

9.1 2017-2018 FARM DAIRY EFFLUENT COMPLIANCE SURVEY**Information Only - No Decision Required**

Report To:	Environment and Planning Committee
Meeting Date:	26 July 2018
Report Author:	Kat Bunting, Compliance & Investigation Officer
Report Number:	REP18-07-04

1 Summary

- 1.1 This report presents the compliance results from the 2017/2018 farm dairy survey, in particular compliance with respect to Resource Consent conditions for the discharge of treated dairy effluent to water, and the discharge of dairy effluent to land as a Permitted Activity under the Tasman Resource Management Plan (TRMP).
- 1.2 In the 2017/2018 milking season a total of 134 farm dairies had active discharges in the Tasman District. Of those, 129 farm dairies operated as Permitted Activities and the remaining five held Resource Consents to discharge treated effluent to water, although four of these periodically apply effluent to land as well.
- 1.3 Each and every year Council aims to complete a full assessment of every farm in regards to dairy effluent disposal. Unfortunately this was not able to be achieved this past season with 96 (72%) of the 134 operational farms inspected by seasons' end. This was due to the Takaka Hill Highway being severely damaged during Cyclone Gita. With approximately two-thirds of the District's dairy farms located in Golden Bay, having very limited access to them for a long period of time meant a large number of inspections could not be completed before the end of the milking season.
- 1.4 At these inspections each farm was assessed against Resource Consent conditions for the discharge of treated dairy effluent to water, or against the Permitted Activity Rule 36.1.2.3 (the discharge of animal to land). The final compliance results for the 96 farms (72% of all farms) inspected were:
 - 94% - Fully Compliant
 - 6% - Non- Compliant
 - 0% - Significantly Non-Compliant
- 1.5 All farms that hold Resource Consents fully complied with all conditions of their respective consents.

2 Draft Resolution

That the Environment and Planning Committee receives the 2017-2018 Farm Dairy Effluent Compliance Survey REP18-07-04 report.

2017-2018 FARM DAIRY EFFLUENT COMPLIANCE SURVEY**3 Purpose of the Report**

- 3.1 The purpose of this report is to present the results of compliance for the 2017/2018 dairy season with respect those farm dairies that hold Resource Consent to discharge treated dairy effluent to water and those farms that operate under the Permitted Activity Rule 36.1.2.3 of the Tasman Resource Management Plan (TRMP) - Discharge of Animal Effluent to Land.
- 3.2 The survey specifically looked at the collection, containment, and disposal of effluent from the farm dairy and general farm management practices associated with effluent. No routine sampling of waterways or soils is undertaken as part of this monitoring programme; it is only undertaken during investigation phases where offences are suspected. Therefore, the monitoring programme and report do not attempt to assess wider effects of water quality, amenity, or aquatic ecology in these catchments which are covered by other reports to Council.

4 Background**The Inspection Process**

- 4.1 The on farm inspection process was identical to that of previous seasons. It is not intended to detail that process in this report and the reader is referred to staff report EP06/05/18 where this was described in detail. For ease of reference however, the geographical location of the three “sub-regions” (Golden Bay, Central, and Murchison) referred to in this and past reports is illustrated below in Figure 1.

