

Compliance Monitoring Report 2019-20



environment
SOUTHLAND
REGIONAL COUNCIL

Te Taiao Tonga



**Environmental Compliance
Monitoring Report**

2019/20

**Report by –
Environment Southland
Compliance Team**

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Foreword

The 2019/20 Compliance Monitoring Report provides an overview of Southland's regional compliance, monitoring and enforcement (CME) activities, carried out by the compliance team over the last year.

The year has been a challenging one, with the February flooding and Covid-19 pandemic having a significant impact on the team's work. Both these events have resulted in team members being redeployed in the emergency management responses and have impacted on our ability to go on-farm to carry out inspections.

Like many, we have had to adapt to different ways of working, including undertaking more aerial inspections to view as many properties as possible.

CME is critical to effective implementation of the Resource Management Act 1991 (RMA).

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** - actions taken by Environment Southland to respond to non-compliance with the RMA.

This report provides a summary of Southland industry's performance against their primary consents. It covers mainly dairy farming, local authorities and industrial operations, but also includes smaller consent holders such as coastal structures and whitebait stands.

CME are essential tools to achieve the purpose of the RMA - the promotion of sustainable management of natural and physical resources. Investment in good plan, policy-making and resource consenting processes can be undermined if CME are done poorly. Therefore, it is important to ensure that the implementation is planned and structured to achieve good, consistent and legally sound results.

As part of the compliance division's move towards regulatory excellence, a pilot survey on compliance behaviour change within the dairy sector was undertaken in Southland this season. There were reduced numbers of respondents due to the events of the year, which needs to be considered in the results.

The survey was not completed with traditional framing of 'customer satisfaction' to regulation as, where there is a prospective of punitive enforcement, you are unlikely to get a fair and accurate reflection of the Council's efforts.

Most (dairy) consent holders felt Environment Southland’s compliance inspection approach was fair and reasonable and the second largest group held a neutral view. Comments from those with a positive view suggest there was good communication, a friendly approach, they did not try to fix non-existent issues and made good suggestions. The process was as expected and fair. Staff were friendly and professional. Most respondents self-report high levels of proactivity when it comes to compliance with dairy discharge consent and compliance behaviour. Most of those that did not comply still viewed themselves as proactive with dairy discharge consent. Most participants view compliance and regular monitoring as important to the industry and region.

With the changes signalled by the Government and new regulations coming into play, there will be increasing pressure on CME requirements over the next year. This requires a constant review of how these functions are carried out in order to achieve the most efficient and effective results and will present some challenges for the compliance team.



N G Horrell
Chairman
Environment Southland



NMG Cook
Chairman
Regulatory Committee

Contents

FOREWORD	IV
INTRODUCTION	IX
1.0 INCIDENTS	2
2.0 AGRICULTURAL AUDITS	6
2.1 DAIRY INSPECTION OVERVIEW	6
2.1.1 <i>Discharge consent inspections</i>	8
2.1.2 <i>Wintering pad inspections</i>	9
2.1.3 <i>Aerial inspections</i>	9
2.2 GROUNDWATER QUALITY SAMPLING FOR DAIRY	9
2.3 WATER CONSENTS	11
3.0 INDUSTRIAL AUDITS – MAJOR INDUSTRIES	13
3.1 MEAT INDUSTRY.....	13
3.1.1 <i>Alliance Group Limited</i>	13
3.1.2 <i>Blue Sky Meats (NZ) Limited</i>	16
3.1.3 <i>South Pacific Meats Limited</i>	17
3.1.4 <i>Prime Range Meats Limited</i>	18
3.2 DAIRY INDUSTRY.....	19
3.2.1 <i>Fonterra Co-operative Group Limited</i>	19
3.2.2 <i>Open Country Dairy (NZ) Limited</i>	21
3.2.3 <i>Mataura Valley Milk Limited</i>	22
3.3 ENERGY INDUSTRY	23
3.3.1 <i>Pioneer Energy Limited</i>	23
3.3.2 <i>Meridian Energy Limited</i>	25
3.4 MANUFACTURING INDUSTRY.....	27
3.4.1 <i>New Zealand Aluminium Smelters Limited</i>	27
3.4.2 <i>Daiken Southland Limited</i>	29
3.5 FERTILISER INDUSTRY	31
3.5.1 <i>Ballance Agri-Nutrients Limited</i>	31
3.5.2 <i>Ravensdown Fertiliser Co-operative Limited</i>	32
3.5.3 <i>Fernhill Limeworks Limited</i>	33
3.6 MINING INDUSTRY	34
3.6.1 <i>Greenbriar Limited</i>	34
3.6.2 <i>Bathurst Resources Limited</i>	36
3.7 SAWMILL INDUSTRY	38
3.7.1 <i>Craigpine Timber Limited</i>	38
3.7.2 <i>Findlater Sawmilling</i>	39
3.7.3 <i>Lindsay & Dixon Limited</i>	40
4.0 SEWAGE TREATMENT AND STORMWATER SYSTEMS	41
4.1 INVERCARGILL CITY COUNCIL	41
4.1.1 <i>Sewage treatment systems</i>	41
4.1.2 <i>Stormwater systems</i>	43
4.2 SOUTHLAND DISTRICT COUNCIL.....	45
4.2.1 <i>Sewage treatment systems</i>	45
4.2.2 <i>Stormwater systems</i>	50
4.3 GORE DISTRICT COUNCIL	52
4.3.1 <i>Sewage treatment systems</i>	52
4.3.2 <i>Stormwater systems</i>	54

5.0	QUARRYING	55
5.1	GRAVEL EXTRACTION	55
6.0	LANDFILLS	56
6.1	S J TIMPANY CONTRACTING – CLEANFILL	56
6.2	AB LIME LIMITED	58
7.0	COASTAL MARINE AREA	60
7.1	SOUTH PORT AND NEW ZEALAND ALUMINIUM SMELTER LIMITED’S COASTAL PLAN AGREEMENTS	60
7.2	WHITEBAIT STANDS.....	61
8.0	TOURISM	62
8.1	DEPARTMENT OF CONSERVATION	62
8.2	MILFORD SOUND TOURISM	65
8.3	ULTIMATE HIKES	67
8.3	COASTAL SURFACE WATER ACTIVITIES IN FIORDLAND.....	68
9.0	SMALL INDUSTRIES	69
9.1	CLEANFILL SITE INSPECTIONS	69
9.2	TRUCK WASH INSPECTION.....	70
10.0	FORESTRY OPERATIONS IN SOUTHLAND	71
11.0	ENFORCEMENT	74
11.1	LETTERS OF DIRECTION AND WARNINGS	74
11.2	ABATEMENT NOTICES	74
11.3	ENFORCEMENT ORDERS	75
11.4	INFRINGEMENT NOTICES	76
11.5	ALTERNATIVE ENFORCEMENT ACTION	77
11.6	PROSECUTIONS	78
GLOSSARY		80

Figures

- Figure 1: Incidents – 3-year comparison 2
- Figure 2: Priority response category compared to previous years 3
- Figure 3: Comparison of discharge consent inspection outcomes over three years 8
- Figure 4: Comparison of discharge consent re-inspections over three years..... 9
- Figure 5: Dairy groundwater monitoring nitrate results for November 2019 and April 2020
(Concentrations of Nitrate measured as g/m³)..... 10
- Figure 6: Low rate (less than 5L/s) water use in Southland 11
- Figure 7: Low rate (less than 5 l/s) compliance 2019/20 12
- Figure 8: High rate (greater than 5 l/s) water use in Southland 12
- Figure 9: Upstream sampling site, Alliance Group Maitua Plant 13
- Figure 10: Fonterra, Edendale 19
- Figure 11: Monowai Power Station..... 23
- Figure 12: Turbine Hall - Manapouri Power Station..... 25
- Figure 13: Aerial view of NZAS site. (Image by NZAS) 27
- Figure 14: Aerial view of Daiken Southland site (Image by Daiken Southland Limited) 29
- Figure 15: Mining operations, New Vale Mine, Waimumu 35
- Figure 16: Active mine pit, Bathurst Resources, Nightcaps 36
- Figure 17: Gravel extraction on the Aparima River 55
- Figure 18: S J Timpany tip face October 2019 57
- Figure 19: View across areas 14 of the active landfill, AB Lime 59
- Figure 20: Tiwai Peninsula 60
- Figure 21: Mackinnon Pass Shelter, Milford Track..... 64
- Figure 22: Milford Sound wastewater treatment plant 66
- Figure 23: An example of green waste which is not allowed to be discharged to a cleanfill 69
- Figure 24: An example of a truck wash facility..... 70
- Figure 25: Summary of forestry activities during the 2019/20 year 72
- Figure 26: Infringement notices issued over the last three years..... 76

Introduction

Environment Southland’s Compliance Monitoring Report has been designed to provide an overview of compliance activities from across Southland during the 2019/20 year. It does not cover all of the activities of the area in detail.

Activities with similar parameters, particularly enforcement, incidents, dairy discharge consents and whitebait stands, have been combined to give a broad overview, rather than reporting on individual conditions or circumstances.



*Simon Mapp
Compliance Manager*

In this report, the dairy industry is reported as a collective as the consent conditions for each farm are similar and compliance with these can be easily compared. Dairy inspections result in each farm receiving a grade which ranges from 1: Full compliance through to 10: Significant non-compliance.

Other industries reported here are either the only one of their type in Southland, or significant differences exist between them that would make comparison of their consent conditions of little value.

Major industrial consents, or those of special interest to Southland, have been identified and are included in the report. Industrial consents are often very complex. This is largely due to the nature of the activity and volume of contaminants that an industry uses or discharges. The industries reported here often have their own environmental assessment teams, or use third party contractors to complete the requirements of their consent.



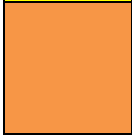
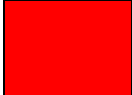
For each of the major industry reports, a table has been included to assess how well the company has kept Environment Southland informed of monitoring results and how they respond to issues. A second table provides an overall assessment of performance against their consent conditions.

Both tables provide a rating in the form of a traffic light system and a comparison between the 2018/19 and 2019/20 year (see below).

Key

Site or consent holders name			
Description of noteworthy event	17/18	18/19	19/20
	Background denotes overall results for year shown in box		Year

Grading

	Compliance Grade
	FULL COMPLIANCE – Compliance with all relevant consent conditions, plan rules, regulations and national environmental standards.
	LOW RISK NON-COMPLIANCE - Compliance 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 (e.g. failure to submit a monitoring report).
	MODERATE NON-COMPLIANCE - Non-compliance with some of the relevant consent conditions, plan rules, regulations and national environmental standards. The non-compliance was deemed to have had some environmental consequences and/or there is a moderate risk of adverse environmental effects or there was a frequent recurrence of low risk or technical non-compliance.
	SIGNIFICANT NON-COMPLIANCE - Non-compliance with many of the relevant consent conditions, plan rules, regulations and national environmental standards where there were significant environmental consequences and/or a high risk of adverse environmental effects.

Also considered in the gradings are the completeness and quality of the results, evidence of contingency planning, prompt notification of events, completion of full and thorough investigations, maintenance of good communications with Environment Southland, proactive in addressing or highlighting potential issues and evidence of environmental ethics.

