 consents related to its mining operation. The primary consents are to:

- ▶ take groundwater and surface water for dewatering
- ▶ discharge stormwater to water
- ▶ discharge treated site water to water
- ▶ discharge ash from industrial operations, mixed with overburden, to land
- ▶ discharge contaminants to air
- ▶ disturb the bed and divert the flow of a tributary of the Wairio Stream.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

Environment Southland did not receive any confirmed complaints or self-reported incidents during the 2023-24 monitoring period.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

Bathurst resources undertook all monitoring required by its consents and was fully compliant with the monitoring requirements and consented limits for the 2023-24 monitoring period.

There are works underway in preparation to realign a tributary of the Wairio Stream that is expected to be completed later in 2024. A site visit will be conducted to observe the opening of the diversion channel.

## Greenbriar Limited

Greenbriar Limited operates coal mines at Ohai and New Vale mines.

### Ohai Coal Mine

Eleven resource consents are held relating to mining activities at the Ohai mine which stopped mining coal in November 2021. Consequently, several consents have been surrendered, and rehabilitation work has commenced and is nearing completion. The primary consents are to:

- ▶ discharge contaminants to air from mining, screening and stockpiling of coal
- ▶ discharge treated wastewater to water
- ▶ discharge surface and groundwater
- ▶ discharge solid waste to land
- ▶ take surface water for a mining operation.

<b>Complaints and self-reported incidents</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
---	----------------	----------------	----------------

No confirmed complaints or self-notifications were received during the 2023-24 period.

<b>Consent performance summary</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
------------------------------------	----------------	----------------	----------------

The monitoring for the Ohai mine was undertaken as per the requirements of the consents and all discharge limits were met during the 2023-24 period.

### New Vale Mine

Seven consents are held relating to mining activities at the New Vale Mine site, as follows:

- ▶ to discharge treated water to the Hedgehope Stream
- ▶ to take groundwater and surface water for mining
- ▶ to discharge contaminants to air
- ▶ to discharge ash to land
- ▶ to discharge pelt processing solids to land
- ▶ to discharge dust suppressant to land

<b>Complaints and self-reported incidents</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
---	----------------	----------------	----------------

No confirmed complaints or self-notifications were received during the 2023-24 period.

<b>Consent performance summary</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
------------------------------------	----------------	----------------	----------------

The monitoring for the New Vale Mine was undertaken as per the requirements of the consents and all discharge limits were met during the 2023-24 period.

## Minor Industries

### Cleanfill site inspections

Cleanfills are 'fill sites' that only accept materials that has no adverse effects on people or the environment when buried.

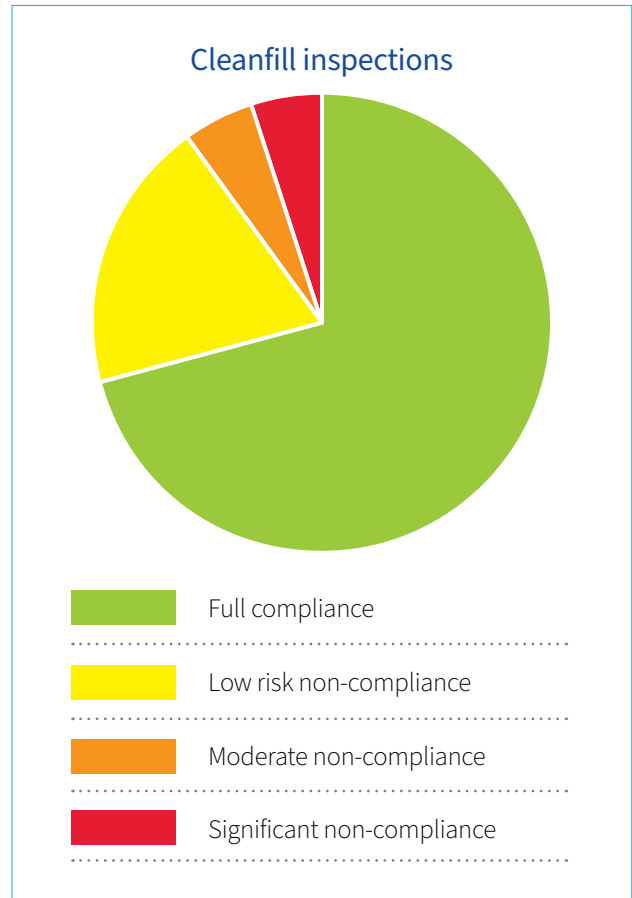
Cleanfill materials include virgin natural materials such as clay, soil, rock, and other inert materials such as bricks.

Appropriate use of cleanfills helps divert a large portion of the waste stream from landfills. There are 21 consented sites in total across Southland.

It is important cleanfills are free from combustible, degradable, hazardous or liquid wastes because they are not designed to protect the environment in the same way as landfills.

We monitor to ensure that only materials that meet the necessary criteria are being deposited and that no unexpected damage to the environment is occurring.

**During 2023-24, 21 inspections were completed with 15 sites graded as fully compliant, four as low risk non-compliance, one as moderate non-compliance and one as significantly non-compliant, which is being followed up by an investigator.**



## Gravel extraction and gravel wash

There are currently 100 land use consents to extract gravel from Southland rivers.

From 1 April 2023, monitoring gravel extraction consents moved to the resource management team as an organisational approach to align gravel management with our other consent management.

During this first year a largely educational approach was taken to ensure consent holders understood the conditions of consents.

Most consent holders received two inspections during the year, although some have received three in the establishment phase of the programme.

**A total of 181 inspections were undertaken, of which 101 were fully compliant, 51 had low risk non-compliance, 17 medium non-compliance and 12 significant non-compliance.**

A number of the non-compliances identified were for breaches of the Flood Control Management Bylaw due to:

- ▶ stockpiling gravel within the floodway
- ▶ breach of a 'no stockpiling' condition within the consent
- ▶ breach of extraction reporting conditions.

We are continuing to work with consent holders to improve understanding and compliance with all conditions.