2017-2018 FARM DAIRY EFFLUENT COMPLIANCE SURVEY

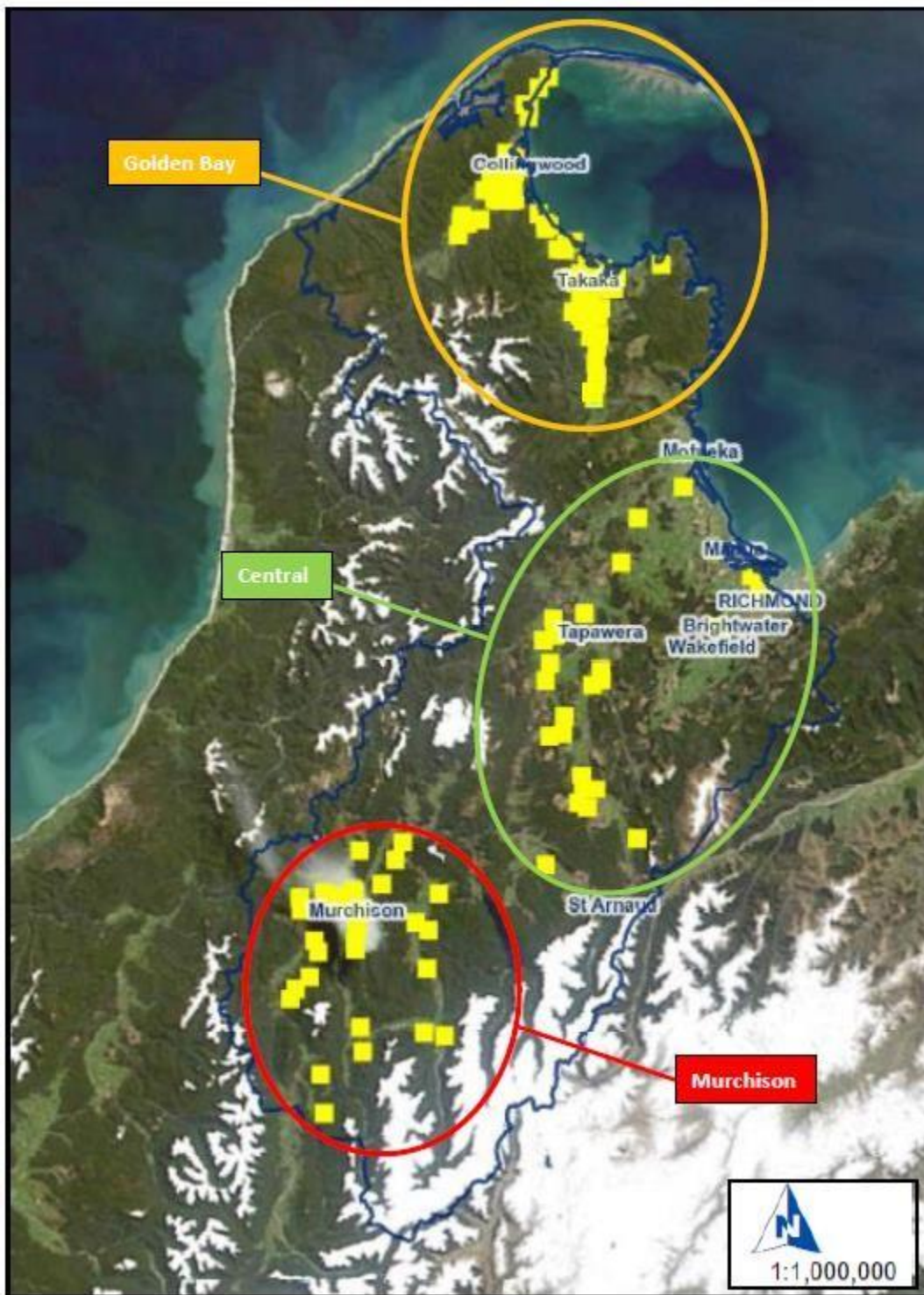


Figure 1: location of the three sub-region of Golden Bay, Central, and Murchison.

4.2 Each yellow square in Figure 1 depicts the location of a farm dairy that was operating during the 2017/2018 milking season. It can be seen from Figure 1 that two thirds of Tasman’s dairy farms are concentrated in the Golden Bay area. The remaining third are evenly distributed in the Central and Murchison sub-regions. Figures 2, 3, and 4 show the spatial distribution of farms in these sub-regions and introduces the catchments, or geographical ‘zones’ of each sub-region.

