

2023

## 8.2 ANNUAL FARM DAIRY EFFLUENT COMPLIANCE MONITORING REPORT

Information Only - No Decision Required

<b>Report To:</b>	Environment and Regulatory Committee
<b>Meeting Date:</b>	3 August 2023
<b>Report Author:</b>	Carl Cheeseman, Team Leader - Monitoring and Enforcement
<b>Report Authorisers:</b>	Adrian Humphries, Regulatory Services Manager; Kim Drummond, Group Manager - Environmental Assurance
<b>Report Number:</b>	RRC23-08-2

### 1. Summary / Te Tuhinga Whakarāpoto

- 1.1 Dairy effluent in Tasman District may be disposed of to land as a permitted activity under specific rules contained in the Tasman Resource Management Plan (TRMP), or alternatively to water strictly under the conditions of a Resource Consent.
- 1.2 In the 2022/2023 milking season, a total of 116 dairy farms had active discharges in the Tasman District. Of that total, 113 relied solely on it being a permitted activity while three, operating as a permitted activity, retained resource consents to discharge treated effluent to water as a contingency option.
- 1.3 The goal of inspecting all active farms in Tasman during the season was achieved this year. This has been the case for most of the 18 years the programme has operated.
- 1.4 The compliance results for the 2022/2023 survey were:
  - 1.4.1 **Full Compliance:** 109 farms (94%)
  - 1.4.2 **Low Risk Non-Compliance:** 7 farms (6%)
  - 1.4.3 **Moderate Risk Non-Compliance:** Nil (0%)
  - 1.4.4 **Significant Non-Compliance:** Nil (0%)
- 1.5 The 2022/23 year's results are in line with the trend of greater than 90% compliance achieved over the last 10 years.
- 1.6 The instances of non-compliance detected were considered minor. Given the nature of these breaches, no formal enforcement action was required but the matters were dealt with.
- 1.7 In future years freshwater farm planning regulations will involve significant change to the regulatory regime in farming. Effluent systems and application areas will be identified as an on-farm risk to freshwater within a freshwater farm plan. Subsequent mitigation actions within the plan must, as a minimum, meet all regulatory requirements related to the risk.
- 1.8 Regional rules and resource consents will remain in effect and council will continue to have an obligation to monitor these. Given the structure and timings of the farm plan process,

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there is a risk of disconnect between the farm plan auditors and Council's regulatory staff on the ground assessing this activity. We are confident that by working the freshwater farm plan approach through the catchment co-ordinators that the risk of overlap or regulatory gaps will be minimised.

- 1.9 Dairy effluent disposal by its very nature carries risk to freshwater quality, ecosystem health and receiving environments. It is intended to maintain this essentially permitted activity monitoring programme as a high priority within the compliance monitoring strategy. Under current settings the cost of the monitoring cannot be recovered.

**2. Recommendation/s / Ngā Tūtohunga****That the Environment and Regulatory Committee**

1. receives the Annual farm dairy effluent compliance monitoring report .

**3. Purpose**

- 3.1 Each year the Council assesses all active dairy farms for compliance with regulatory requirements through a dedicated compliance monitoring programme, with respect to the disposal of treated dairy shed effluent.
- 3.2 Dairy shed effluent may be disposed of to land as a permitted activity under specific rules contained in the Tasman Resource Management Plan (TRMP), or alternatively, to water strictly under the conditions of a resource consent.
- 3.3 The purpose of this report is to present the results of the 2022/2023 compliance monitoring survey of all farms actively disposing dairy shed effluent to land or water.
- 3.4 The report also outlines any enforcement responses that may have been required, where it was established that compliance was not being met.

**4. Background****The Dairy Monitoring Programme**

- 4.1 The 'all farms' compliance monitoring programme has been in place since 2005. Prior to 2005, only consented dairy effluent discharges were monitored. The genesis of the current monitoring programme was in response to the regional council's collective drive for consistent monitoring and enforcement of the dairy sector in New Zealand. One of the fundamental changes for Tasman was the inclusion of those farms disposing of dairy effluent as permitted activities into the monitoring programme.