## Truck wash inspections

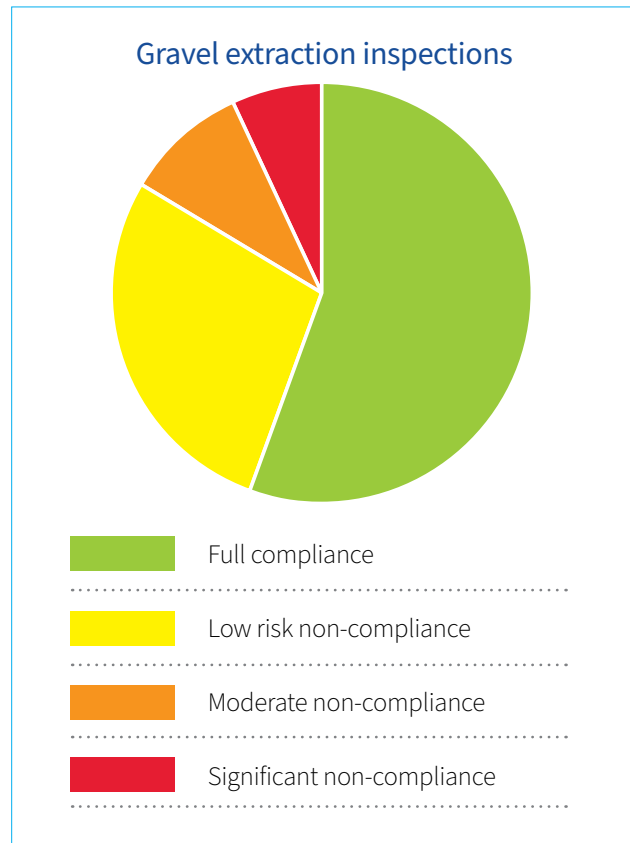
Truck washes are facilities where stock and other large trucks are cleaned in order to reduce risk of disease spread and effluent discharging to roads.

While truck washes are a small industry, the risk to the environment can be large if the wash water is poorly managed. There are 22 consented truck washes in Southland.

Contaminants in the wash water varies dependent on the type of truck washed. The common contaminants are pathogens (effluent), ammoniacal nitrogen (effluent), phosphorus (sediment), hydrocarbons (fuel residue) and metals.

There are 17 current gravel wash discharge consents in Southland, which require a consent to discharge to either land or water. A number also hold a consent for water abstraction.

Of these, 16 were monitored this year and the one that wasn't monitored is not currently operating. All were graded fully compliant.



Wash water facilities require sufficient areas of flat land for discharging this wash water.

Truck washes are usually inspected annually, unless otherwise stated in the resource consent. Some truck washes have desktop reporting requirements such as water sample results and wash water discharge logs.

During the 2023-24 year, due to resourcing and other priorities, only two were inspected and these inspections were both found to be fully compliant.

Inspections of truck washes will be prioritised when resourcing allows and should be fully completed in early 2025.



# Sewage, stormwater and water supply

---





# Gore District Council

## Sewage treatment systems

The Gore District Council (GDC) holds resource consents for treating and discharging wastewater at three locations within the Gore district. The compliance performance during 2023-24 was assessed against the current resource consents.

The applications for renewal of the discharge consents at the Mataura and Gore wastewater treatment plants are still in progress.

GDC holds five sewage treatment related resource consents. These consents are to:

- ▶ discharge treated wastewater from the Mataura township
- ▶ discharge treated wastewater from the Gore township
- ▶ discharge treated wastewater at Waikaka
- ▶ discharge contaminants to air from the Gore wastewater treatment system
- ▶ discharge waste activated sludge to land from industrial or trade processes.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

There were four self-reported incidents by GDC during the 2023-24 period.

Two of the incidents involved sewage overflows that were resolved by GDC.

One incident involved an overdose of sulphuric acid applied to the wastewater discharge in Gore. However, no consent breaches of the discharge quality limits or receiving water standards were identified during the investigation.

The discharge of treated wastewater was non-compliant as a result of the rolling 80th percentile for *E. coli* exceeding the consented limit. Re-sampling efforts by GDC returned *E. coli* results within consented limits.

Consent performance summary – Gore	2021-22	2022-23	2023-24
------------------------------------	---------	---------	---------

Gore District Council's consent to discharge to the Mataura River expired in December 2023.

An application to renew this consent was lodged with Environment Southland in January 2021.

GDC continues to operate under this consent under section 124 of the RMA until the application process is complete.

Two breaches were identified during the 2023-24 period following the sulphuric acid overdosing incident. The operation and maintenance plan was deficient and failed to meet consent requirements.

GDC have since submitted an updated plan that has been graded as compliant.

Consent performance summary – Mataura	2021-22	2022-23	2023-24
---------------------------------------	---------	---------	---------

All monitoring required by the consent was undertaken and all water sample results were compliant with the consent for the 2023-24 period.

The consent to discharge treated wastewater to the Mataura River expired in May 2021.

An application to renew the discharge consent was lodged in January 2021 and the Gore District Council continues to operate under section 124 of the RMA until the consenting process is complete

Consent performance summary – Waikaka	2021-22	2022-23	2023-24
---------------------------------------	---------	---------	---------

All monitoring required by the consent was undertaken and all water sample results were compliant with the consent for the 2023-24 period.

## Stormwater systems

The Gore District Council (GDC) holds resource consents for discharging stormwater at three locations within the Gore district.

They are to:

- ▶ discharge stormwater to water for Gore township
- ▶ discharge stormwater to water for Mataura township
- ▶ discharge stormwater to water for Pukerau and Waikaka townships.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

Environment Southland had previously issued an abatement notice to GDC in 2020 to cease unauthorised discharge of contaminants to Cronin's Creek at Falconer Road, Gore. This abatement notice is still active.

There was one self-reported incident that occurred regarding the stormwater network, which is detailed in the consent performance summary below.

Consent performance summary – Gore	2021-22	2022-23	2023-24
------------------------------------	---------	---------	---------

GDC are required to notify Environment Southland before they apply dye into the stormwater network.

There was one instance during the 2023-24 period where notification was not provided to Environment Southland. This was because the pipe network where the dye applied was thought to be part of the wastewater network.

It was later discovered to be part of the stormwater network and notification was provided to Environment Southland. The operators have been reminded to notify the GDC compliance team whenever works regarding dye are commenced so it can provide notification to Environment Southland regardless of whether the system is waste or stormwater.

Consent performance summary – Mataura	2021-22	2022-23	2023-24
---------------------------------------	---------	---------	---------

GDC undertook all monitoring required by the consent for the stormwater network in Mataura and was fully compliant for the 2023-24 period.

Consent performance summary – Pukerau and Waikaka	2021-22	2022-23	2023-24
---	---------	---------	---------

GDC undertook all monitoring required by the consent for the stormwater network in Pukerau and Waikaka and was fully compliant for the 2023-24 period.

## Water supply

GDC holds nine resource consents to abstract groundwater and surface water for industrial and community water supply. This includes emergency takes to supplement urban supply.

Complaints and self-reported incidents summary	2021-22	2022-23	2023-24
--	---------	---------	---------

There were no complaints for self-reported incidents relating to the GDC water take consents for the 2023-24 period

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

Information supplied for the Gore District Council's water take consents showed compliance with the abstraction limits of the consents.