2017-2018 FARM DAIRY EFFLUENT COMPLIANCE SURVEY

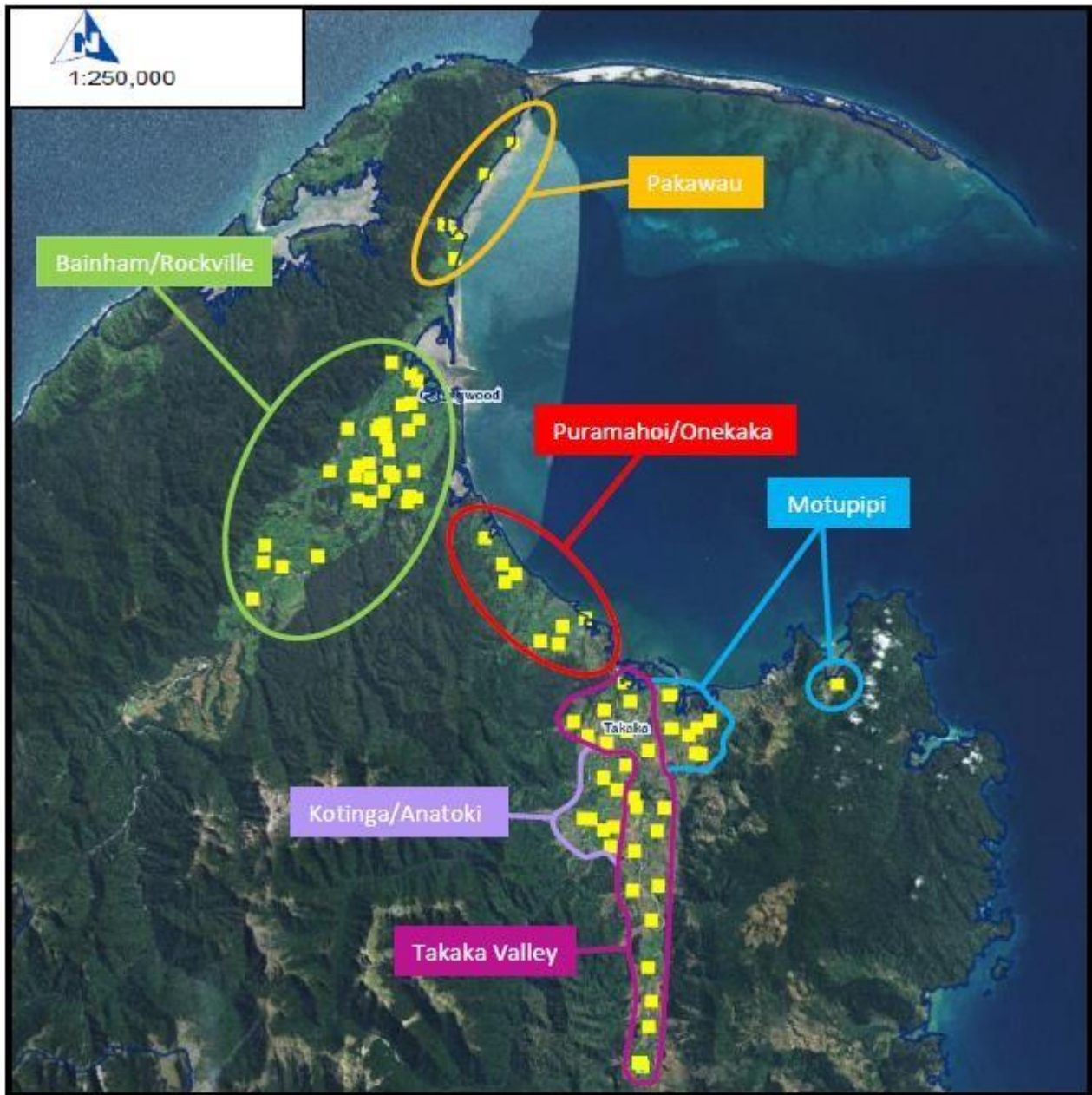


Figure 2: The spatial distribution of farm dairies in the Golden Bay sub-region

- 4.3 The dairy farms of Golden Bay can be placed into six ‘zones’ with each zone relating to either a catchment or geographical area. The majority of farms are located in the Bainham/Rockville area where the Aorere River flows and also the Takaka Valley where the Takaka River flows. The remaining farms are dotted around the coastlines of near Pakawau, Puramahoi/Onekaka, and Motupipi, or a small inland pocket in Kotinga/Anatoki.
- 4.4 Figure 3 illustrates the spatial distribution of farms in the Central sub-region. Here there are three distinct zones. Most of the farms are located in and around the upper catchment of the Motueka River, the remaining farms are located on the Waimea Plains and in Moutere.