**Dairying in Tasman**

- 4.2 Tasman's dairy farms are essentially clustered within a number of our designated Freshwater Management Units (FMUs). The largest percentage are situated in the Takaka and Aorere/West coast catchments, with the remainder located in the southern river valleys of the Upper Buller /Kawatiri. There are a lesser number scattered around the Upper Moutere, Motueka and Waimea Plains near Richmond.

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4.3 Figure 1 below illustrates the spatial distribution of dairy farms within the corresponding Freshwater Management Units in the Tasman Region.

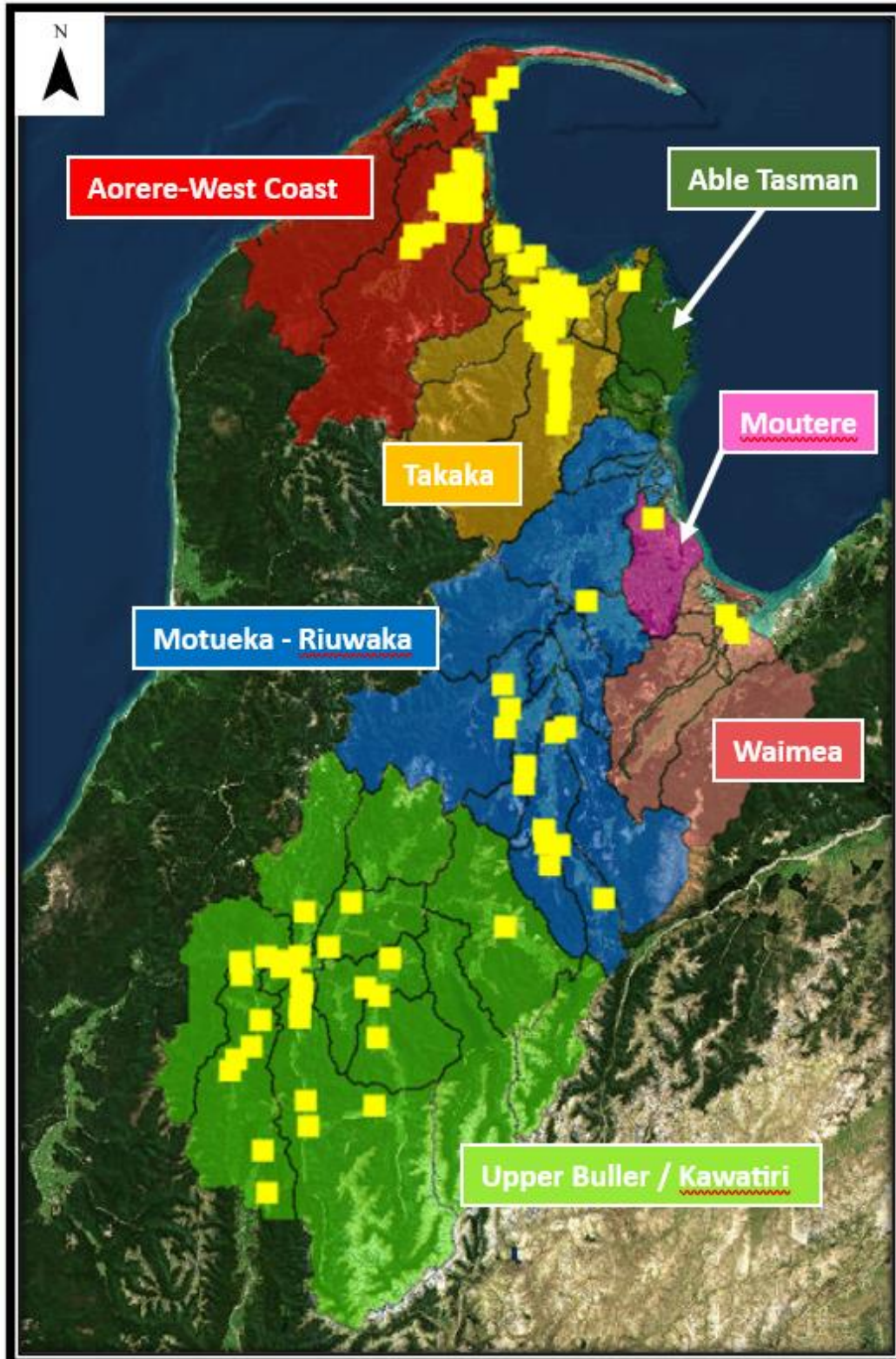


Figure 1: The spatial distribution of dairies within their corresponding Freshwater Management Unit (FMU) in the Tasman Region. DISCLIAMER the FMU boundaries are subject to change.

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4.4 Table 1 below details the districts' farms as a number and percentage within the current FMU's.

<b>FMU</b>	<b>Number of Farms</b>	<b>Regional Proportion</b>
<b>Aorere-West Coast</b>	33	28%
<b>Takaka</b>	36	31%
<b>Moutere</b>	1	1%
<b>Motueka-Riuwaka</b>	14	12%
<b>Waimea</b>	3	3%
<b>Murchison</b>	29	25%

Table 1 Tasman's dairy farms as a number and percentage across the Freshwater Management Units

4.5 Tasman District is relatively small as a dairy farming region and makes up just 1% of the national herd on less than one percent of the total land area. The average farm area, herd size and stocking rates in Tasman are lower than the national average.