There was an instance of non-compliance due to a telemetry system not being set up as required by the Measurement and Reporting of Water Takes Regulations. Telemetry has now been set up.

---

## Landfills

The Gore and Mataura landfills were found to be in breach of their respective consents during the 2023-24 period.

The discharge of solid waste to the Gore landfill has been prohibited since 2006.

Environment Southland conducted site visits to the Gore landfill during the 2023-24 period and confirmed solid waste being discharged to the landfill, breaching the consent. An abatement notice was issued to cease discharge to the landfill.

GDC have applied for a resource consent to authorise the discharge of waste to the landfill. The abatement notice was appealed by GDC and is currently on hold with the Environment Court pending the decision of the consent application.

Cleanfill is authorised to be discharged to the Mataura landfill.

Environment Southland conducted a site visit during the 2023-24 period and confirmed the discharge of unauthorised material. There is currently an open investigation by Environment Southland to determine further action.

# Invercargill City Council

## Wastewater treatment

The Invercargill City Council (ICC) holds resource consents for the purpose of treating and discharging wastewater at three locations within the Invercargill region.

ICC holds 10 resource consents relating to its sewage treatment plants. These include consents to:

- ▶ discharge treated wastewater to an estuary
- ▶ discharge treated wastewater to coastal water
- ▶ discharge contaminants to land
- ▶ discharge biosolids to land
- ▶ discharge contaminants to air.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

One confirmed odour complaint was received from a member of the public during the 2023-24 reporting period from the Clifton Wastewater Treatment Plant.

Consent performance summary – Bluff wastewater	2021-22	2022-23	2023-24
--	---------	---------	---------

One non-compliance was recorded against ICC's consent to discharge wastewater into the coastal marine area at Bluff.

An Environment Southland site audit identified missing signage, required to notify the public of wastewater discharges.

The signs were erected in proximity to the discharge pipe and coastal receiving waters. ICC was fully compliant with all other requirements of its consent.

Consent performance summary – Invercargill wastewater	2021-22	2022-23	2023-24
---	---------	---------	---------

One non-compliance was recorded against ICC's consent to discharge wastewater into the coastal marine area at New River Estuary. An Environment Southland site audit identified missing signage, required to notify the public of wastewater discharges. The signs were erected in proximity to the discharge pipe and coastal receiving waters.

One non-compliance was recorded against ICC's consent to discharge to air. ICC was undertaking emergency maintenance to remove sludge from the system. This created an odour which lasted approximately one hour, until cleaning was complete. A site visit by Environment Southland confirmed the odour originated at the Clifton Wastewater Treatment Plant. No further action was taken, after Environment Southland requested information on the cause and future mitigation.

An odour meeting held in March 2024, was publicly notified and attended by Environment Southland and ICC. These meetings are annual events as required by the discharge to air consent, primarily to discuss and inform Clifton residents of any issues arising from the wastewater treatment plant.

ICC was compliant with all other monitored consent conditions for the 2023-24 period.

Consent performance summary – Omaui wastewater	2021-22	2022-23	2023-24
--	---------	---------	---------

ICC was compliant with all monitored consent conditions for the 2023-24 period. The next reporting period to ascertain system performance is in 2025.

Consent performance summary – Biosolids to land, Station Road	2021-22	2022-23	2023-24
---	---------	---------	---------

ICC was compliant with all monitored consent conditions for the 2023-24 period.

Biosolids to land, Christies Track	2021-22	2022-23	2023-24
------------------------------------	---------	---------	---------

ICC was compliant with all monitored consent conditions for the 2023-24 period.

## Stormwater systems

The Invercargill City Council (ICC) holds one resource consent for discharging stormwater at multiple locations within the Invercargill area. This is to discharge stormwater, water, and contaminants to water.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

ICC reported 31 incidents of sewage overflow for the 2023-24 period for its stormwater discharge consent.

There were 16 events of sewage discharge to land, most as a result of flooding in September 2023. Lindisfarne Street and Marama Ave sewage pump stations were overwhelmed with stormwater, causing sewage to overflow and enter the stormwater system.

This resulted in spills to the neighbouring communities, namely Turnbull Thomson Park residences. During the February 2024 rain event there were five discharges of sewage from private residences that flowed into the stormwater system.

Sewage entering the stormwater network comprised 15 breaches, with four of these events confirmed to have reached the Otepunu Stream and Kingswell Creek.

Environment Southland investigated 10 hydrocarbon discharges from the stormwater network. These were a result of varied events, including diesel spills from machinery or storage tanks, automobile discharge and trade waste dumping. Once hydrocarbons enter the stormwater sumps, the pathway to streams and the coastal marine area is often undetermined. Five separate incidents over a period of weeks where hydrocarbons entered the Otepunu Stream were eventually tracked to originate from a diesel spill from a private property.

There were three miscellaneous spills to land and/or stormwater which included a truck of molasses discharging its load onto the road and two events of sediment loading via the stormwater network. The large volume of molasses resulted in a contractor clean up, whereas the sediment caused foaming in the receiving waters.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

Where spills are contained at the point of discharge (i.e. private residences or sumps within the stormwater network), ICC contractors are deployed to remove debris and solids and, where practicable, remediate the sites in a satisfactory manner.

Where sewage is contained within ICC sumps, contaminants are vacuumed, and the area washed down and water removed.

ICC staff members attend all incidents and where sewage has infiltrated the stormwater network, water samples are taken at point source and water discharges adjacent to the area. These inspections are undertaken to assess any environmental effects on the receiving waters and, where appropriate, temporary signage is erected by ICC to warn members of the public of the potential water quality risk. During these events, ICC is required to inform Environment Southland and stakeholder groups including Te Ao Marama Inc and the Ministry of Health.

Where an exceedance of *E. coli* or Ammoniacal nitrogen is recorded, ICC initiates a surveillance programme to determine if and where sewage has entered the stormwater system. Sampling was undertaken at 17 sites across Kingswell Creek, Clifton Channel, Otepunu & Waikiwi Streams during 2023-24. There are currently seven outfall catchments that remain under investigation. *E. coli* sampling continues to indicate slightly elevated levels in the Albert Street outfall to the Waihopai River, however these levels are below national guidelines. The Otepunu River continues to be monitored at Miller, Conon, Liddell, Lime and Mary Streets. *E. coli* sampling results show a decline in *E. coli* levels on all outfalls over the period of this consent and a decline in the 2023-24 reporting year.

Consent performance summary <i>CONTINUED</i>	2021-22	2022-23	2023-24
--	---------	---------	---------

Where significant rain events have caused overflow, ICC has advised its Engineering Services Group to review stormwater infiltration into wastewater networks in Invercargill. Replacement of a foul sewer pipe in Brown Street has shown a reduction in *E. Coli* levels, however ICC continues to investigate the source of varied sampling results from the 2023-24 period.