After consultation with consent holders and stakeholders we decided for this report to add a fourth compliance grade (yellow) to better reflect consent performance.

This report is separated into three main parts - Inspection and Audit Activities, Incident Response and Enforcement.

Since the first Compliance Monitoring Report in 1998, the format and detail of the report has changed. If there is an area you would like to see more detail on or something you would like added to the report next year, please let us know.

Part A

Incident Response

1.0 Incidents

Compliance officers respond to incidents either found by officers or reports of pollution from members of the public. We have a pollution response available 24/7 (0800 76 88 45).

This year, there were a similar number of incidents reported to the Compliance Division, as in the previous year. In the 2019/20 year, there were 964 incidents (747 public, 217 staff) compared to the 2018/19 year, which had 963 incidents reported in total (813 public, 150 staff).

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

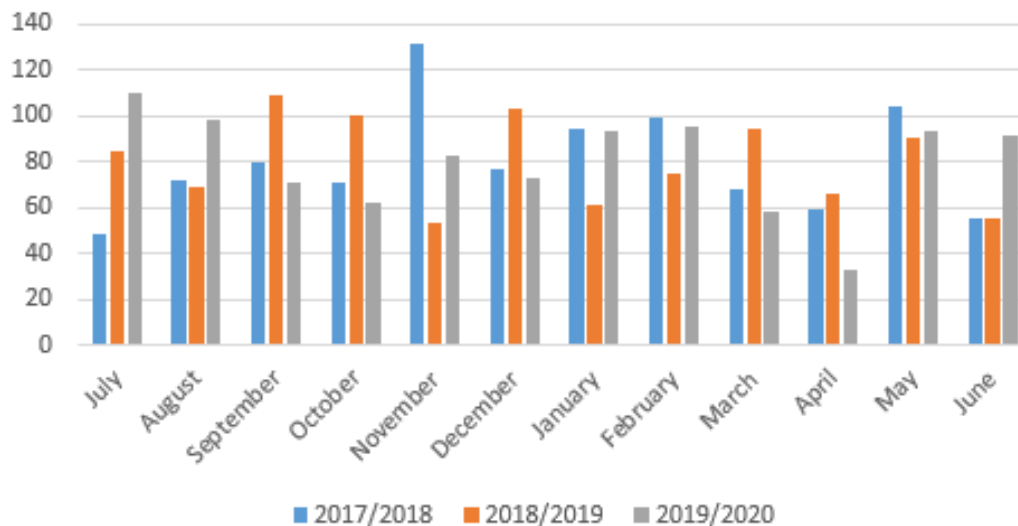


Figure 1: Incidents – 3-year comparison

Reported incidents per month compared over three years

The variety of incidents reported to the Compliance Division can be extremely wide and covers all manner of environmental incidents. A lot of incidents are reasonably simple and can be completed in a short timeframe. However, some incidents require a more significant investigation, that take months to arrive at a resolution.

We do see spikes in the number of incidents due to seasonal factors. The steadily high number of incidents reported within the month of May is due to a reducing tolerance for nuisance smoke and odour. The spike in incidents reported in June 2020 is a combination of the increase in air incidents and winter grazing incidents noted during the inspection programme and calls from members of the public.

Priority of incidents

Not all Incidents are created equal. When reported, the initial incident is assigned a priority from High (1 hour to 24 hours), Medium (2 days to 4 weeks) Low (1 month to 6 months). The priority is determined initially based on the impacts to the environment and/or the community. Priorities can also be determined taking into account several factors including the need for rapid evidence collection, the receiving environment and time of day.

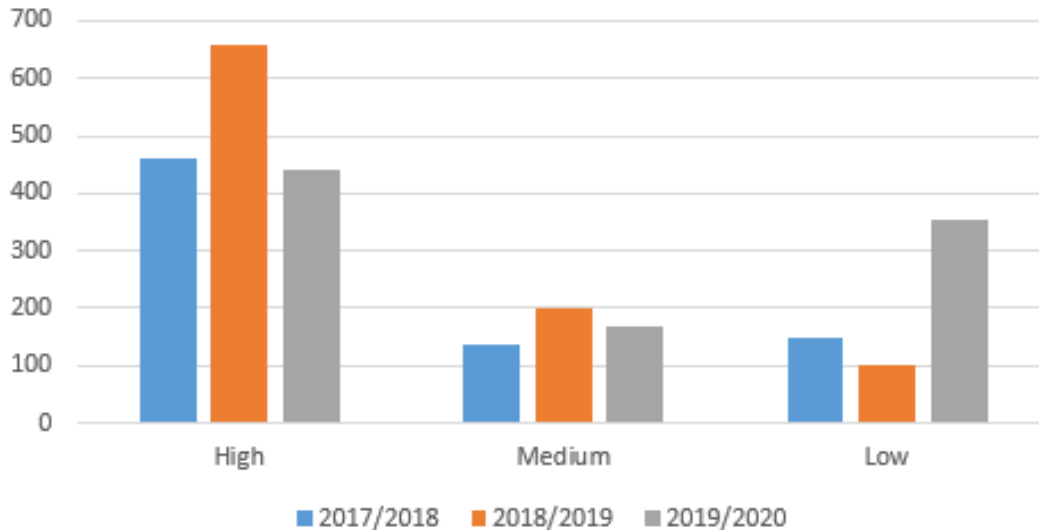


Figure 2: Priority response category compared to previous years

Priority response category compared to previous years

There was a decrease in the number of high priority incidents and a noticeable increase in the number of low priority incidents this year.

This year, there was a decrease in the number of calls coming in from the public which tend to be a source of high priority incidents (813 in 2018/19 year down to 747 in 2019/20).

Part B

Inspection and audit activities

2.0 Agricultural audits

The Mycoplasma Bovis bacteria remains a concern on a small number of farms. Ministry of Primary Industries (MPI) are continuing to work to eradicate M. Bovis from New Zealand but its presence continues to impact on the dairy inspection programme.

This year we experienced significant disruption to the inspection programme, and therefore inspection numbers, due to flooding events in February 2020 and the COVID-19 lockdown.

This year 21 inspections were rated as being significantly non-compliant of 634 inspections conducted. This equates to approximately 3.3% significant non-compliant inspections

2.1 Dairy inspection overview

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

Dairy shed effluent is created from the milking shed and platform during clean down and is a combination of water and effluent. As such it is an excellent natural liquid fertiliser. It contains 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.

However, pasture can only use so much effluent at a time. It's 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 the groundwater aquifers or an underground source of water;
- *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.

There are four outcomes following an inspection that determine a dairy farm's performance against the conditions of their consent.

	Compliance grade
1	FULL COMPLIANCE. Compliance with all relevant consent conditions, plan rules, regulations and national environmental standards.
2	LOW RISK NON-COMPLIANCE. Compliance 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 (e.g. failure to submit a monitoring report).
5	MODERATE NON-COMPLIANCE. Non-compliance with some of the relevant consent conditions, plan rules, regulations and national environmental standards, where there are some environmental consequences and/or there is a moderate risk of adverse environmental effects.
10	SIGNIFICANT NON-COMPLIANCE. Non-compliance with many of the relevant consent conditions, plan rules, regulations and national environmental standards, where there are significant environmental consequences and/or a high risk of adverse environmental effects.

Intensive winter grazing – case study

Intensive winter grazing is a practice that provides feed for stock during the winter months when grass growth is at a minimum. Completed correctly, it provides a high amount of feed in a reduced area.

Despite its benefits to farmers, it is a high risk activity with regards to water quality in Southland. During the 2019 (May-September) intensive winter grazing season, there was a lack of good management practices in accordance with the proposed Southland Water and Land Plan and ongoing evidence of poor practice was highlighted by members of the public and the media.



The concerns that good management practices were not being consistently applied across the region, causing both environmental and animal welfare issues, led to an approach which saw Environment Southland lead a range of industry groups to come together to bring about significant improvement.

Environment Southland, DairyNZ, Beef + Lamb New Zealand, Federated Farmers, Ministry for the Environment and Ministry for Primary Industries worked together to ensure a consistent and proactive approach to getting the message out to farmers about good management practices.

Environment Southland chief executive Rob Phillips said the Council worked hard to help farmers lift their winter grazing performance from initiating hui; providing advice through its land sustainability team; making informational material available; and following COVID-19, a solution in conjunction with industry to streamline access to modify consent conditions for farmers struggling with excess stock due to a slow down at processing plants.

A collaborative programme was undertaken by the compliance, land and water services and communications teams at Environment Southland. Land and water services completed cultivation flights identifying high risk areas before the grazing started and offered assistance to those land owners, communications worked with other industry groups to ensure consistent communications around good management practices and the compliance team completed three aerial inspection flights over the winter grazing season. Compliance manager Simon Mapp said that although the weather was milder than the previous season, making it easier to comply with rules, the inspections over the 2020 season showed considerable improvement of use of good management practices than in the previous year.

Only a small number of properties required follow-up, mostly relating to education around critical source areas and back fencing. In some cases, the landowners were referred for further enforcement action, but in many cases they were referred to the land and water services team or another industry group for further support and advice to improve their practice. Where any animal welfare concerns were identified, they were passed on to the Ministry for Primary Industries for follow-up.

The joint initiative is ongoing, with the industry groups working together to ensure farmers undertake good planning in advance of next year's winter grazing season.

2.1.1 Discharge consent inspections

External influences continue to impact on Environment Southland’s ability to complete the dairy monitoring programme. During the 2019/20 season staff continued to adhere to the standard disinfection protocols to mitigate the risks of spreading the M. Bovis bacteria, however this year monitoring was severely hampered by the impact of the February 2020 floods and the COVID-19 lockdown.

Consequently, only 634 on-site and aerial dairy shed effluent discharge consent inspections were completed during the 2019/20 season. Of these, 478 were fully compliant, 135 were graded low risk or moderate non-compliance, and 21 were graded significant non-compliance.

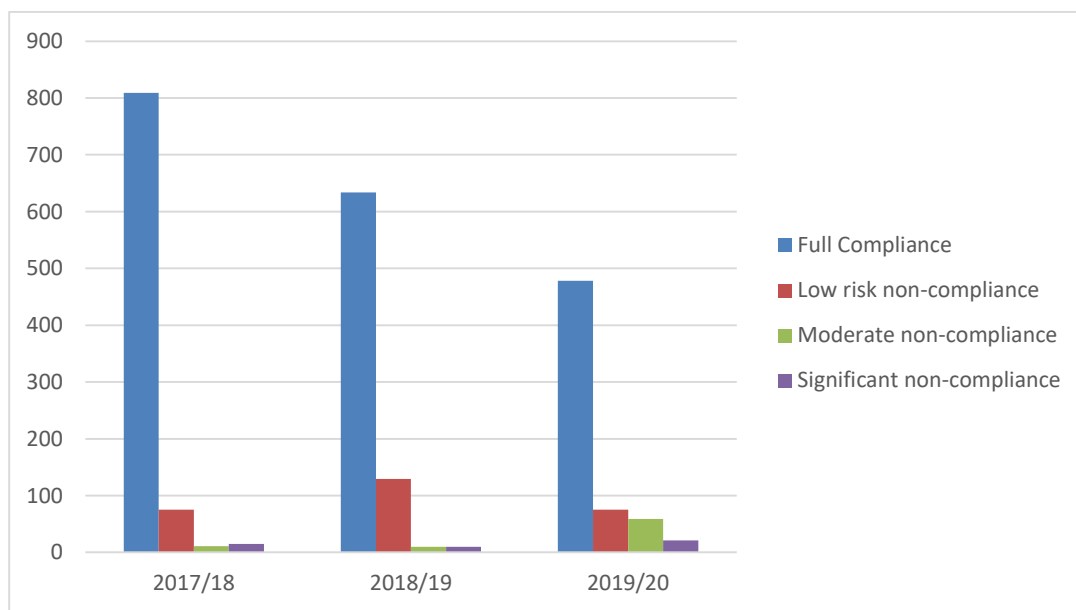


Figure 3: Comparison of discharge consent inspection outcomes over three years

If an inspection results in a grade of 10 (significant non-compliant), a re-inspection is conducted. Some of the re-inspections were not completed due to the external influences noted earlier, however these were re-inspected early in the new season. Fourteen re-inspections were completed for the 2019/20 financial year.