4.6 The following table provides a statistical breakdown of the district in comparison to the National and South Island data. The table has also been refined to include a comparison within the subset of FMU's for the same measures.

**Note:** the FMU's have been aggregated into northern, central, and southern subsets for ease of reference.

	<b>Number of Farms</b>	<b>Total Land Area (ha)</b>	<b>Average Farm Area (ha)</b>	<b>Total Dairy Population</b>	<b>Average Herd Size</b>	<b>Average Stocking Rate (cows/ha)</b>
<b>National Statistics (2021-2022) *</b>	10,796	1,701,380	158	4,842,122	449	2.85
<b>South Island Statistics (2021-2022) *</b>	3,164	686,526	217	2,048,685	647	2.98
<b>Tasman Statistics*</b>	116	16,424	142	41,325	356	2.55
<b>Northern</b> Aorere-West Coast + Takaka*	69	9,070	131	23,153	336	2.57
<b>Central</b> Moutere + Motueka/Riuwaka + Waimea)	19	2,701	142	7,177	378	2.62
<b>Southern</b> Upper Buller/Kawatiri*	28	4,653	166	10,995	393	2.45

\* [New Zealand Dairy Statistics 2021-22](#)

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- 4.7 Since the start of the monitoring regime in 2005, we have observed considerable change in dairy farming in this district.
- 4.8 One of the principal changes over time has been the steady decline in active farms. There has been a corresponding decline in cow numbers as well as a less prominent change to land area under dairy platform. Figure 2 below displays this trend.