ICC submits an Annual Report each year, which includes the Stormwater Quality Management Plan (SQMP) and data files, summarising its monitoring and infrastructure work undertaken during the year. The data files include shellfish and fish flesh sampling and sediment and water quality monitoring, all of which were compliant for this reporting period.

ICC's Annual Report (2023-24) complies with a request from Environment Southland in 2023 to demonstrate improvements in locations that Invercargill City Council has made across the stormwater network. Environment Southland has been working with ICC to ensure spills and discharges are avoided as much as possible, are adequately notified, mitigated and resolved.

Environment Southland is monitoring the situation and will take action where the response to non-compliance is inadequate.

## Water supply

ICC operates the water treatment plant at Branxholme, where water from the Ōreti River is treated for supply to Invercargill and Bluff. The ICC holds two resource consents relating to the operation of the plant. These are for taking water, and discharging filter backwash water to land and water.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

No confirmed complaints or self-notifications were received during the 2023-24 period.

Consent performance summary	2021-22	2022-23	2023-24
-----------------------------	---------	---------	---------

**Discharge consent:** This consent has several weekly monitoring requirements. All these requirements were completed, and ICC met all the standards in the consent.

**Abstraction consent:** The volume of water taken from the Ōreti River at Branxholme met the limits set out in the consent. However, during this period ICC did not comply with the Measurement and Reporting of Water Take Regulations 2010, by not supplying daily abstraction volumes and undertaking verification of their water meters within the timeframes required. This has now been resolved and water meter verifications have been supplied and daily submission of abstraction volumes now occurs.

## Milford Sound Tourism Limited

Milford Sound Tourism Limited is the primary infrastructure provider in Milford Sound. It owns and operates the harbour, wharves and visitor terminal. It also operates wastewater treatment facilities at Milford Sound and at Knobs Flat.

Milford Sound Tourism holds six resource consents. They are to:

- ▶ carry out maintenance dredging in Freshwater Basin
- ▶ discharge treated wastewater to water at Deepwater Basin
- ▶ occupy part of the coastal marine area with an existing discharge pipe
- ▶ dam, divert and use water at Knobs Flat
- ▶ occupy coastal marine area with wharf and dolphin structures
- ▶ discharge treated wastewater from a wastewater treatment plant to groundwater at Knobs Flat.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

No confirmed complaints or self-notifications were received during the 2023-24 period.

Consent performance	2021-22	2022-23	2023-24
---------------------	---------	---------	---------

Site inspections with Milford Sound Tourism showed its staff value the environment and are proactive in caring for it.

The wharf and dolphin structures at Deepwater Basin are well-maintained, signage is visible at all required sites and experts undertake environmental assessments. Documentation is easily accessed onsite including discharge volumes, maintenance records and its Operations Management Plan.

The wastewater treatment plant is well-maintained and water samples from Deepwater Basin showed results within consent parameters.

During December 2023, Milford Sound Tourism reopened the Knobs Flat wastewater treatment plant after hiring qualified contractors to make alterations and upgrades. Three water samples throughout the summer period were non-compliant with one parameter. Milford Sound Tourism prioritised this issue, with experts from around New Zealand working on the plant. Environment Southland sent a letter of direction to have the issue resolved by next season.

Milford Sound Tourism restored the flow monitoring electronics of a stream damaged by a flood event during 2020. Environment Southland issued a non-supply of data fee to Milford Sound Tourism regarding flow records which were not supplied during the 2023-24 period. The stream monitoring equipment has since been installed and it is performing well.

Milford Sound Tourism are responsive to resolving issues and excellent at communicating with Environment Southland.

# Southland District Council

## Wastewater treatment systems

The Southland District Council (SDC) holds resource consents for the purpose of treating and discharging wastewater at 22 locations within the Southland District.

SDC holds 23 discharge consents relating to sewage treatment, including consents to:

- ▶ discharge processed wastewater to land
- ▶ discharge processed wastewater to water
- ▶ discharge contaminants to air from wastewater treatment.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

No incidents were reported related to the sewage discharge or treatment plants for 2023-24.

### Consent performance summary

Balfour	2021-22	2022-23	2023-24
---------	---------	---------	---------

The daily discharge inflow exceeded the consent outflow limit on 118 occasions during rain. There was no risk of any adverse environmental impacts from these exceedances. The flow limit is currently still being addressed through the re-consenting application.

Browns	2021-22	2022-23	2023-24
--------	---------	---------	---------

SDC Browns wastewater treatment system was fully compliant with all consent conditions for the 2023-24 period.

Curio Bay	2021-22	2022-23	2023-24
-----------	---------	---------	---------

The discharge *E.coli* limit of 2MPN/100mL was exceeded in two out of three samples with a maximum result of 10MPN/100mL. There was no impact on receiving water quality. SDC investigated and determined three of the 80 membranes in the treatment plant had a leak so they were blocked off, fixing the issue. All other monitoring conditions were complied with.

Edendale/Wyndham	2021-22	2022-23	2023-24
------------------	---------	---------	---------

SDC Edendale/Wyndham wastewater treatment system was fully compliant with all effluent quality and receiving water monitoring consent conditions for the 2023-24 period.

The annual average daily discharge inflow exceeded the consent outflow limit, and the maximum daily discharge flow limit was exceeded on 45 occasions during rain. There was no risk of any adverse environmental impacts from these exceedances. The flow limit is currently being addressed through the re-consenting application.

Gorge Road	2021-22	2022-23	2023-24
------------	---------	---------	---------

SDC Gorge Road wastewater treatment system was fully compliant with all monitored consent conditions for the 2023-24 period.

Lumsden	2021-22	2022-23	2023-24
---------	---------	---------	---------

SDC Lumsden wastewater treatment system was fully compliant with all monitored consent conditions for the 2023-24 period.



Consent performance summary *CONTINUED*

<b>Manapōuri</b>	2021-22	2022-23	2023-24
------------------	---------	---------	---------

SDC Manapōuri wastewater treatment system was fully compliant with all monitored consent conditions for the 2023-24 period.

<b>Monowai</b>	2021-22	2022-23	2023-24
----------------	---------	---------	---------

SDC Monowai wastewater treatment system was fully compliant with all monitored consent conditions for the 2023-24 period.

<b>Nightcaps</b>	2021-22	2022-23	2023-24
------------------	---------	---------	---------

On one occasion two tests were left off the discharge due to lab error. SDC Nightcaps wastewater treatment system was fully compliant with all other monitored consent conditions for the 2023-24 period.