2017-2018 FARM DAIRY EFFLUENT COMPLIANCE SURVEY

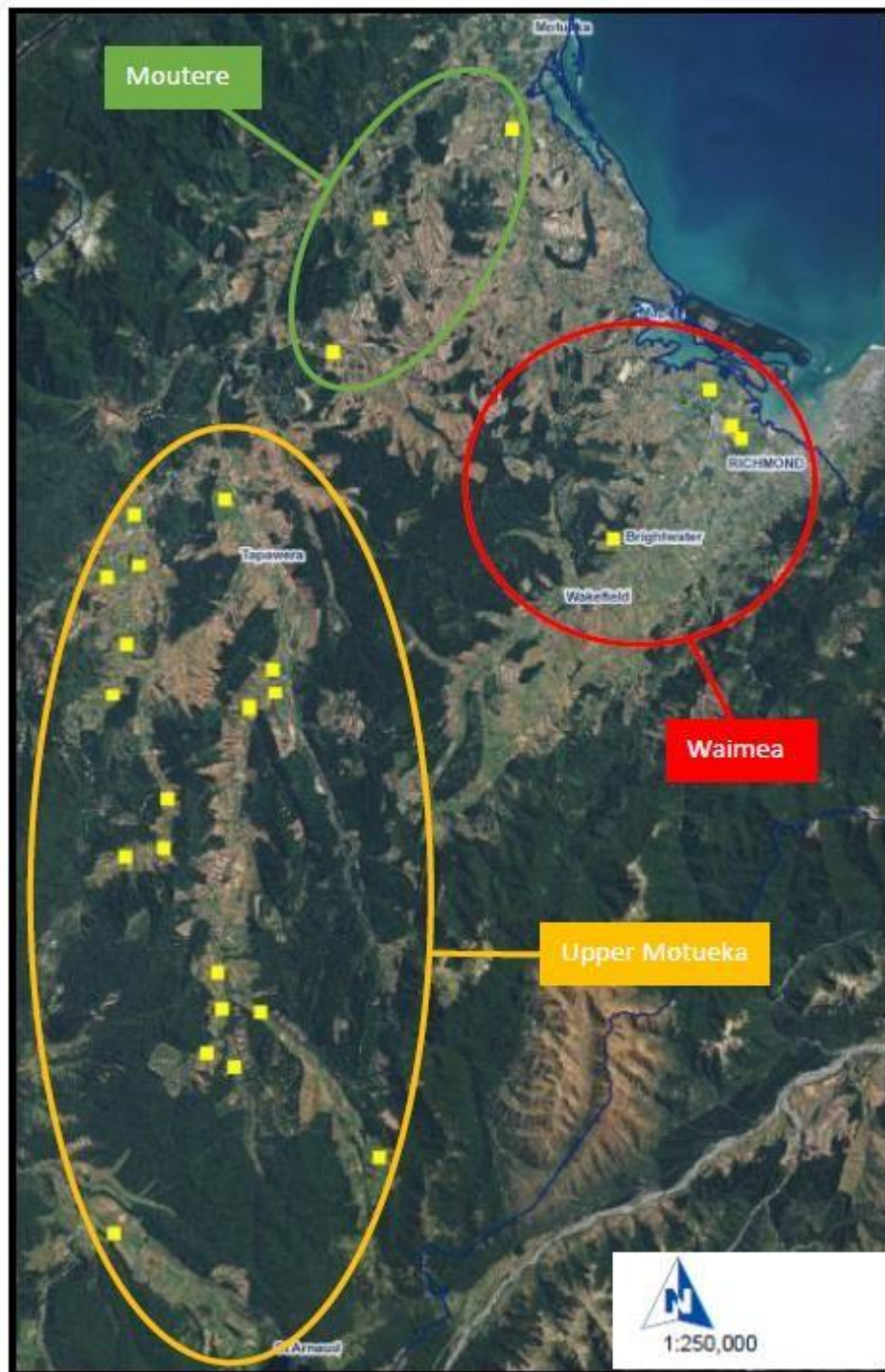


Figure 3: The spatial distribution of farm dairies in the Central sub-region

4.5 The Murchison sub-region can also be separated into zones with most farms situated on old rivers terraces in the long narrow valleys. The exception being those farms on the plains in and around the town of Murchison itself.