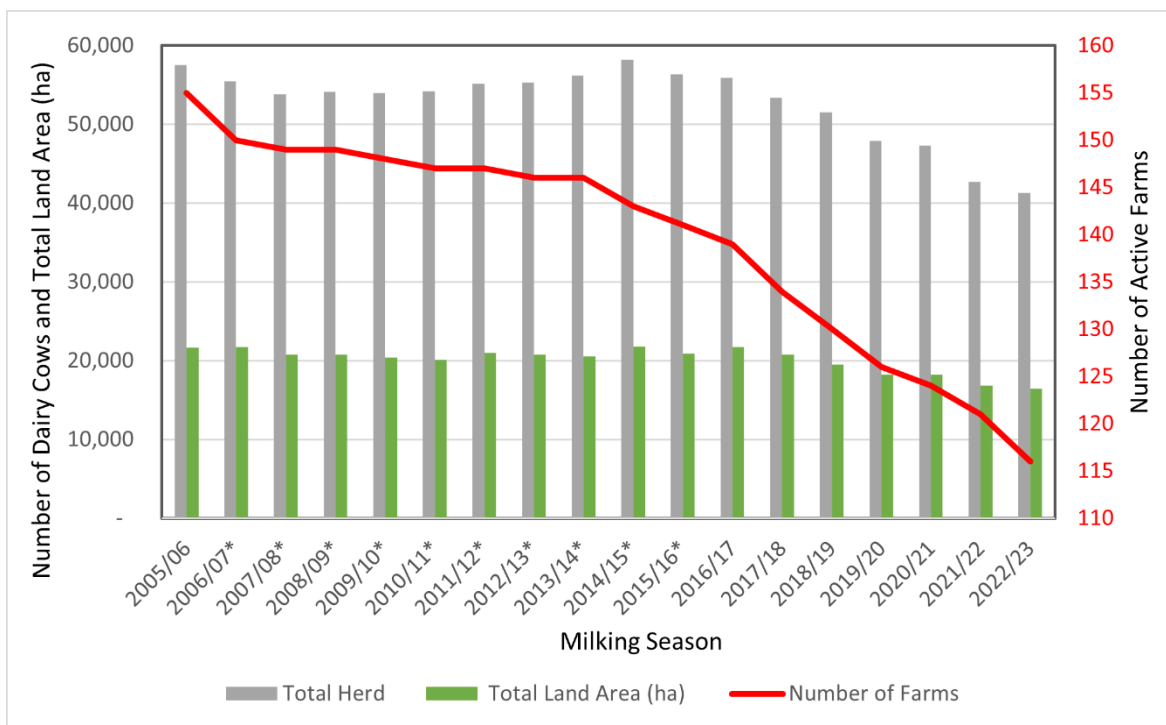


Figure 2: Trend in dairy herd size, associated land area (ha) and number of farms between the 2005/06 and 2022/23 milking seasons

- 4.9 Information gained from monitoring identifies:
  - 4.9.1 Much of this decline is attributable to amalgamation, as smaller farms became part of bigger entities. This was particularly evident in the first 10 years, when land under dairy remained reasonably consistent, while farm numbers fell.
  - 4.9.2 Over the latter years dairy farm numbers have continued to decline. Evidence suggests this is now mainly due to smaller farms ceasing supply and wider land use change away from dairying to dairy support, beef and, in some areas, hop gardens.
  - 4.9.3 The decrease in herd numbers and a reduction in the dairy platform, particularly in the last few seasons, is associated with this fundamental change of land use.

**Resource Consents to Discharge Treated Effluent to Water**

- 4.10 The discharge of treated dairy effluent to water is not a permitted activity and requires resource consent under the TRMP.

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4.11 When the monitoring programme started there were 33 farms that held discharge permits. Many of these were active and being used as the primary method of effluent disposal. Since 2005, there has been a continual surrender of this consent class, to the point where only three farms hold consent. All three of these farms are in high rainfall areas of Golden Bay and are held as contingency for wet weather.

**5. The 2022-2023 Compliance Results**

- 5.1 The dairy farm field inspection process is defined with the intent of being applied consistently each year. The predominant purpose of the inspection is to assess compliance with the individual permitted activity rules and resource consent conditions where relevant.
- 5.2 At the completion of each inspection, a grade is assigned reflecting the level of compliance achieved at the time of inspection. The overall compliance grade is derived from the condition with the worst compliance grade.
- 5.3 This Council uses a compliance grading system that is described in the Ministry for the Environment's "Best Practice Guidelines for Compliance, Monitoring and Enforcement under the Resource Management Act 1991".
- 5.4 Table 3 below describes this grading system with explanation.

<b>COMPLIANCE GRADE</b>	
	<b>Full Compliance:</b> All relevant consent conditions, plan rules, regulations, and national environmental standards are upheld.
	<b>Low Risk Non-Compliance:</b> 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 report)
	<b>Moderate Non-Compliance:</b> 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.
	<b>Significant Non-Compliance:</b> Non-compliance with many of the relevant consent conditions, plan rules, regulations, and national environmental standards, where there are significant environmental consequences and/or there is a high risk of adverse environmental effects.