<b>Ohai</b>	2021-22	2022-23	2023-24
-------------	---------	---------	---------

The Ohai wastewater treatment system was fully compliant with all effluent quality and receiving water monitoring consent conditions for the 2023-24 period.

The daily discharge outflows exceeded the consent outflow limit on 51 occasions during rain. SDC is undertaking ongoing work to reduce stormwater infiltration into the sewerage network.

<b>Otautau</b>	2021-22	2022-23	2023-24
----------------	---------	---------	---------

SDC Otautau wastewater treatment system was fully compliant with all monitored consent conditions for the 2023-24 period.

<b>Riversdale</b>	2021-22	2022-23	2023-24
-------------------	---------	---------	---------

SDC Riversdale wastewater treatment system was compliant with all monitored consent conditions for the 2023-24 period.

<b>Riverton Rocks</b>	2021-22	2022-23	2023-24
-----------------------	---------	---------	---------

SDC Riverton Rocks wastewater treatment system was fully compliant with all monitored consent conditions for the 2023-24 period.

<b>Riverton township</b>	2021-22	2022-23	2023-24
--------------------------	---------	---------	---------

SDC Riverton township wastewater treatment system was fully compliant with all effluent quality and receiving water monitoring consent conditions for the 2023-24 period.

<b>Stewart Island</b>	2021-22	2022-23	2023-24
-----------------------	---------	---------	---------

On one occasion the dissolved inorganic nitrogen limit in the water body was exceeded. This is an improvement on previous years. One test was missed on the estuary sample. New disposal lines are being used for the land disposal.

<b>Upukerora Te Anau</b>	2021-22	2022-23	2023-24
--------------------------	---------	---------	---------

SDC Upukerora Te Anau wastewater treatment system was fully compliant with all monitored consent conditions for the discharge to land, water and air consents for the 2023-24 period. The discharge to land and water consent expired 30 November 2023 and has not been renewed.

<b>Te Anau – Kepler</b>	2021-22	2022-23	2023-24
-------------------------	---------	---------	---------

The annual wastewater total nitrogen loading to land was exceeded. The review of environmental management is still ongoing. The *E.coli* limit was breached in one bore on one occasion. Investigations showed it was not related to the consented discharge. The remaining monitoring and reporting requirements were complied with for the 2023-24 period.

## Consent performance summary *CONTINUED*

Tokenui	2021-22	2022-23	2023-24
---------	---------	---------	---------

SDC Tokenui wastewater treatment system was fully compliant with all monitored consent conditions for the 2023-24 period.

Tuatapere	2021-22	2022-23	2023-24
-----------	---------	---------	---------

SDC Tuatapere wastewater treatment system was fully compliant with all monitored consent conditions for the 2023-24 period.

Winton	2021-22	2022-23	2023-24
--------	---------	---------	---------

Two consents were operational over the 2023-24 period. The first consent was current till 8 December 2023 and the monitoring conditions were complied with. However, the daily inflows were greater than the outflow limit for the reported period. The inflows complied with the new consent limit for the period 9 December 2023-30 June 2024. The new consent required two months of additional sampling and two extra tests, however these were not undertaken as the consent holder had accidentally not updated the sampling schedule and test list. These have now been updated to ensure no further monitoring is missed.

**Note:** The quantity of water discharged is referred to as 'discharge flows'. Discharge flows are the amount of sewage and wastewater either entering or leaving the sewage treatment system. All exceedances of discharge flows typically correspond to periods of high rainfall. This indicates that there is stormwater entering the sewerage systems. Therefore, although the discharge flows have increased, the discharge is likely to be more dilute than normal due to mixing with rainwater. Discharge inflows are sometimes used as a proxy for outflows. Oxidation ponds and wetlands provide retention of the wastewater and buffering of the inflows, therefore occasional increased inflows will not result in increased outflows.

## Stormwater systems

The Southland District Council (SDC) holds five discharge resource consents for discharging stormwater and land drainage water to surface water bodies and soak pits from 18 townships within the Southland region.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

One incident was reported of a car driving through a sewage pump station in Edendale in July 2023, resulting in the overland flow of sewage to a stormwater drain. The contamination was quickly isolated and cleaned up with a sucker truck.

Three self-notifications were received of sewage overflows from manholes to the stormwater network during major flooding in Winton, Nightcaps and Lumsden in September 2023. Sites were inspected by SDC and cleaned up as much as conditions allowed.

Similarly one public notification was received of sewage overflows from the network to the stormwater network during flooding in Otautau in September 2023. This was referred to SDC for follow-up.

## Consent performance summary

Balfour, Browns, Lumsden, Mossburn, Riversdale, Tokonui and Waikaka	2021-22	2022-23	2023-24
---	---------	---------	---------

The monitoring conditions of the consent were compliant for the 2023-24 period.

Dipton, Edendale, Manapōuri, Nightcaps, Ohai, Otautau, Tuatapere and Wallacetown	2021-22	2022-23	2023-24
--	---------	---------	---------

SDC advised that monitoring was completed as required but received outside the 2023-24 reporting period.

Winton	2021-22	2022-23	2023-24
--------	---------	---------	---------

SDC advised that monitoring was completed as required but received outside the 2023-24 reporting period.

Te Anau	2021-22	2022-23	2023-24
---------	---------	---------	---------

SDC advised that monitoring was completed as required but received outside the 2023-24 reporting period.

---

## Water supply

The Southland District Council holds resource consents to abstract groundwater and surface water for community and rural water supply. This includes emergency water takes to supplement urban supply.

SDC has 24 consents to take water and to supply water to 21 townships and rural communities in Southland.

Complaints and self-reported incidents	2021-22	2022-23	2023-24
--	---------	---------	---------

There were no complaints or self-reported incidents relating to the SDC water take consents for the 2023-24 period.

Consent performance	2021-22	2022-23	2023-24
---------------------	---------	---------	---------

Of the 24 water takes, 2 consents are graded as non-compliant for missing abstraction data for all or part of the year.

In all cases the data was later supplied.

---



# Water Abstraction

---



Water take consents are divided into two groups depending on the rate water is taken and are monitored in different ways:

- ▶ Low rate water take consents where water has a maximum rate of take of less than 5 litres per second
- ▶ High rate water take consents where water has a maximum rate of take of 5 litres per second or greater.

High rate water takes are regulated in part by Measurement and Reporting of Water Takes Regulations 2010, which has specific requirements about how water volume is measured and how the data is reported.