2017-2018 FARM DAIRY EFFLUENT COMPLIANCE SURVEY

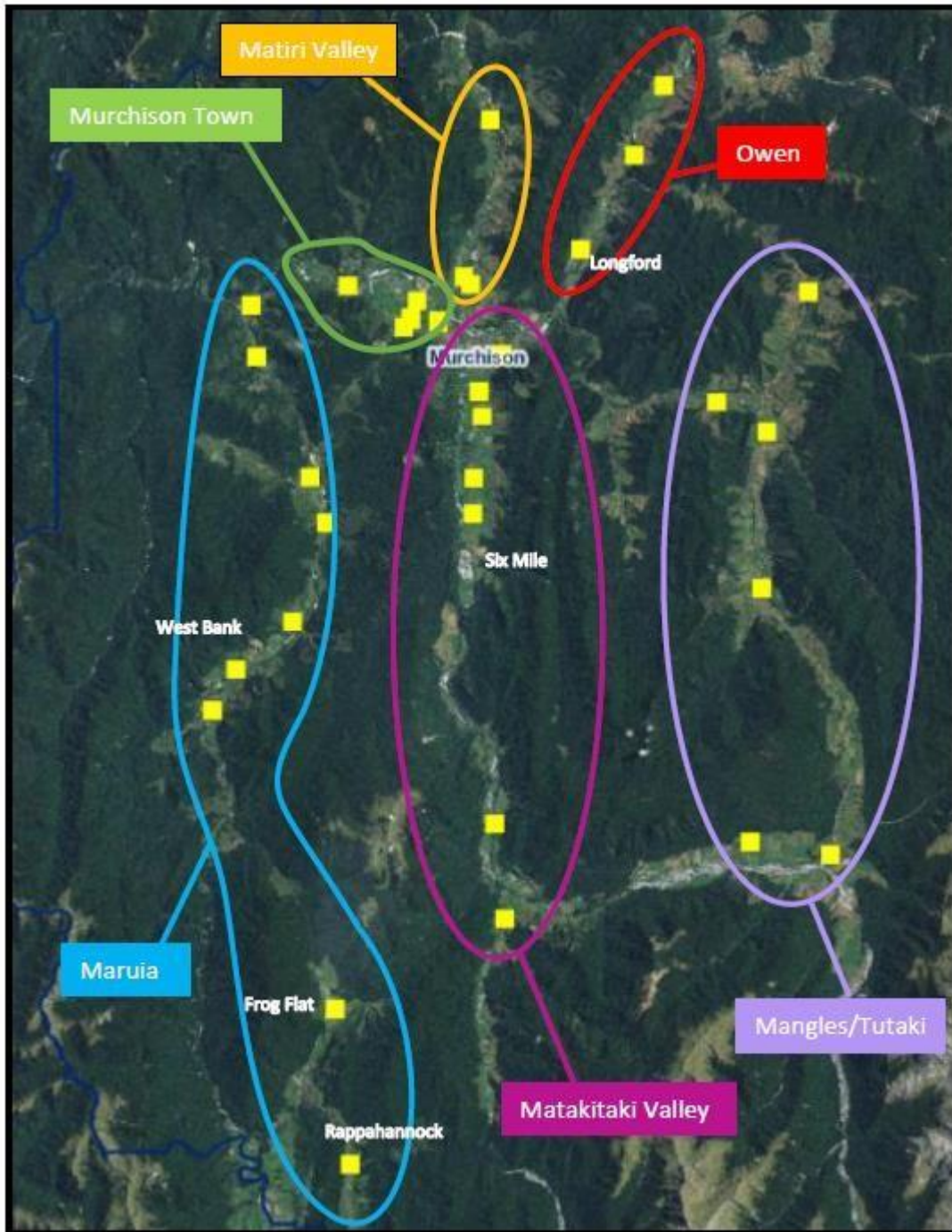


Figure 4: The spatial distribution of farm dairies in the Murchison sub-region

Compliance Grading

4.6 As with all dairy farm inspections undertaken by Council, farms once assessed were placed into one of three categories that described their level of compliance. The criteria for assigning these categories are:

2017-2018 FARM DAIRY EFFLUENT COMPLIANCE SURVEY

- **Compliant:** No non-compliance with any Resource Consent conditions or any sections of Rule 36.1.2.3 of the TRMP were found at the time of inspection.
- **Non-compliant:** All issues that did not fit into either “compliant” or “significantly non-compliant” eg technical non-compliance with no adverse environmental effect.
- **Significantly Non-compliant:** refer to Attachment 1 for a full list of criteria

4.7 These compliance classes are used by all regional councils to ensure national consistency when reporting on dairy compliance and will be referred to throughout the remainder of this report.

5 Compliance – Present Situation

5.1 Due to the restricted access to the Golden Bay area after Cyclone Gita, Compliance staff took the opportunity to work one on one with farmers in and around the Murchison area. It has been recognized from past surveys that the Murchison region is an area that has the district’s most vulnerable effluent management systems in terms of contingency systems and storage.

5.2 The time spent on these farms proved to be very successful in gaining positive traction from some of the most reluctant farmers to embrace best farm practices. This has largely been achieved by holding frequent on-farm meetings with them and/or their consultants to provide information and education on new systems and technologies. While Golden Bay may not have had as many visits as planned it is also pleasing to note that two farmers in that region who were reluctant to upgrade have now begun installing site specific effluent systems that are designed and built to industry standards.