Table 3: MfE (2018) four-tier compliance monitoring grading categories

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5.5 Figure 3 below displays the aggregate compliance result from the 2022/2023 monitoring of farms in Tasman District.

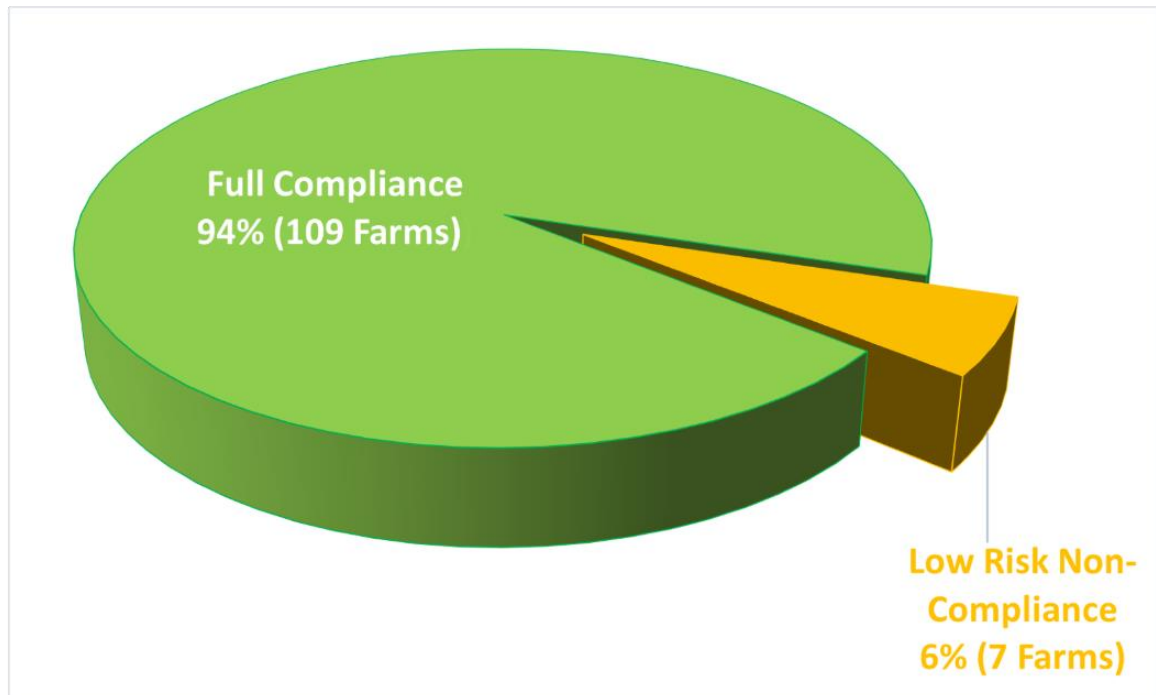


Figure 3: Compliance gradings of farms inspected during the 2022/2023 milking season with respect to Rule 36.1.2.3 of the TRMP or Resource Consent Conditions.

- 5.6 Of the 116 active dairy farms inspected during the 2022/2023 season 109 (94%) achieved full Compliance at time of inspection.
- 5.7 Seven farms failed to achieve a full compliance status at the time of inspection. These farms were found with levels of non-compliance that resulted in a low-risk non-compliance grade. No farms received a grade worse than this.
- 5.8 The farms with non-compliance were graded based on the issues that failed a specific permitted activity rule.
- 5.8.1 For six farms, this involved minor ponding of effluent on the ground.
- 5.8.2 For one farm, a breach of the 10m set back from an adjoining property when discharging effluent.
- 5.9 None of the breaches resulted in any risk of environmental contamination either through run off or groundwater contamination.
- 5.10 Given the nature and scale of the breaches, Council resolved these matters with education around the rules for those operating the system. No reinspection was required.
- 5.11 The 2022/2023 results continue to indicate a high level of compliance with council's effluent disposal rules. While slightly below the results of the 2019/2020 and 2020/2021 seasons in terms of full compliance, this year was not marred by any farms having moderate or significant non-compliance, in line with the two years prior.