### High rate water take consents

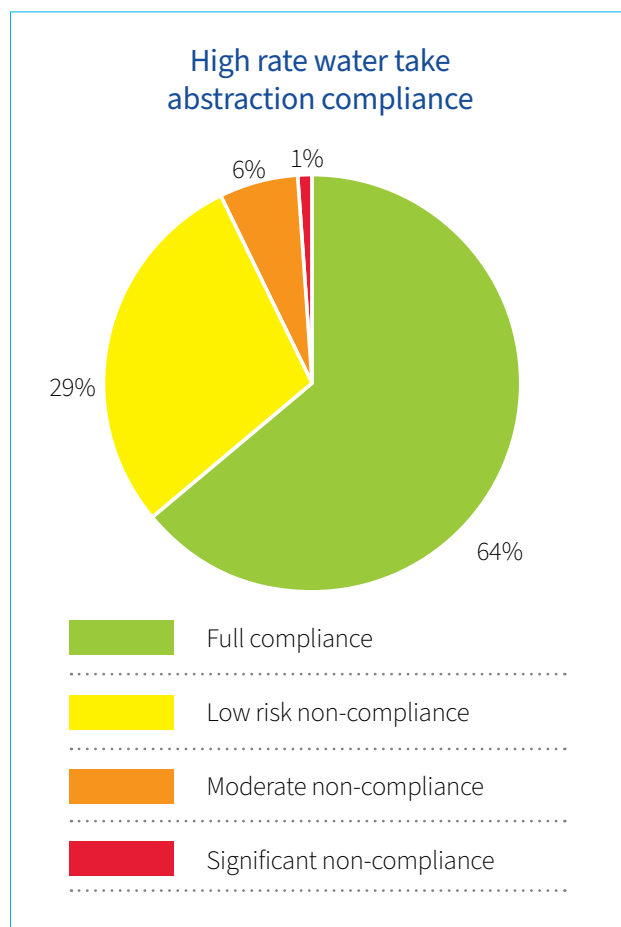
(Abstraction rate 5 litres per second or greater)

There are 203 current high rate water take consents.

Due to an active prioritisation of this work, the Resource Management team has assessed the abstraction records of 176 of these consents in 2023-24, up from 42 in 2022-23.

This is with the aim of improving our understanding of water use in Southland and providing water consent holders with feedback and better customer service.

While we have recorded a large number of low risk non-compliance that is generally related to data supply or data quality, we are encouraging consent holders to actively engage with their water data contractors and Environment Southland to ensure that the abstraction data we receive is complete and accurate.



### Low rate water take consents

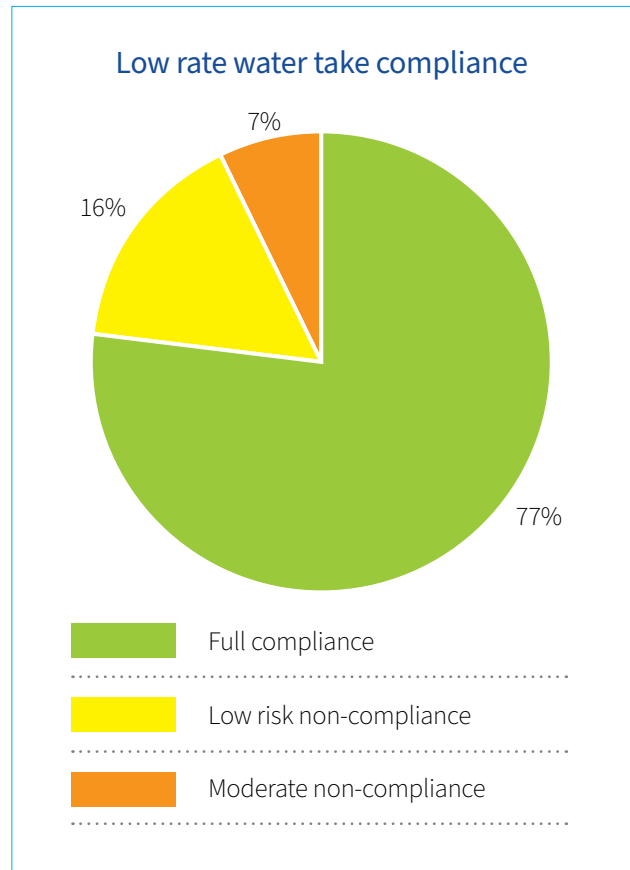
While Southland receives regular rainfall, the demand on our water resources is increasing.

Low risk non-compliance is usually as a result of failing to supply adequate abstraction data as required by the conditions of a consent, while moderate non-compliance is usually indicative of over abstraction.

There are a wide range of industries with low rate water take consents, with the dairy industry having the greatest number – with around 85% of all water take consents abstracting less than 5 litres per second.

At the time of writing, assessment of this year’s abstraction data submissions was ongoing. Early results suggest compliance was consistent with last year.

For the most part Environment Southland adopts an education-first approach to compliance with low rate water take consents. This has resulted in continued improvement in compliance over a number of years. Environment Southland considers enforcement options when dealing with significant or repeated non-compliance.



### Fish screen and bore inspections

In 2023-24, Environment Southland inspected 21 high rate groundwater consents. These inspections focus on assessing the location of the take, the bore head protection, correct irrigation areas, validation of meters and checks for leaks and offtakes.

Environment Southland is undertaking a programme of inspections of surface water takes, to assess the compliance and effectiveness of fish screens.

This is to ensure that fish are not being trapped or harmed in the pump intake. This is the second year of a five-year programme which aims to inspect and assess all surface water consents requiring fish screens.

**During 2023-24, 17 fish screens were monitored and graded as follows:**

- ▶ 5 were non-compliant, requiring action
- ▶ 12 were compliant.

Inspections involved assessing the sweep velocity of water across the screen, the through velocity of water through the screen, and the aperture size of the screen.



# Incident Response

Incidents come in many forms and can be either found by resource management officers or reported by members of the public through our online options or our 24/7 phone line (0800 76 88 45).

Incidents include everything from serious pollution situations like contaminants getting into waterways and outdoor burning creating a smoke nuisance, through to rubbish complaints. We have an officer on call 24/7 to assess reports based on their urgency and respond as required.

This year, the number of incidents logged by the resource management team saw a significant drop.