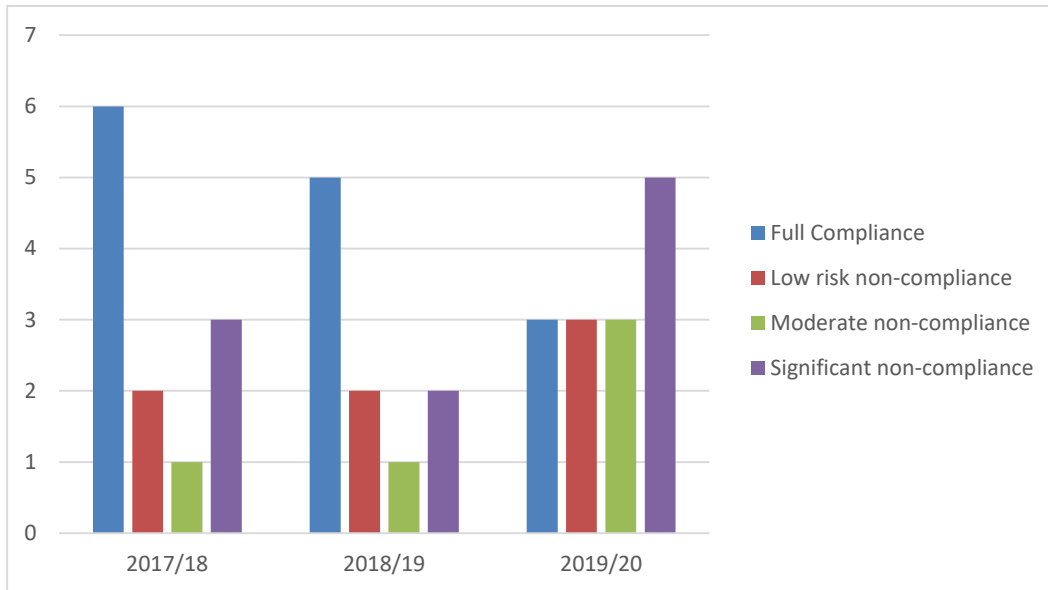


Figure 4: Comparison of discharge consent re-inspections over three years

2.1.2 Wintering pad inspections

Compliance 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.

Compliance officers completed 62 inspections and re-inspections in the 2019/20 financial year of the various types of consented wintering pads. There were 39 rated as fully compliant, 20 rated as low risk or moderate non-compliance and three rated as significant non-compliant.

2.1.3 Aerial inspections

Compliance staff undertook 351 aerial inspections of dairy discharge permits in the 2019/20 financial year. There were 307 rated as fully compliant, 22 rated as low risk non-compliance and 22 moderate non-compliance.

2.2 Groundwater quality sampling for dairy

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 (base flow).

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 as it affects 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 measureable 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 what land based activity may be contributing to the change.

The number of consents requiring groundwater monitoring varies each year as discharge consents get updated. In November 2019, 165 sites were monitored to measure the effects of dairy effluent discharge on groundwater. In April 2020, 205 sites were monitored to measure the effects of dairy effluent discharge on. The April monitoring was delayed due to COVID-19 lockdown.

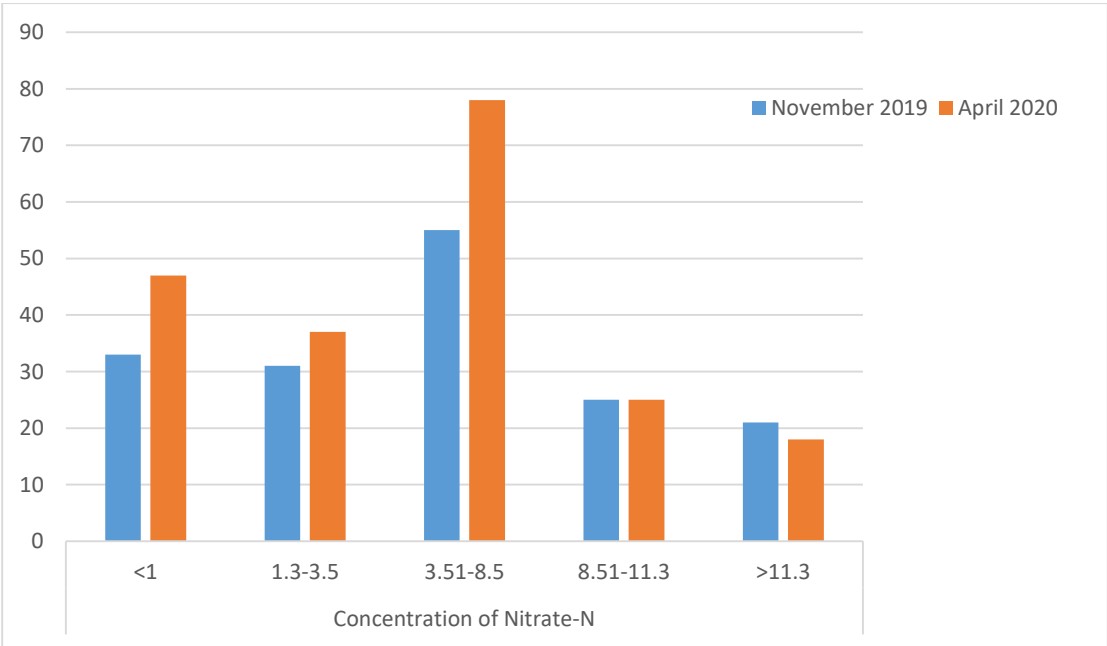


Figure 5: Dairy groundwater monitoring nitrate results for November 2019 and April 2020 (Concentrations of Nitrate measured as g/m³).

2.3 Water consents

Water take permits have been separated into two groups:

- low rate water take consents; and
- high rate water take consents.

Low rate water take consents allow water to be abstracted at a rate of less than 5 litres per second, while high rate water take consents allow water to be abstracted at a rate of 5 litres per second or greater.

Low rate water take consents

There are a wide range of industries with low rate water consents from gravel wash to car wash operations, with the dairy industry having the greatest number of low rate water take consents, with a total of 95% of all water take consents abstracting less than 5 litres per second.

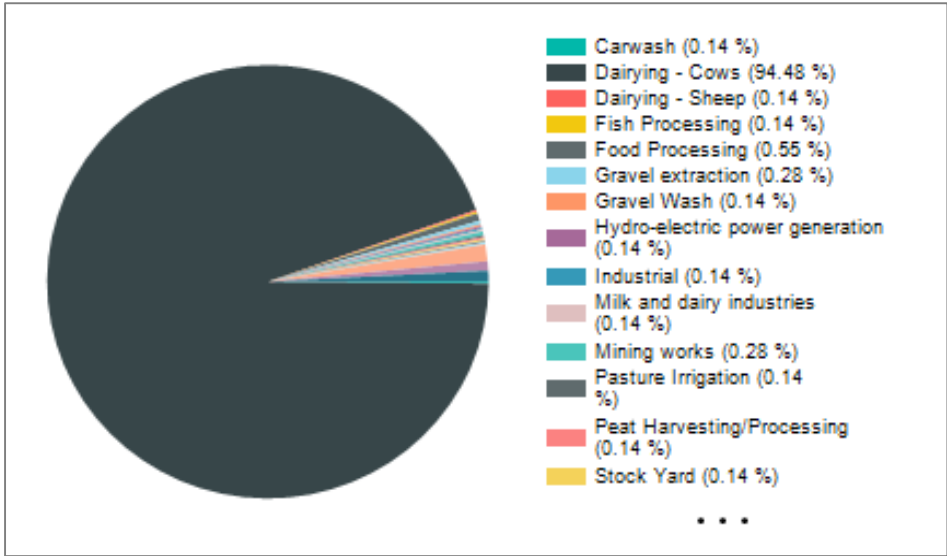


Figure 6: Low rate (less than 5L/s) water use in Southland

While Southland receives regular rainfall, the demand on the water resource is increasing. This year, the level of compliance was 78% of consent holders being fully compliant with consent conditions.



Figure 7: Low rate (less than 5 l/s) compliance 2019/20

Environment Southland has adopted the Regional Sector Strategic Compliance framework when dealing with monitoring. This involves education, engagement, enablement and enforcement. Any one or all of these tools can be used at any time to achieve compliance. Last year, Environment Southland adopted an educative approach. This approach has resulted in an overall improvement in compliance from 51% in 2018/19 to 78% in 2019/20.

Irrigation water consents

During the 2019/20 irrigation season there were 188 high rate water take consents. Of those, 136 were for abstraction from groundwater and 52 were for abstraction from surface water.

Irrigation in Southland is predominantly to encourage pasture growth, with 92 of the irrigation consents identified as being for pasture irrigation and 21 for crop irrigation.

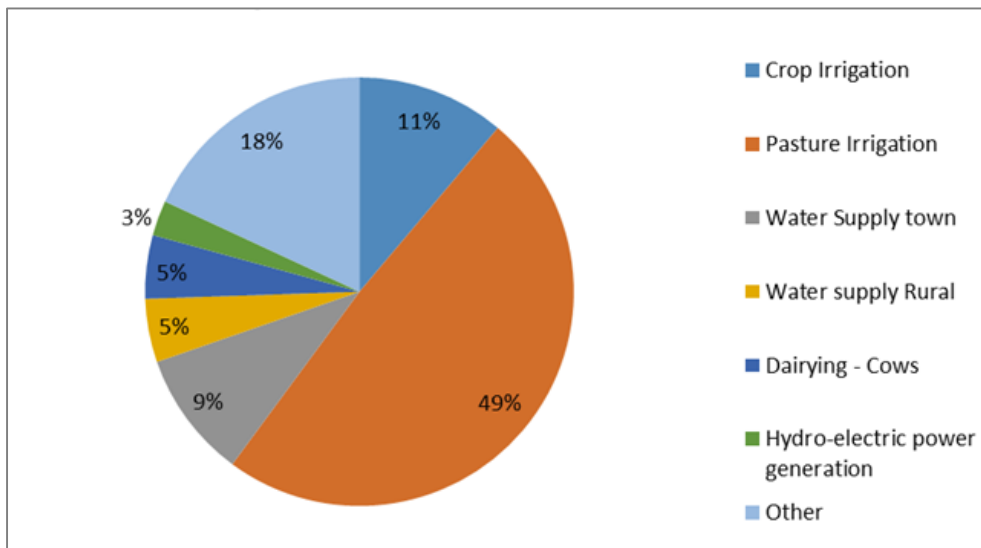


Figure 8: High rate (greater than 5 l/s) water use in Southland

3.0 Industrial audits – major industries

3.1 Meat industry

3.1.1 Alliance Group Limited

Alliance Group Limited operates two meat processing plants in Southland, one at Lorneville, and one at Mataura. The Makarewa plant operated by Alliance Group ceased operations in late 2018.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.