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5.12 The following figure displays compliance trends over the life of this monitoring programme.



Figure 4: Historic district wide compliance trends with respect to 36.1.2.3 of the TRMP, Resource Consent Conditions and Section 15(1) of the RMA 1991

**6. 2023/2024 Farm Dairy Effluent Survey and future programme**

- 6.1 The Farm Survey for the 2023/2024 season is scheduled to begin around September of this year.
- 6.2 While the structure and purpose of the effluent monitoring programme will remain the same, there will be changes in how we execute it. With reorganisation allowing two dedicated catchment based freshwater compliance officers’, opportunity now exists to spread the dairy monitoring programme across these roles instead of one officer. This will allow these staff to provide a comprehensive approach to delivering all our monitoring requirements under the various freshwater legislation, as well as the rules framework. This “one stop shop” approach should enhance relationships with the farmers, as well as synergy and support of the Catchment Facilitators work in these areas.
- 6.3 Looking to the future, it is evident that freshwater farm planning regulations will change the face of regulation, particularly in the dairy sector. This new regime will allow the farm operator to use their freshwater farm plan to meet other freshwater regulatory requirements, such as regional rules and national environment standards, where the regulation specifically allows for a freshwater farm plan pathway to be used.
- 6.4 Effluent systems and application areas will be identified as an on-farm risk to freshwater within a freshwater farm plan. The subsequent mitigation actions within the plan, must at



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minimum, meet all regulatory requirements related to the risk and be recognised as fit for purpose.

- 6.5 Despite this, regional rules and resource consents will remain in effect and Council will continue to have an obligation to monitor these. Further, given the structure and timings of the farm plan process, there is a risk of a disconnect between the farm plan and Council staff on the ground assessing this activity if the new arrangements are not well co-ordinated.
- 6.6 Dairy effluent disposal, by its very nature, carries risk to freshwater quality, ecosystem health and receiving environments, therefore it is intended to maintain this essentially permitted activity monitoring programme as a high priority within a broader compliance monitoring strategy.

**7. Farm Dairy National Audit**

- 7.1 Since 2006, an audit of all Regional Councils' compliance inspections of farm dairy effluent systems has been undertaken by an appointed peer review panel co-ordinated through Te Uru Ka Hika. The purpose of this audit has been to determine that consistency exists in the assessment and subsequent application of compliance gradings for farm dairy effluent monitoring by the regional authority.
- 7.2 The farm dairy audit has been successful over the years (pleasingly Tasman District Council's farm dairy effluent compliance inspections achieved a 100% pass rate at each audit), a decision has been made to discontinue this process as it is seen to have achieved its objectives.

**8. Consideration of Financial or Budgetary Implications**

- 8.1 Presently there is no robust legal means open to the Council to recover the costs incurred in the monitoring of farm dairies for permitted activity rules. As most farms within the district operate as a permitted activity, the Council cannot charge for routine inspections. This will not change with the introduction of the Freshwater Farm Plan Regulations or other existing regulations.
- 8.2 For the three consented activities the costs associated with monitoring are recovered by way of annual charges.

**9. Conclusion**

- 9.1 A total of 116 dairy farms had active discharges in the Tasman District during the 2022/2023 milking season, down from last season.
- 9.2 Compliance rates were again high this season, and for those that did not achieve full compliance the breach was considered minor and did not require formal enforcement action.
- 9.3 The specific compliance results were as follows:
- 9.3.1 Ful Compliance: 94%

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9.3.2 Low Risk Non-Compliance: 6%

9.3.3 Moderate Risk Non-Compliance: 0%

9.3.4 Significant Non-Compliance: 0%

9.4 All three farms that hold Resource Consents fully complied with all conditions of their respective Consents.

9.5 Farm Surveys for the 2023/2024 season commence in September 2023 and inspections will begin soon after. The intention is to maintain this programme in its current form now and into the future to ensure we are meeting our statutory monitoring obligations as well as protecting the regions freshwater resource.

<b>10. Attachments / Tuhinga tāpiri</b>
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Nil