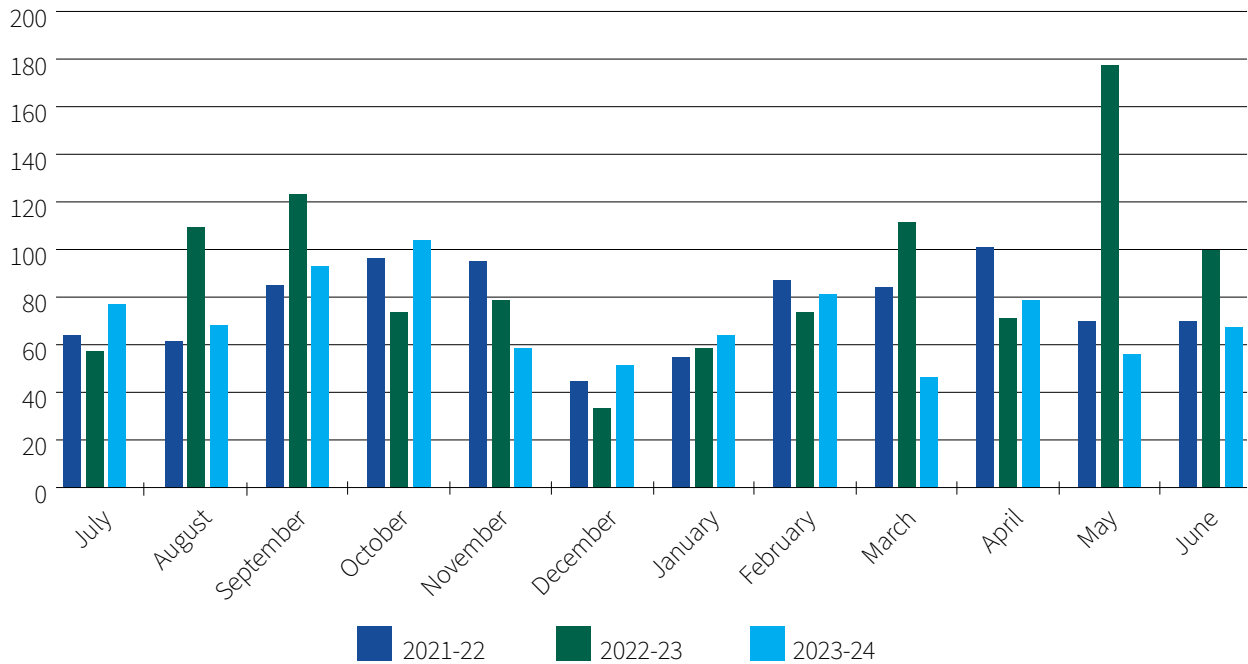
**In the 2023-24 year there 844 incidents (629 public, 215 staff), compared to 2022-23 when 1064 incidents (719 public, 345 staff) were reported.**

## The response can vary:

- ▶ Some simply require a phone call, others one or more site visits and taking samples. Follow up actions also vary, with many able to be completed on the day or within a few days.
- ▶ Some incidents are quite technical, needing technical expertise and an investigation to establish the full picture and any liability. These investigations can take several weeks or months to arrive at a resolution.

Where possible, the costs involved in attending and investigating an incident are charged to an offending party. Unfortunately for many of the incidents staff attend, like the removal of rubbish and dead stock from waterways, it is not possible to identify the offending party and the costs need to be met by ratepayers.

### Incidents - Three-year comparison

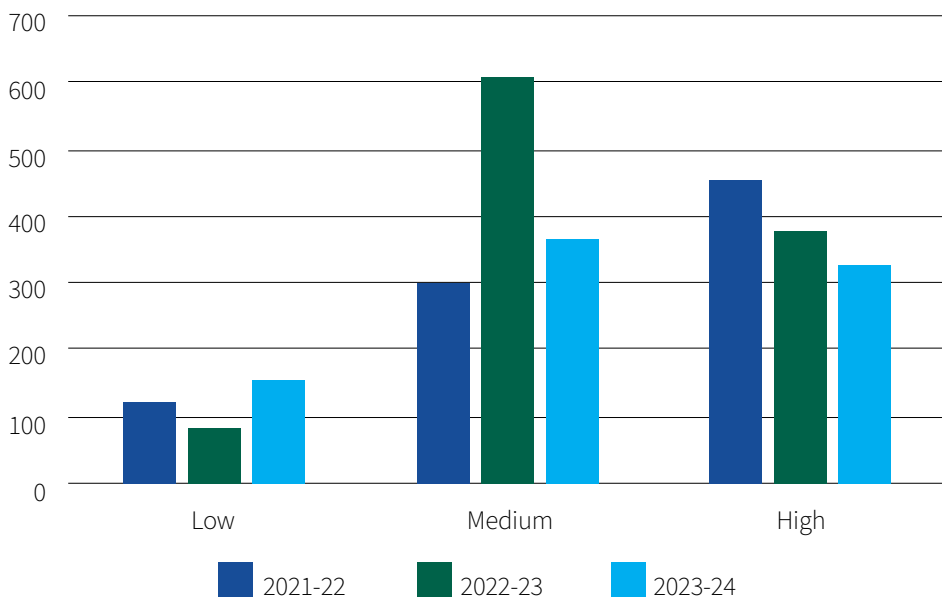


### Priority of incidents

When reported, the initial incident is assigned a priority from High (1-24 hours), Medium (2-4 weeks) Low (1-6 months). The priority is determined based on the impact to the environment, the community, cultural values, the need for rapid evidence collection and the receiving environment.

There was a decrease in the number of high and medium priority incidents, with a slight increase in the low priority incidents.

### Priority status - Three-year comparison





# Enforcement

Environment Southland has an Enforcement Policy available on our website:

[www.es.govt.nz/environment/compliance/compliance-information](http://www.es.govt.nz/environment/compliance/compliance-information)

This policy highlights the process that Environment Southland will use when considering and completing enforcement action against a person or a company.

Following an investigation into an incident or breach, enforcement action may be considered. When enforcement action is believed to be necessary, the resource management team uses the most appropriate tool for the given situation. Enforcement action can be a directive action such as a letter of direction, warning, abatement notice or enforcement order, or it can be punitive, such as an infringement notice or prosecution.

## Advice letters

These are used when there is identified minor non-compliance with no immediate environmental impacts and advise people of a rule or regulation they may be breaching or are at risk of breaching. These are designed to highlight the issue and give people the opportunity to correct the situation and prevent further non-compliance.

In the 2023-24 year we issued 18 letters of advice which largely related to intensive winter grazing rules, where people were advised prior to stock being on a crop that it would be a breach of the slope or critical source area rules to graze. There were also two letters of advice relating to forestry, one for a whitebait stand and one in relation to a wetland.

## Letters of direction and warnings

A letter of direction is used in a minor to moderate situation with a cooperative, motivated party. It is designed to prevent further breaches, or to remedy or mitigate the effects of non-compliance. Normally the letter will give timelines and the action to be taken or ceased.

A formal warning is a written warning to a person or company that has committed an offence. No further action will be taken in respect of the breach, but it will form part of the history of non-compliance. Normally a formal warning will be given in a minor to moderate incident.

During the 2023-24 year, the resource management team issued 55 letters of direction and 39 formal warnings.

## Abatement notices

An abatement notice requires an offender to comply with the notice within a specified timeframe.