Figure 9: Upstream sampling site, Alliance Group Mataura Plant

Lorneville

Consents
<p>Alliance Group Limited holds 14 resource consents for the Lorneville plant. The primary consents include:</p> <ul style="list-style-type: none"> • the discharge of treated wastewater to the Makarewa River; • the discharge of treated wastewater to land; • the discharge of wastewater and stockyard solids to land; • the discharge of contaminants to air; • the discharge of stormwater into an open drain; • to take surface water from the Makarewa and Oreti Rivers.

Complaints and self-reported incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
<p>Alliance Lorneville was compliant with all monitored consent conditions for the 2019/20 period.</p> <p>Alliance Lorneville has had difficulty with the reliability of its ambient air quality monitoring, resulting in periods of reduced monitoring. Alliance has been proactive in investigating and acquiring the appropriate monitoring equipment and has been recorded as compliant for the period.</p> <p>There were no confirmed exceedances of wastewater discharge quality limits.</p>			

Mataura

Consents
<p>Alliance Group Limited holds eight resource consents for the Mataura plant. The consents are:</p> <ul style="list-style-type: none"> • the discharge of contaminants, including odour, to air; • the discharge of treated meat works wastewater to the Mataura River; • the discharge of stormwater to the Mataura River; • the discharge of cooling water to the Mataura River; • the discharge of wastewater treatment solids to land; • to take water from a water race fed by the Mataura River for meat processing; • to dam, divert, use and discharge water for hydro-electric power-generation; • to take surface water for pelt and hide processing.

Complaints and self-reported incidents	2017/18	2018/19	2019/20
<p>Two complaints or self-reported incidents were received during the 2019/20 period.</p> <p>Both were wastewater spills reported to Environment Southland by Alliance Mataura. Reporting was prompt and effective. These spills were investigated and no breaches of the RMA or consent conditions were identified and no action was taken.</p>			

Air discharge consent performance	2017/18	2018/19	2019/20
<p>Alliance Mataura was compliant with all monitored consent conditions for the air discharge during the 2019/20 period.</p>			

Consent performance summary	2017/18	2018/19	2019/20
<p>Two breaches of the consent discharge conditions were identified during the 2019/20 period.</p> <p>A formal warning and an infringement were issued for exceedances of the wastewater discharge quality limits. No receiving water limits were exceeded. Alliance Group Limited was co-operative and proactive in investigating the cause of the discharge quality exceedances.</p> <p>All other consents recorded a high level of compliance.</p>			

3.1.2 Blue Sky Meats (NZ) Limited

Blue Sky Meats Limited operates a meat processing plant at Morton Mains, near Woodlands.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
<p>Blue Sky Meats (NZ) Limited holds eight resource consents for the purpose of meat processing at its Morton Mains plant. The primary consents are:</p> <ul style="list-style-type: none"> • to take groundwater for a meat processing operation; • the discharge of contaminants to the ground through the operation of offal pits; • the discharge of wastewater to land via a spray irrigator; • the discharge of contaminants to air from a rendering and blood drying plant, boiler plant, and wastewater treatment and irrigation.

Complaints and self-reported Incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
Blue Sky Meats was graded non-compliant in relation to the discharge of wastewater to land. A non-compliance was issued due to the quality of the information presented in the annual report, and the non-supply of data.			

3.1.3 South Pacific Meats Limited

South Pacific Meats Limited operates a meat processing plant at Awarua, approximately 10 km south of Invercargill.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
<p>South Pacific Meats Limited holds five resource consents for the purpose of meat processing at its Awarua plant. The primary consents include:</p> <ul style="list-style-type: none"> • the discharge of stormwater containing contaminants into the New River Estuary; • the discharge of contaminants to air from a rendering plant, wastewater treatment plant, boiler and associated processes; • the discharge of meat works effluent sludge to land.

Complaints and self-reported Incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
There were two breaches of the consent conditions during the 2019/20 period. These were minor in nature and related to the discharge of meat works effluent sludge to land. There were no adverse effects as a result of the non-compliances.			

3.1.4 Prime Range Meats Limited

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

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
<p>Prime Range Meats Limited holds three resource consents for the purpose of meat processing. The primary consents are:</p> <ul style="list-style-type: none"> • the discharge of contaminants, including odour, to air from a meat works and rendering plant, and from a wastewater treatment system; • the discharge of treated wastewater to land from a meat processing operation.

Complaints and self-reported Incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
Prime Range Meats was compliant with all monitored consent conditions for the 2019/20 period.			

3.2 Dairy industry

3.2.1 Fonterra Co-operative Group Limited

Fonterra Co-operative Group Limited operates a milk processing facility at Edendale.



Figure 10: Fonterra, Edendale

What do we look at?

Environment Southland investigate complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents

Fonterra Co-operative Group Limited holds nine resource consents related to dairy processing at its Edendale plant. The primary consents include:

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

Complaints and self-reported incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
<p>A non-compliance was issued in relation to Fonterra's consents to irrigate wastewater to land. This was due to the riparian planting programme not being undertaken by the required date. This is the second year now that the consent condition has not been met. The site has made substantial progress toward completing the planting, and expects to have all planting completed by the end of 2021.</p> <p>There were two breaches of the consent conditions in relation to the discharge of wastewater and process water to the Mataura River for the 2019/20 period. Both breaches were minor in nature and were for failing to give notification of a discharge occurring, and for minor exceedances of the discharge limits.</p> <p>There were three breaches of the air discharge consent. These were all for incomplete data records and were technical in nature.</p> <p>A technical non-compliance was given due to Fonterra not taking all necessary samples during the season in relation to its consent to discharge dairy liquids to land.</p> <p>Fonterra was compliant with the conditions of its water take consents during the 2019/20 period.</p>			

3.2.2 Open Country Dairy (NZ) Limited

Open Country Dairy (NZ) Limited operates a milk processing plant at Awarua, to the south of Invercargill.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
<p>Open Country Dairy holds five resource consents relating to its dairy processing plant. The primary consents include:</p> <ul style="list-style-type: none"> • the discharge of condensate and stormwater to a farm drain; • the discharge of contaminants to the air from a milk processing plant and boiler.

Complaints and self-reported incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
<p>Open Country Dairy completed all of the monitoring requirements of their consents for the 2019/20 period.</p> <p>However, there was one minor breach with the air discharge consent, where there was an exceedance of the emission limits.</p>			

3.2.3 Maitara Valley Milk Limited

Maitara Valley Milk Limited operates a milk processing plant at McNab, to the north east of Gore.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
<p>Maitara Valley Milk Limited holds seven resource consents related to its dairy processing plant. The primary consents include:</p> <ul style="list-style-type: none"> • to discharge sludge to land; • to discharge odour and contaminants to air from a milk processing plant and associated facilities; • to discharge stormwater to water; • to discharge treated wastewater to land; • to take and use groundwater.

Complaints and self-reported incidents	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 reporting period.		

Consent performance summary	2018/19	2019/20
<p>Two breaches of the consent conditions were received during the 2019/20 period.</p> <p>The daily wastewater discharge flow limit was exceeded on only two days during the year.</p> <p>No environmental impacts occurred as a result of the exceedances.</p>		

3.3 Energy industry

3.3.1 Pioneer Energy Limited

The hydroelectric power station at Monowai is owned by Pioneer Energy. The company operates 13 power stations across Southland and Central Otago.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.



Figure 11: Monowai Power Station

Consents

Pioneer Energy holds 18 resource consents related to the operation of its Monowai Power Scheme. They include:

- to take surface water;
- to use, maintain and alter an existing earth dam;
- to discharge water to water;
- to discharge contaminants to land;
- to dam and divert the waters of the Monowai River.

Complaints and self-reported incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
There was one breach of the consent conditions during the 2019/20 period. A non-compliance was recorded in relation to Pioneer Energy's fish passage monitoring programme reporting requirements. Part of the monitoring programme is yet to be completed. The company is working to resolve the situation.			

3.3.2 Meridian Energy Limited

Meridian Energy Limited operates the largest hydroelectric power station in New Zealand at West Arm, Lake Manapouri within the Fiordland National Park. Electricity is generated using water stored in Lakes Te Anau and Manapouri. The stored water from the lakes is controlled using structures at the outlet of Lake Te Anau and the Lower Waiau 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.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.



Figure 12: Turbine Hall - Manapouri Power Station

Consents

Meridian Energy Ltd holds 29 resource consents related to the operation of the Manapouri Power Scheme. The primary consents are:

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

Complaints and self-reported incidents	2017/18	2018/19	2019/20
A complaint was received in relation to the management of the lake levels. An investigation was undertaken and it was concluded that Meridian had taken all reasonable measures to operate according to the requirements of the guidelines.			

Consent performance summary	2017/18	2018/19	2019/20
There were five days during which, at times, the flows recorded downstream of the Manapouri Lake Control structure did not meet flows in the Mararoa River when turbidity was elevated. The breaches were of a short duration and did not result in sediment laden water flowing into Lake Manapouri.			

3.4 Manufacturing industry

3.4.1 New Zealand Aluminium Smelters Limited

New Zealand Aluminium Smelters Limited (NZAS) is located on the Tiwai Peninsula at Awarua, and produces some of the purest aluminium in the world.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the resource consents.



Figure 13: Aerial view of NZAS site. (Image by NZAS)

Consents

New Zealand Aluminium Smelters Limited (NZAS) holds six discharge and water take consents that require inspecting. The consents are:

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

Complaints and self-reported incidents	2017/18	2018/19	2019/20
An infringement was issued for an effluent spill to ground.			

Consent performance summary	2017/18	2018/19	2019/20
<p>A number of breaches of consent discharge limits occurred in the 2019/20 period.</p> <p>The cyanide limit for the effluent discharge to Foveaux Strait was exceeded on one occasion by a margin of 10%.</p> <p>The limit for fluoride in the discharge to Bluff Harbour was exceeded on one occasion.</p> <p>Two exceedances of the discharge volume limit for sewage to land occurred.</p> <p>No issues were identified during the Environment Southland audit sampling of the stormwater discharge to Bluff Harbour and ambient air quality sampling.</p> <p>NZAS continually provided notifications to Environment Southland during the 2019/20 period.</p>			

3.4.2 Daiken Southland Limited

Daiken Southland Limited operates a mixed density fibreboard (MDF) manufacturing plant, located south of the Matura.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.



Figure 14: Aerial view of Daiken Southland site (Image by Daiken Southland Limited)

Consents

Daiken Southland Limited holds 11 resource consents. The primary consents include:

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

Complaints and self-reported incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
Daiken Southland was compliant with all monitored consent conditions for the 2019/20 period. All wastewater was discharged to land and all wastewater discharge limits were met. All limits on stormwater, all discharge to air limits and limits on discharge of ash to land were met.			

3.5 Fertiliser industry

3.5.1 Ballance Agri-Nutrients Limited

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

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
Ballance Agri-Nutrients Limited holds three resource consents for its fertiliser manufacturing plant at Awarua. The consents are: <ul style="list-style-type: none">• the discharge of stormwater from a fertiliser manufacturing facility to water;• to take groundwater for fertiliser processing;• the discharge of contaminants to air from the manufacture of fertiliser and associated activities.

Complaints and self-reported incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
Ballance Agri-Nutrients was compliant with all monitored consent conditions for the 2019/20 period.			

3.5.2 Ravensdown Fertiliser Co-operative Limited

Ravensdown Fertiliser Co-operative Limited operates two sites in Southland; a limestone quarry at Dipton and a wholesale outlet at Balfour.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
<p>Ravensdown Fertiliser Co-operative Limited holds two resource consents for the purpose of operating a limestone quarry at its Dipton site. The consents are:</p> <ul style="list-style-type: none"> • the discharge of treated stormwater to water; • the discharge of contaminants to air from limestone crushing, drying and handling. <p>The company holds one resource consent for its Balfour site. This consent is for:</p> <ul style="list-style-type: none"> • the discharge of stormwater from a limestone quarry.

Complaints and self-reported incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
Two consecutive breaches of the stormwater consent were identified during the 2019/20 period for the Balfour site, both related to exceedances of the receiving water standards, as a result of the discharge. Ravensdown has initiated an investigation to identify the cause. The outcome of this investigation was not available at the time of writing this report.			

3.5.3 Fernhill Limeworks Limited

Fernhill Limeworks Limited operates a limestone quarry at Kauana, north of Winton.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
Fernhill Limeworks Limited holds two resource consents for the purpose of operating a limestone quarry. The consents are: <ul style="list-style-type: none">• the discharge of treated stormwater to water;• the discharge of contaminants to air from limestone crushing, drying and handling.

Complaints and self-reported incidents	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.	

Consent performance summary	2019/20
Fernhill Limeworks was compliant with all monitored consent conditions for the 2019/20 period.	

3.6 Mining industry

3.6.1 Greenbriar Limited

Greenbriar Ltd operate coal mines at Ohai and Waimumu (Goodwin and Newvale mine sites).

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Ohai Mine site

Consents
<p>Twelve resource consents are held relating to mining activities at the Ohai mine site. The primary consents include:</p> <ul style="list-style-type: none">• to discharge contaminants to air from mining, screening and stockpiling of coal;• to discharge treated wastewater to water;• to discharge surface and groundwater;• to discharge solid waste to land;• to take surface water for a mining operation.

Complaints and self-reported incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
Greenbriar was compliant with all monitored consent conditions for the 2019/20 period.			

Goodwin and New Vale Mine sites

Consents
<p>Eight consents are held relating to mining activities at the Goodwin and New Vale mine sites, as follows:</p> <ul style="list-style-type: none"> • to discharge treated water to the Hedgehope Stream (Goodwin); • to discharge treated water to the Hedgehope Stream (New Vale); • to take groundwater and surface water for mining (Goodwin); • to take groundwater and surface water for mining (New Vale); • to discharge contaminants to air; • to discharge ash to land; • to discharge pelt processing solids to land; • to discharge dust suppressant to land.

Complaints and self-reported incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
<p>There was one breach of consent discharge limits during the 2019/20 period.</p> <p>This was an exceedance of the consented limit for total suspended solids at Newvale and one exceedance of the consented limit for total suspended solids at Goodwin mine. These exceedances were at a low level and receiving environment results indicate no or minor effect.</p> <p>All other consents were compliant for 2019/20.</p>			



Figure 15: Mining operations, New Vale Mine, Waimumu

3.6.2 Bathurst Resources Limited

Bathurst Resources Limited operates an opencast coal mine in Nightcaps, Western Southland.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.



Figure 16: Active mine pit, Bathurst Resources, Nightcaps

Consents

Bathurst Resources Limited holds 14 consents related to its mining operation. The primary consents include:

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

Complaints and self-reported incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
<p>There were four breaches of the groundwater daily abstraction limit during the 2019/20 period.</p> <p>A minor non-compliance was recorded for the non-supply of conductivity data in relation to the discharge of site water. The site is required to monitor the conductivity continuously. Bathurst Resources carried out an investigation and determined that damage to the monitoring equipment had resulted in the data not being recorded. This issue was addressed.</p>			

3.7 Sawmill industry

3.7.1 Craigpine Timber Limited

Craigpine Timber Limited operates a sawmilling and timber processing plant at Winton.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
<p>Craigpine Timber Limited holds two consents related to its sawmilling operation. The consents are:</p> <ul style="list-style-type: none"> • to discharge contaminants to the air from timber processing activities; • to discharge timber yard stormwater and condensate to water.

Complaints and self-reported incidents	2017/18	2018/19	2019/20
One confirmed complaint was received during the 2019/20 period. The complaint related to the discolouration of a waterway adjacent to the Craigpine Timber site. An investigation by Environment Southland identified that contaminated stormwater had been discharged from the Craigpine Timber site into the waterway, which caused further downstream effects.			

Consent performance summary	2017/18	2018/19	2019/20
One breach of the consent conditions occurred during the 2019/20. The breach related to an exceedance of the receiving water limits, as a result of the discharge of contaminated stormwater from the site.			

3.7.2 Findlater Sawmilling

Findlater Sawmilling Limited operates a sawmilling plant at Tussock Creek.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
Findlater Sawmilling holds two consents related to its sawmilling operation. They are: <ul style="list-style-type: none">• to take groundwater for a sawmilling operation;• to discharge stormwater to a wetland from a sawmilling operation.

Complaints and self-reported incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
Findlater Sawmilling Limited was compliant with all monitored consent conditions for the 2019/20 period.			

3.7.3 Lindsay & Dixon Limited

Lindsay & Dixon Limited operates a sawmilling plant at Tuatapere.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
<p>Lindsay & Dixon Limited holds one discharge consent related to its sawmilling operation. This is:</p> <ul style="list-style-type: none"> to discharge stormwater, boiler blow-down water and sludge to land and to water.

Complaints and self-reported incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
One breach of the consent conditions was identified during the 2019/20 financial year. The breach related to an exceedance of the receiving water standards, as a result of the discharge. The impact on the receiving water was minor.			

4.0 Sewage treatment and stormwater systems

4.1 Invercargill City Council

4.1.1 Sewage treatment systems

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

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
<p>ICC holds seven resource consents relating to its sewage treatment plants. These include consents to:</p> <ul style="list-style-type: none"> • 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	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.		

Wastewater

Bluff wastewater	2017/18	2018/19	2019/20
<p>ICC was compliant with all of the monitoring requirements of the consent for the 2019/20 period.</p> <p>However, a technical non-compliance was given due to the late submission of the annual monitoring report.</p>			

Invercargill wastewater	2017/18	2018/19	2019/20
ICC was compliant with all monitored consent conditions for the 2019/20 period.			

Omaui wastewater	2017/18	2018/19	2019/20
ICC was compliant with all monitored consent conditions for the 2019/20 period.			

Biosolids to land, Station Road	2017/18	2018/19	2019/20
ICC was compliant with all monitored consent conditions for the 2019/20 period.			

Biosolids to land, Christies Track	2017/18	2018/19	2019/20
ICC was compliant with all monitored consent conditions for the 2019/20 period.			

Water abstraction

ICC operates the water treatment plant at Branxholme, where water from the Oreti River is treated for supply to Invercargill and Bluff. The City Council holds two resource consents relating to the operation of the plant. The consents permit the taking of water, and the discharge of filter backwash water to land and water.

Complaints and self-reported incidents	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.		

Consent performance summary	2017/18	2018/19	2019/20
ICC was compliant with all of the monitoring requirements of the consent for the 2019/20 period. However, a technical non-compliance was given due to the late submission of the annual monitoring report.			

4.1.2 Stormwater systems

The Invercargill City Council (ICC) holds a resource consent for the purpose of discharging stormwater at multiple locations within the Invercargill area.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
ICC holds one resource consent relating to stormwater discharges from its reticulated stormwater network. This is to: <ul style="list-style-type: none">• discharge stormwater, water, and contaminants to water.

Complaints and self-reported incidents

In total, 28 incidents or complaints were reported during the 2019/20 period. Of these 28, seven were related to sewage entering the stormwater network, with six of these being the result of blockages in ICC's foul sewer network.

The 21 incidents that were not sewage related were caused due to a number of reasons. These included:

- contamination resulting from oil, diesel, and petrol spills;
- cleaning of painting equipment in the roadside kerb;
- discharges from commercial and industrial premises;
- discolouration in the waterway from a milky looking substance;
- contamination resulting from residential drainage and plumbing issues;
- contamination from building materials being washed into drains;
- paint chips from water blasting of buildings.

On all occasions, staff from ICC investigated and took appropriate action to mitigate the issues associated with the discharges.

Complaints and self-reported incidents	2017/18	2018/19	2019/20
Seven incidents occurred, which related to the discharge of sewage to the stormwater network. Six of these were as a result of blockages in the Invercargill City Council's foul sewer network.			

Consent performance summary	2017/18	2018/19	2019/20
ICC was in breach of the discharge conditions of its consent due to the confirmed discharge of sewage, and other hazardous substances, to the stormwater network.			
ICC was compliant with all of the monitoring requirements of the consent during the 2019/20 period.			

4.2 Southland District Council

4.2.1 Sewage treatment systems

The Southland District Council (SDC) holds resource consents for the purpose of treating and discharging wastewater at 22 locations within the Southland region. The compliance performance during 2019/20 was assessed against current resource consents.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
<p>SDC holds 24 discharge consents relating to sewage treatment, including consents to:</p> <ul style="list-style-type: none"> • discharge processed wastewater to land; • discharge processed wastewater to water; • discharge contaminants to air from wastewater treatment.

Complaints and self-reported incidents	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.		

Consent performance summary

Balfour	2017/18	2018/19	2019/20
SDC Balfour treatment system was fully compliant with all monitored consent conditions for the 2019/20 period.			

Browns	2017/18	2018/19	2019/20
SDC Browns treatment system was fully compliant with all monitored consent conditions for the 2019/20 period.			

Curio Bay	2017/18	2018/19	2019/20
SDC Curio Bay treatment system was fully compliant with all monitored consent conditions for the 2019/20 period.			