Unlike enforcement orders, they are issued by Resource Management officers and do not require an application to the Environment Court. Depending on the situation, they may be a tool to ensure people do the right thing and we are able to assess that they have, or they can be used in more serious cases to ensure illegal activity having an impact on the environment is ceased.

Non-compliance with an abatement notice is an offence under the Resource Management Act 1991 and can receive infringement fines or prosecution.

During the 2023-24 year, the resource management team issued 30 abatement notices, significantly less than the 60 issued in 2022-23.

## Enforcement orders

An enforcement order is another way of ensuring compliance with the Resource Management Act. It is similar, in some respects, to an abatement notice in that it is used to get someone to start or stop doing something.

Where it differs is that anybody (not just the council) can apply for an enforcement order against somebody else. These are issued by the Environment Court rather than the council.

Enforcement orders offer more options than an abatement notice, including the ability to recover clean-up costs in avoiding, remedying or mitigating any adverse effect on the environment.

The court may also order restoration of a natural or physical resource. If the order is not complied with, council may go ahead and comply on the respondent's behalf (and recover the cost of doing so).

Enforcement orders can be issued at sentencing or can be issued prior to enforcement action being taken or alternatively as a sole form of enforcement action.

If a problem or the options to resolve it are complex, enforcement proceedings provide a court-supervised procedure for bringing about a conclusion, and if problems are encountered during the implementation of the solution, direction can be sought from the court.

No enforcement orders were applied for or granted during the 2023-24 year.

## Infringement notices

An infringement notice can be issued to an individual or company that has committed a Resource Management Act offence. The infringement fine is \$300, \$500, \$750 or \$1000, and if unpaid, is sent to the Ministry of Justice for fine collection (where further fees are likely to be added).

Infringements are a punitive tool that acknowledge a person or company has breached the Resource Management Act.

Infringements can be appealed. Information on how to make an appeal is included on the back of each infringement notice. Staff can also explain this, and payment arrangements can be made for those struggling to pay.

During the 2023-24 year, the resource management team issued 40 infringement notices compared to 33 in 2022-23.

## Alternative enforcement action

Environment Southland has developed a diversion policy as an alternative to prosecution in special circumstances.

Diversion has three primary purposes – rehabilitation, reparation and restoration, as well ensuring that the Council's statutory objectives are met.

The chief executive is responsible for determining whether the public interest is best served by the continuation of a prosecution or by an offer of diversion. In assessing eligibility for diversion, the chief executive will consider:

- Offender-based criteria
- Offence-based criteria.

The weight given to particular criteria is a matter for the chief executive's discretion.

In the 2023-24 year there were no cases considered for alternative enforcement action, although one case of diversion was finalised. This was for the installation of two unconsented moorings in Harrison Cove, Piopiotahi Milford Sound. The company made a financial contribution to environmental causes in Fiordland and gave a public apology.

## Prosecutions

Consideration of an offence for prosecution is done through the Enforcement Policy. Before proceeding, the matter is put before the Enforcement Recommendation Panel (ERP) – a group of internal experts who consider the evidence and assess each case against the principles of the Solicitor General's Prosecution Guidelines.

This provides an objective look at each case, seeks clarification and makes a recommendation on the final outcome.

The ERP may adopt the investigating officer's recommendation, recommend a different outcome, ask for more information or suggest an independent legal review.

When a legal review recommends prosecution, the chief executive has final sign-off for prosecution action to proceed. This means:

- The evidence which can be presented in court is sufficient to provide a reasonable prospect of conviction – the Evidential Test
- Prosecution is required in the public interest – the Public Interest Test.

In 2023-24, charges were laid in relation to one prosecution, although an initial court appearance had not been made in this reporting period.

# Glossary

<b>Ammoniacal nitrogen</b>	Ammoniacal nitrogen is rarely found at high levels in natural waters. Its presence is an excellent means of detecting pollution. It is a major component in urine excreted by mammals. High levels of ammoniacal nitrogen are potentially toxic to aquatic life.
<b>cBOD5</b>	Carbonaceous Biochemical Oxygen Demand – A measure of the ability of contaminants to consume and remove oxygen from water, reducing its availability to aquatic life
<b>Clarity</b>	The distance that can be seen through the water. The higher the clarity, the greater the visibility in the water.
<b>DRP</b>	Dissolved Reactive Phosphorus – A form of phosphorus that is readily available to plants to sustain growth. High levels of phosphorus and nitrogen in receiving waters can promote the growth of nuisance weeds in waterways.
<b><i>E. coli</i></b>	Escherichia coli - <i>E.coli</i> is a bacterium that is commonly found in the lower intestine of warm-blooded organisms. They are a subset of the Faecal Coliform group and are regarded as an indicator of faecal contamination and therefore the presence of pathogenic (harmful) bacteria.
<b>EC</b>	Electrical Conductivity – The ability of water to conduct electricity. This gives a conservative measure of the mineral content of water. Generally, the greater the conductivity of the water, the greater the mineral content.
<b>ERP</b>	Enforcement recommendation panel – Environment Southland panel who make internal recommendations.
<b>ES</b>	Environment Southland
<b>Loading</b>	The quantity of contaminants discharged over a set period of time.
<b>MPN</b>	Most Probable Number – a statistical estimate of the mean density of bacteria in a water sample.
<b>NES</b>	National Environmental Standard – A regulation that prescribe standards for environmental matters nationally.
<b>Nitrate</b>	An oxidised form of nitrogen – Nitrate nitrogen is soluble and is therefore readily available to plant life to sustain growth.
<b>Sewage</b>	Domestic human wastewater and excrement.
<b>Sewerage system</b>	A pipe network use to transport sewage.
<b>Stormwater system</b>	A system of pipes and drains that carry rain and snowmelt from street surfaces, roofs and other paved areas. The stormwater system leads directly to waterways.
<b>Total nitrogen</b>	An important element in the growth of plant material. It is required for protein formation and consequently animals have a significant N content. Total Nitrogen is a measure of all nitrogen present.
<b>Phosphorus</b>	Phosphorus is an important element in the growth of plant material. Total Phosphorus is a measure of all phosphorus present, including all forms of phosphorous whether it is tightly bound to particulate matter or potentially available to plant life.
<b>Turbidity</b>	Turbidity is a laboratory measurement to determine the clarity of the water. The higher the result, the more cloudy the water.
<b>µg/m3</b>	A measure of concentration in a liquid or gas. Micrograms of material in 1 cubic metre of water. 1 gram = 1,000,000 micrograms.
<b>Wastewater</b>	Water that has been used in the home, in a business or as part of an industrial process.



environment  
**SOUTHLAND**  
REGIONAL COUNCIL

Te Taiao Tonga