Edendale/Wyndham	2017/18	2018/19	2019/20
<p>SDC Edendale/Wyndham treatment system was fully compliant with all monitored consent conditions for the 2019/20 period.</p> <p>The annual average daily discharge flow exceeded the consent limit, and the maximum daily discharge flow limit was only exceeded on 18 occasions during heavy rain. There was no risk of any adverse environmental impacts from these exceedances.</p>			

Gorge Road	2017/18	2018/19	2019/20
SDC Gorge Road treatment system was fully compliant with all monitored consent conditions for the 2019/20 period.			

Lumsden	2017/18	2018/19	2019/20
SDC Lumsden treatment system was fully compliant with all monitored consent conditions for the 2019/20 period.			

Manapouri	2017/18	2018/19	2019/20
SDC Manapouri treatment system was fully compliant with all monitored consent conditions for the 2019/20 period.			

Monowai	2017/18	2018/19	2019/20
SDC Monowai treatment system was fully compliant with all monitored consent conditions for the 2019/20 period.			

Nightcaps	2017/18	2018/19	2019/20
SDC Nightcaps treatment system was fully compliant with all monitored consent conditions for the 2019/20 period.			

Ohai	2017/18	2018/19	2019/20
SDC Ohai treatment system was fully compliant with all monitored consent conditions for the 2019/20 period.			

Otautau	2017/18	2018/19	2019/20
SDC Otautau treatment system was fully compliant with all monitored consent conditions for the 2019/20 period.			

Riversdale	2017/18	2018/19	2019/20
SDC Riversdale treatment system was fully compliant with all monitored consent conditions for the 2019/20 period.			

Riverton Rocks	2017/18	2018/19	2019/20
SDC Riverton Rocks treatment system was fully compliant with all monitored consent conditions for the 2019/20			

Riverton township	2017/18	2018/19	2019/20
SDC Riverton township treatment system was fully compliant with all monitored consent conditions for the 2019/20 period.			

Stewart Island	2017/18	2018/19	2019/20
Two breaches of consent conditions were recorded at the SDC Stewart Island treatment system during the 2019/20 period. On both occasions the dissolved inorganic nitrogen limit was exceeded.			

Te Anau – discharge to land & water	2017/18	2018/19	2019/20
<p>SDC Te Anau discharge to land and water was fully compliant with all effluent monitored consent conditions for the 2019/20 period.</p> <p>The average monthly discharge flow limit was breached on four occasions.</p> <p>There was no risk of any adverse environmental impacts from these exceedances.</p>			

Te Anau – discharge to air	2017/18	2018/19	2019/20
SDC Te Anau consent to discharge to air was fully compliant with all monitored consent conditions for the 2019/20 period.			

Tokonui	2017/18	2018/19	2019/20
SDC Tokonui treatment system was fully compliant with all monitored consent conditions for the 2019/20 period.			

Tuatapere	2017/18	2018/19	2019/20
SDC Tuatapere treatment system was fully compliant with all monitored consent conditions for the 2019/20 period.			

Winton	2017/18	2018/19	2019/20
<p>One breach of consent conditions was recorded at the SDC Winton treatment system during the 2019/20 period.</p> <p>This was a breach of the receiving water ammoniacal nitrogen limit.</p>			

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.

Water abstraction

The Southland District Council holds 24 resource consents to abstract groundwater and surface water for community and rural water supply. This includes emergency water takes to supplement urban supply.

Complaints and self-reported incidents

There were no complaints or self-reported incidents relating to the SDC water take consents for the 2019/20 period.

Consent performance summary

SDC abstracted water from 21 locations for the townships and rural communities in Southland during the 2019/20 period. These were:

- 18 water takes were fully compliant with the abstraction limit;
- three consented takes did over abstract water for their townships or respective rural communities:
 - Ohai, Nightcaps and Wairio exceeded their consented limit on one occasion;
 - Eastern Bush/Otahu Flat exceeded their consented limit on 144 occasions;
 - Kakapo exceeded their abstraction limit on 64 occasions during the period 1 July 2019–3 May 2020. A new consent with a greater abstraction limit commenced 4 May 2020 and the abstraction from 4 May–30 June 2020 was fully compliant with the new limit.

4.2.2 Stormwater systems

The Southland District Council (SDC) holds resource consents for the purpose of discharging stormwater from 18 townships within the Southland region. The compliance performance during 2019/20 was assessed against current resource consents.

What do we look at?

SDC holds resource consents to discharge to water from the reticulated stormwater network systems at various townships around Southland. Compliance is assessed against these resource consent.

Consents
<p>SDC holds four discharge consents. The primary consents are:</p> <ul style="list-style-type: none"> • discharge stormwater and land drainage water to surface water bodies and soakpits.

Complaints and self-reported incidents	2018/19	2019/20
<p>Two confirmed complaints or self-reported incidents were received during the 2019/20 period.</p> <p>One complaint related to the discharge of sewage onto the road by a third party breaking the sewerage pipe. The spill was cleaned up, breakage fixed and no sewage reached the stormwater network. The second complaint related to the discharge of sewage from the Te Anau stormwater network to the lake. Two sewerage to stormwater cross-connections were found and removed. Follow-up sampling indicated no further sewage discharge from the outlet. A formal warning was issued in relation to this incident.</p>		

Consent performance summary

Balfour, Browns, Lumsden, Mossburn, Riversdale, Tokonui and Waikaka	2018/19	2019/20
<p>Results for samples collected from two of the 14 sites breached consent limits during the 2019/20 period.</p> <p>No environmental effects from the exceedances were confirmed. Preliminary investigations indicate that the source contamination was likely to be agricultural and/or road run-off.</p>		

Dipton, Edendale, Manapouri, Nightcaps, Ohai, Otautau, Tuatapere and Wallacetown	2018/19	2019/20
<p>Six breaches of consent conditions occurred in the 2019/20 period.</p> <p>Twenty-two sites across all the towns were sampled during dry weather conditions. One site had results that complied with the limits for the first round of sampling, but exceeded the limits for the second round of sampling. No environmental effects were confirmed. The source of the contamination is currently unknown but being investigated. The remaining dry weather monitoring results complied with the consent limits. Wet weather monitoring was only undertaken at three of the eight towns (nine of 22 sites), which was a breach of consent. The wet weather results were fully compliant with the consent limits. Failure to undertake wet weather monitoring at five of the towns (13 sites) has occurred over consecutive years therefore a formal warning was issued.</p>		

Winton	2018/19	2019/20
<p>Results from two of the nine sites breached the dry weather consent discharge limits in the 2019/20 period.</p> <p>Investigations into the source of the contamination are ongoing.</p> <p>Wet weather monitoring was undertaken at all sites and complied with the consent limits.</p>		

Te Anau	2018/19	2019/20
<p>Sewage was found to be discharging to the lake via the stormwater network, as outlined under “complaints and self-reported incidents”, which was a breach of consent. Nine sites across Te Anau were sampled during dry weather conditions after the sewage discharge was stopped. All the results from all sites complied with the consent limits. Eight sites were sampled during wet weather conditions. The wet weather sample results fully complied with the consent limits.</p>		

4.3 Gore District Council

4.3.1 Sewage treatment systems

The Gore District Council (GDC) holds resource consents for the purpose of treating and discharging wastewater at three locations within the Gore region. The compliance performance during 2019/20 was assessed against the current resource consents.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
<p>GDC holds five sewage treatment related resource consents. These consents are:</p> <ul style="list-style-type: none"> • discharge of treated wastewater from the Mataura township; • discharge of treated wastewater from the Gore township; • discharge of treated wastewater at Waikaka; • discharge of contaminants to air from the Gore wastewater treatment system; • discharge of waste activated sludge to land from industrial or trade processes.

Complaints and self-reported incidents	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.		

Consent performance summary

Gore	2017/18	2018/19	2019/20
<p>All monitoring was completed as required by the consent. GDC has struggled to maintain the wastewater limit to within the consented quality limits during low flow for a number of years and this year Environment Southland issued a formal warning for breach of these limits.</p> <p>GDC has undertaken a number of improvements in order to optimise the quality of wastewater discharged through its plant. Sample results since these changes have been implemented show wastewater quality consistently within the consented limits.</p>			

Mataura	2017/18	2018/19	2019/20
All monitoring required by the consent was undertaken and all water sample results were compliant with the consent for the 2019/20 period.			

Waikaka	2017/18	2018/19	2019/20
All monitoring required by the consent was undertaken and all water sample results were compliant with the consent for the 2019/20 period.			

Water abstraction

GDC holds 11 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

There were no complaints or self-reported incidents relating to the GDC water take consents for the 2019/20 period.

Consent performance summary

All water abstraction limits were adhered to during the 2019/20 period.

4.3.2 Stormwater systems

Stormwater networks

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

Consents
<p>GDC holds three stormwater resource consents. They are:</p> <ul style="list-style-type: none"> • discharge of stormwater to water for Gore township; • discharge of stormwater to water for Mataura township; • discharge of stormwater to water for Pukerau and Waikaka townships.

Complaints and self-reported incidents	2018/19	2019/20
Environment Southland received several complaints about the quality of stormwater discharges during the 2019/20 period. Three of these complaints were confirmed as breaches of consents of receiving water standards.		

Consent performance summary

Gore	2018/19	2019/20
<p>GDC undertook all monitoring required by the consent in 2019/20 including routine sampling on four occasions.</p> <p>GDC were highly proactive in investigating potential private wastewater cross-connections. As mentioned above the receiving water standards for the stormwater discharge were breached on three occasions.</p>		

Mataura	2018/19	2019/20
GDC undertook all monitoring required by the consent in 2019/20 including routine sampling on four occasions. GDC were highly proactive in investigating potential private wastewater cross-connections.		

Pukerau and Waikaka	2018/19	2019/20
GDC completed all required monitoring in Pukerau and Waikaka. GDC were highly proactive in investigating potential private wastewater cross-connections.		

5.0 Quarrying

5.1 Gravel extraction

The Resource Management Act 1991 and/or a rule in a Council plan require that a resource consent is required to disturb the bed of a river.

Environment Southland has 136 current land use consents to extract gravel from Southland rivers and during the 2019/20 financial year Environment Southland granted seven new consents for gravel extraction.

The current land use consents for gravel extraction total an extraction volume of 453,547 m³ of gravel.

Environment Southland catchment staff regularly inspect the land use consents to ensure that the operation of the consent and the volume of gravel taken have been completed in accordance with the consent conditions. Overall compliance in the 2019/20 financial year has been good.



Figure 17: Gravel extraction on the Aparima River

6.0 Landfills

6.1 S J Timpany Contracting – Cleanfill

S J Timpany Contracting operates a cleanfill and a limited-scope landfill at Otatara, accepting solid waste from the demolition of housing and commercial buildings, asbestos and some contaminated soils. The site also has a holding pad which allows for sample testing of contaminated soils and the encapsulation of contaminants prior to discharge.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
S J Timpany Contracting holds a consent to discharge cleanfill and solid waste to land.

Complaints and self-reported incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
S J Timpany cleanfill and limited-scope landfill was fully compliant with all monitored consent conditions during the 2019/20 period.			
No issues were identified by Environment Southland during the assessment of consent monitoring reports, site inspections, groundwater sampling or surface water sampling.			



Figure 18: S J Timpany tip face October 2019

6.2 AB Lime Limited

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

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
<p>AB Lime Limited holds six resource consents relating to the landfill. The consents are:</p> <ul style="list-style-type: none"> • the discharge of solid waste onto or into land; • the discharge of contaminants to air from a landfill; • the discharge of stormwater to a tributary of the Lochiel Stream; • to take 40 cubic metres of groundwater; • to take 500 cubic metres of surface water; • to dam and divert surface water.

Complaints and self-reported incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-reported incidents were received during the 2019/20 period.			

Air discharge consent performance	2017/18	2018/19	2019/20
<p>AB Lime Limited was compliant with all monitored consent conditions for the 2019/20 period.</p> <p>The gas flare burning temperature has consistently been compliant with the consented limit.</p> <p>There have been no odour issues for the 2019/20 period.</p>			

Other consent performance	2017/18	2018/19	2019/20
<p>AB Lime Limited showed a high level of compliance with all monitored consent conditions for the 2019/20 period.</p> <p>A series of issues with the stormwater quality monitoring equipment led to a prolonged period of technical non-compliance. However, samples collected during this time showed that these issues had no influence on the landfill leachate in the discharge.</p> <p>The annual peer review inspection and report was completed and concluded that the landfill was being operated in accordance with the consents and good practice.</p>			



Figure 19: View across areas 14 of the active landfill, AB Lime

7.0 Coastal Marine Area

7.1 South Port and New Zealand Aluminium Smelter Limited's coastal plan agreements



Figure 20: Tiwai Peninsula

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

South Port services and 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 based product.

Activities on these sites are managed by means of individual agreements. The agreements describe a series of systems which each party has agreed to, ensuring the management of port activities are compliant with the Resource Management Act 1991.

Incidents reported

South Port	2018/19	2019/20
One confirmed self-reported incident was received in the 2019/20 period. A small volume of oil was confirmed to have discharged to the harbour.		

NZAS Wharf	2018/19	2019/20
One confirmed self-reported incident was received in the 2019/20 period. A small volume of pitch was confirmed to have discharged to the harbour during the unloading of material to the wharf.		

7.2 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 control the fishing of whitebait.

The 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.

There are currently 656 current resource consents for whitebait stands in Southland. During 2019/20, 506 inspections were completed, with 479 graded as fully compliant and 27 graded as non-compliant.

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

Whitebait stands were inspected for compliance, with common conditions such as each stand displaying a unique stand number, displaying the consent holder's name, being at the consented length and in a state of good repair.

Inspections are completed mid-season, which allows owners additional time for repairs. As in previous years, there was a high level of compliance with these consents.

Although most of the whitebait stands in Southland are permanent structures, stands in Fiordland have to be removed each season. The Fiordland stands are inspected, typically at the end of the season to ensure that the removal conditions are met.

8.0 Tourism

8.1 Department of Conservation

The Department of Conservation (DOC) holds 47 current resource consents throughout the Southland region for a number of different purposes.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
DOC holds resource consents for the following purposes:
<ul style="list-style-type: none"> • Coastal: 10 • Discharge: 17 • Land Use: 6 • Water: 10

Complaints and self-reported incidents	2017/18	2018/19	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
Clinton Hut - DOC at the Clinton Hut was compliant with all monitored consent conditions for the 2019/20 period.			
Mintaro Hut - DOC at the Mintaro Hut was compliant with all monitored consent conditions for the 2019/20 period.			
Dumpling Hut - DOC at the Dumpling Hut was compliant with all monitored consent conditions for the 2019/20 period.			
Sandfly Point Hut - DOC at the Sandfly Point Hut was compliant with all monitored consent conditions for the 2019/20 period.			
Luxmore Hut - DOC at the Luxmore Hut was compliant with all monitored consent conditions for the 2019/20 period.			

Consent performance summary	2017/18	2018/19	2019/20
Iris Burn Hut - DOC at the Iris Burn Hut was compliant with all monitored consent conditions for the 2019/20 period.			
Moturau Hut - DOC at the Moturau Hut was compliant with all monitored consent conditions for the 2019/20 period.			
Lake McKenzie Hut - DOC at the Lake McKenzie Hut was compliant with all monitored consent conditions for the 2019/20 period.			
Howden Hut - DOC at the Howden Hut was compliant with all monitored consent conditions for the 2019/20 period.			
Martins Bay Hut - DOC at the Martins Bay Hut was compliant with all monitored consent conditions for the 2019/20 period.			
Anchor Island - DOC at the Anchor Island Hut was compliant with all monitored consent conditions for the 2019/20 period.			
Mavora Lakes - DOC at Mavora Lakes did not meet all monitoring requirements for the 2019/20 period.			

Environment Southland inspections

Environment Southland inspects the Routeburn, Milford and Kepler Tracks every three years. This includes an inspection of the sewage disposal systems at the huts, water takes for the huts, and several toilets and shelters along the tracks. The most recent inspections were completed in 2017/18 as follows.

Consent Inspections	2017/18
Routeburn Track (December 2017) Full compliance was recorded for all facilities on this track. Note: Only facilities in the Southland region were inspected.	
Milford Track (February 2018) Full compliance was recorded for all facilities on this track. Some recommendations were made to ensure all systems were operating as efficiently as possible.	
Kepler Track (March 2018) Full compliance was recorded for all facilities on this track, with the exception of the Luxmore Hut. Evidence of overland flow, discolouration of vegetation and odour was observed in the Luxmore disposal field.	



Figure 21: Mackinnon Pass Shelter, Milford Track

8.2 Milford Sound Tourism

Milford Sound Tourism (MST) is the primary infrastructure provider in Milford Sound. MST owns and operates the harbour, wharves and visitors' terminal. It also operates the wastewater treatment facilities at Milford Sound and at Knobs Flat.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
<p>Milford Sound Tourism holds 13 resource consents. The primary consents include:</p> <ul style="list-style-type: none"> • discharge treated wastewater to groundwater at Knobs Flat; • discharge treated wastewater to water at Deepwater Basin; • discharge water to water from a hydro-electric power scheme; • carry out maintenance dredging in Freshwater Basin.

Complaints and self-reported incidents	2017/18	2018/19	2019/20
<p>No confirmed complaints or self-notifications were received during the 2019/20 period.</p> <p>The February floods caused damage to the Milford Sound sewage treatment plant. The extra water flow as a result of the flood caused an overflow of wastewater to Deepwater Basin. MST notified the council immediately and acted to promptly mitigate the discharge.</p>			

Consent Performance	2017/18	2018/19	2019/20
<p>Two breaches of consent discharge limits occurred in the 2019/20 period.</p> <p>A formal warning was issued for repeated non-compliance at the Knobs Flat wastewater treatment plant. MST made significant effort to understand the problem and improve processes to achieve the best results with its plant. Recent sample results have shown significant improvement. Due to the drop in tourist numbers, as a result of COVID-19 pandemic, the Knobs Flat treatment plant has been closed until further notice.</p> <p>There was one exceedance of the wastewater discharge limits at the Milford Wastewater Treatment Plant.</p> <p>The plant was significantly damaged in the February 2020 floods. Repairs were undertaken during the winter of 2020.</p> <p>Several reports were supplied late or not supplied at all.</p>			



Figure 22: Milford Sound wastewater treatment plant

8.3 Ultimate Hikes

Ultimate Hikes holds eight current resource consents throughout the Southland region for a number of different purposes.

What do we look at?

Environment Southland investigates complaints and self-reported incidents and assesses compliance against the conditions listed in the primary resource consents.

Consents
Ultimate Hikes holds resource consents for the following purposes: <ul style="list-style-type: none"> • Coastal: 1 • Discharge: 5 • Water: 2

Complaints and self-reported incidents	2019/20
No confirmed complaints or self-notifications were received during the 2019/20 period.	

Consent performance summary	2019/20
Glade House - Ultimate Hikes at Glade House was compliant with all monitored consent conditions for the 2019/20 period.	
Pompolona Lodge - Ultimate Hikes at the Pompolona Lodge was compliant with all monitored consent conditions for the 2019/20 period.	
Quinton Lodge - Ultimate Hikes at Quinton Lodge was compliant with all monitored consent conditions for the 2019/20 period.	
Mackenzie Lodge - Ultimate Hikes at Mackenzie Lodge was compliant with all monitored consent conditions for the 2019/20 period.	

Environment Southland Inspections

Environment Southland inspects the Routeburn, Milford Tracks every three years. This includes an inspection of the sewage disposal systems at the huts, water takes for the huts, and several toilets and shelters along the tracks.

8.3 Coastal surface water activities in Fiordland

Coastal permits are required for undertaking commercial surface water activities in Fiordland. Environment Southland is responsible for ensuring compliance with coastal permits issued under the Regional Coastal Plan for Southland and the Resource Management Act 1991.

Compliance of commercial surface water activities is assessed by monitoring surface water activity logs provided as a condition of consents. During the 2019/20 period, compliance with the requirement to supply activity logs has increased from 75% for the 2018/19 year to 95% in the second quarter of 2020. This increase in reporting has occurred following the implementation of a systematic reminder schedule for all consent holders. No on-water checks or inspections of the vessels were completed in 2019/20.

9.0 Small Industries

9.1 Cleanfill site inspections

Cleanfill sites are spread throughout Southland. There are 21 consented sites in total, with four not currently in use.

Cleanfills are “fill sites” that only accept materials that, when buried, have no adverse effects on people or the environment. Cleanfill materials include virgin natural materials such as clay, soil, rock, and other inert materials such as bricks.

It is important that cleanfills are free from combustible, degradable, hazardous or liquid wastes because they are not designed to protect the environment from contact with them in the same way as landfills. Appropriate use of cleanfills helps divert a large portion of the waste stream from landfills.

During 2019/20, 12 inspections were completed. Seven were graded as fully compliant, four were graded as low risk non-compliance and one was graded as significantly non-compliant.



Figure 23: An example of green waste which is not allowed to be discharged to a cleanfill

9.2 Truck wash inspection

Truck washes are usually inspected annually, unless otherwise stated in the resource consent. There are 21 consented truck washes in Southland.

During the 2019/20 year, 16 were inspected and of these 12 were found to be fully compliant, three were graded with minor non-compliance and one was graded as moderate non-compliance.



Figure 24: An example of a truck wash facility

10.0 Forestry operations in Southland

National Environmental Standard – Plantation Forestry

The National Environmental Standard for plantation forestry (NES-PF) came into effect on 1 May 2018. The NES-PF are regulations under the Resource Management Act 1991 (RMA) and apply to any forest of at least one hectare that has been planted specifically for commercial purposes and will be harvested.

The NES-PF regulations aim 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.

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

1. afforestation (planting new forest);
2. pruning and thinning-to-waste (selective felling of trees where the felled trees remain on-site);
3. earthworks;
4. river crossings;
5. forestry quarrying (extraction of rock, sand, or gravel within a plantation forest or for operation of a forest on adjacent land);
6. harvesting;
7. mechanical land preparation;
8. replanting.

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

During the 2019/20 period the following notifications were received:

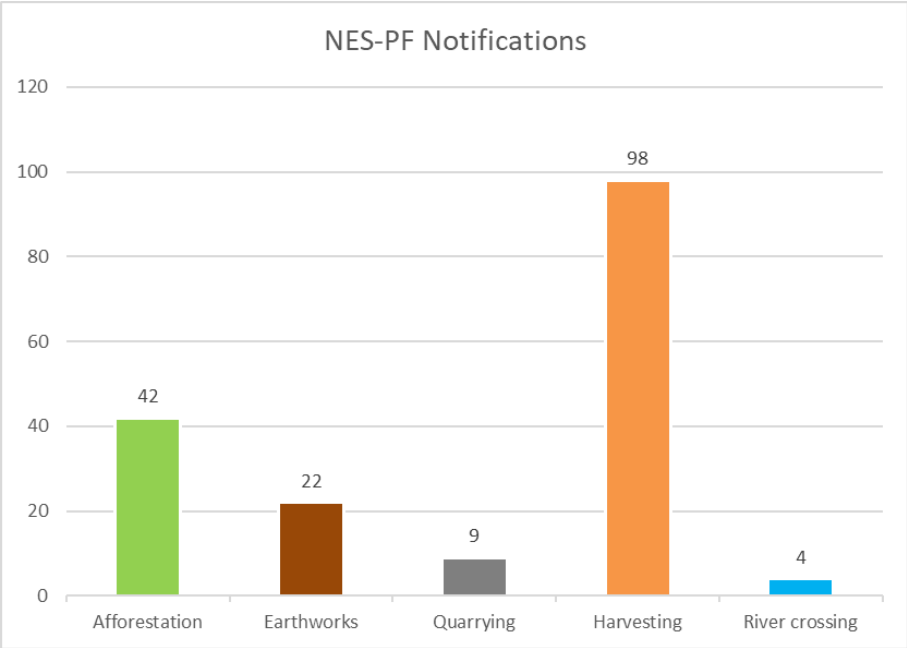


Figure 25: Summary of forestry activities during the 2019/20 year

Part C

Enforcement

11.0 Enforcement

Environment Southland has developed an Enforcement Policy that is available on our website.

<https://www.es.govt.nz/Document%20Library/Plans,%20policies%20and%20strategies/Council%20policies/ES%20Compliance%20Policies.pdf>

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

11.1 Letters of Direction and Warnings

When enforcement action is believed to be necessary the Compliance Division uses the most appropriate tool for the given situation. Enforcement action can be a directive action. Letters of direction, warnings, abatement notices and enforcement orders are all considered to be directive forms of enforcement.

A letter of direction is used in a minor to moderate situation with a co-operative, 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 what action should 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 2019/20 year, the Compliance Division issued 11 letters of direction and issued 37 formal warnings.

11.2 Abatement notices

An abatement notice requires an offender to comply with the notice within a specified timeframe. Non-compliance with an abatement notice is an offence under the Resource Management Act 1991 and can receive infringement fines or prosecution.

This means that when an activity has been identified as being, or is likely to be, harmful to the environment, direction will be issued requiring the person avoid, remedy or mitigate the adverse effect.

Abatement notices are issued to people or organisations that breach a rule in the Act, any regulation, or a condition of the resource consent. Unlike enforcement orders, they are issued by compliance officers and do not require an application to be made to the Environment Court.

During the 2019/20 year, the Compliance Division issued 30 abatement notices.

11.3 Enforcement orders

An enforcement order is another way of requiring 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.

However, it differs from an abatement notice in 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.

Four enforcement orders were applied for and granted during the 2019/20 year:

- **Hardegger Trustees Limited**
To review effluent system.
- **Invercargill City Council**
For the installation of alarm level monitors on constructed overflows.
- **Keystone Dairies Limited**
To review effluent system.
- **Charles Kidd & Paul Thayer**
To review oil storage facility.

11.4 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 \$1,000 and, if not paid in certain timeframes, will be sent to the Ministry of Justice for fine collection (where further fees are likely to be added).

Infringements can be appealed. Information on how to make an appeal is found on the back of each infringement notice and can be explained by staff.

There were 47 infringement notices issued for the 2019/20 year.

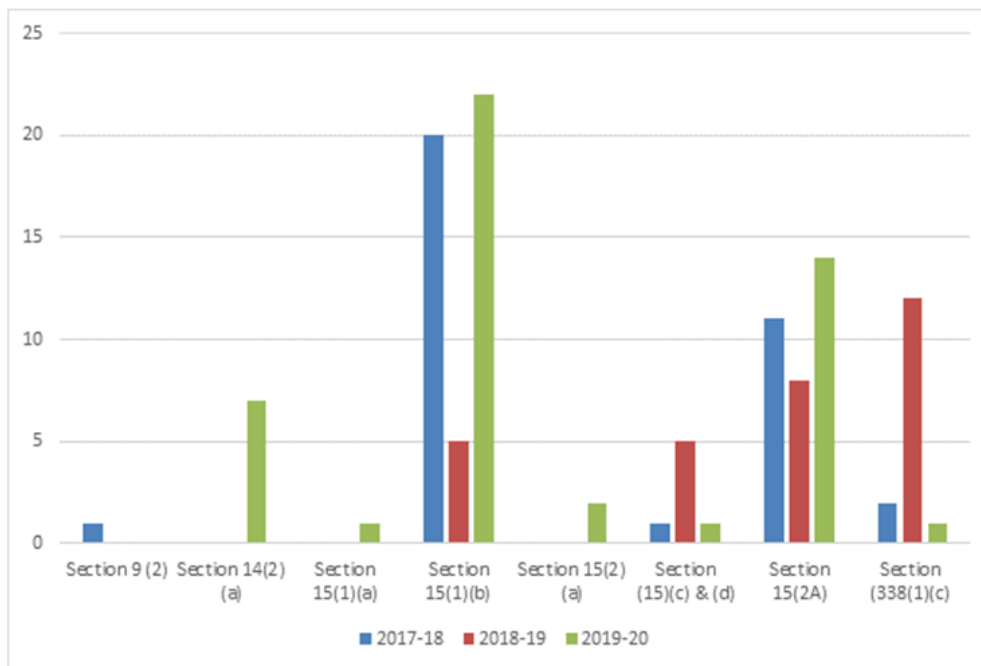


Figure 26: Infringement notices issued over the last three years

Notes:

Section 9	Restrictions on use of land
Section 13	Restriction on certain uses of beds of lakes and rivers
Section 15 (1)(a)	Discharge of contaminant or water into water
Section 15(1)(b)	Discharge of contaminant onto or into land in circumstances which may result in that contaminant entering water
Section 15 (1)(c) & (d)	Contaminant from any industrial or trade premises into air; or Contaminant from any industrial or trade premises onto or into land
Section 15(2A)	Discharge of a contaminant into the air, or into or onto land, from a place or any other source, whether moveable or not, in a manner that contravenes a regional rule
Section 323(a)	Breach of an Abatement Notice

11.5 Alternative enforcement action

Environment Southland has developed a diversion policy to ensure that there is an alternative course of action other than prosecution in special circumstances.

Diversion has three primary purposes being rehabilitation; reparation and restoration; and ensuring that the Council's statutory objectives are better met.

In assessing eligibility for diversion, the Chief Executive will consider:

- offender-based criteria;
- offence-based criteria.

The weight given to particular criteria will be a matter for the Chief Executive's discretion. Ultimately, the Chief Executive will determine whether the public interest is best served by the continuation of a prosecution or by an offer of diversion.

In the 2019/20 year, there were no cases considered for alternative enforcement action.

11.6 Prosecutions

Environment Southland follows its enforcement policy. Prior to proceeding with prosecution, the matter is put before the Enforcement Decision Group (EDG). The EDG assesses each case against the principles of the Solicitor General's Prosecution Guidelines.

Once the EDG process is completed, the case can cease, recommend a different outcome, ask for more information or recommend an independent legal review.

A legal review is returned and final sign-off is completed by the Chief Executive 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; and
- prosecution is required in the public interest – the Public Interest Test.

The matters that were prosecuted and completed in the 2019/20 year were:

Defendant	Offence Date	Charge	Charge description	Plea	Sentencing Date	Outcome	Fine
Frank Kidd	17/05/2018	15(1)(b)	Discharge of a contaminant to land (oil) which may (did) enter water	Guilty	10/07/2019	Convicted and fined	\$22,500 E/O also granted
Paul James Thayer	17/05/2018	15(1)(b)	Discharge of a contaminant to land (oil) which may (did) enter water	Guilty	10/07/2019	Convicted and fined	\$7,125
Keystone Dairies Limited	18/07/218	15(1)(b)	Discharge of a contaminant to land (effluent) which may enter water	Guilty	5/09/2019	Convicted and fined	\$32,000 E/O also granted
Nathan Robert Erskine	18/07/2018	15(1)(b)	Discharge of a contaminant to land (effluent) which may enter water	Guilty	6/11/2019	Convicted and fined	\$2,000
Invercargill City Council	26/01/2018	15(1)(a)	Discharge of a contaminant (sewage) to water	Guilty	5/09/2019	Convicted and fined	\$30,625 E/O also issued
Neville Oliver Horton	2/08/2016	15(2A)	Discharge of a contaminant (land-fill) to land which contravenes a Regional rule	Not guilty - Trial by Jury	11-13 November 2019	Not guilty	

Defendant	Offence Date	Charge	Charge description	Plea	Sentencing	Outcome	Fine
Southern Centre Dairies Ltd	28/02/2019	15(1)(b)	Discharge of a contaminant to land which may (did) enter water - Irrigation	Guilty	3/06/2020	Convicted and fined	\$30,000
Fernlea Farms Limited	1/05/2019 & 21/06/2019	15(1)(b), 15(1)(b), 9(2)(a), 338(1)(c)	Multiple effluent discharges, construction of effluent pond & breach of A/N*	Guilty - (9(2)(a) to be withdrawn on E/O** by consent	3/06/2020	Convicted and fined	\$51,575
Wayne Arthur Carpenter	1/05/2019 & 21/06/2020	15(1)(b), 15(1)(b), 9(2)(a), 338(1)(c)	Multiple effluent discharges, construction of effluent pond & breach of A/N*	Guilty - (9(2)(a) to be withdrawn on E/O** by consent	3/06/2020	Convicted and fined	\$51,575

*Abatement notice

**Enforcement order

Glossary

Ammoniacal Nitrogen (NH₄N)	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.
CCA	Copper (Cu), Chromium (Cr) and Arsenic (As) are the usual metals analysed for when considering the timber treatment process. High levels of metals can become toxic to aquatic life.
DIN	Dissolved Inorganic Nitrogen – Nitrate + Nitrite Nitrogen plus Ammoniacal Nitrogen.
DO	Dissolved Oxygen – Oxygen is important to sustain life. DO is the amount of oxygen dissolved in water.
<i>E.coli</i>	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.
EC	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.
ES	Environment Southland
g/m³	Grams of material in 1 cubic metre of water – A measure of concentration in a liquid or gas.
Loading	The quantity of contaminants discharged over a set period of time.
Sewage	Domestic human wastewater and excrement.
Sewerage system	A pipe network use to transport sewage.
Stormwater system	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.
Turbidity	Turbidity is a laboratory measurement to determine the clarity of the water. The higher the result, the cloudier the water.
Wastewater	Water that has been used in the home, in a business or as a part of an industrial process