2017/2018 Inspection Results

5.3 Compliance with respect to an individual’s consent conditions, Rule 36.1.2.3 of the TRMP and Section 15(1)(b) of the RMA 1991 as assessed from the farm inspections are presented in Figure 5.

5.4 Of the 96 inspections made during 2017/2018 season, 90 (94%) of all inspections were graded “Compliant”.

5.5 Six (6%) inspections found issues that were graded as “Non-Compliant”. Such non-compliance included:

- Minor ponding present after more than one hour had passed since effluent had been applied to land (five farms). In all five cases the ponding was intermittent over an area less than 10m² and was just deep enough to splash.
- Failing to adhere to setback rules for effluent application near waterways (one farm). In this case no effluent was at risk of directly or indirectly entering water.

2017-2018 FARM DAIRY EFFLUENT COMPLIANCE SURVEY

5.6 No inspections found an issue that was graded as “Significantly Non-compliant”.

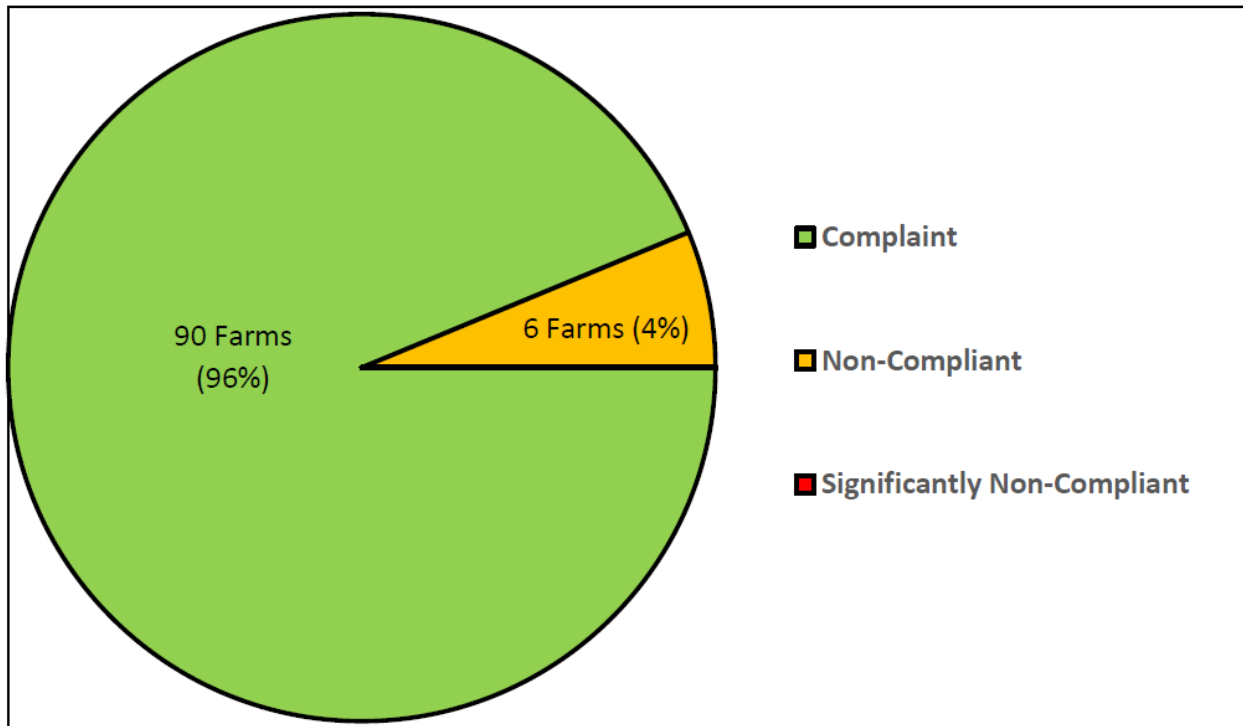


Figure 5: Final compliance gradings of farms inspected during the 2017/2018 milking season with respect to Rule 36.1.2.3 of the TRMP, Resource Consent conditions, and Section 15(1) of the RMA 1991.

5.7 The spatial spread of non-compliance within Tasman District during the 2017/2018 milking season is shown in Figure 6. The graph in Figure 6 shows the number of inspected farms in each sub-region and underlying catchment along with the corresponding compliance grade assigned to each farm. The graph also depicts the particular rule breached in that non-compliance.

2017-2018 FARM DAIRY EFFLUENT COMPLIANCE SURVEY

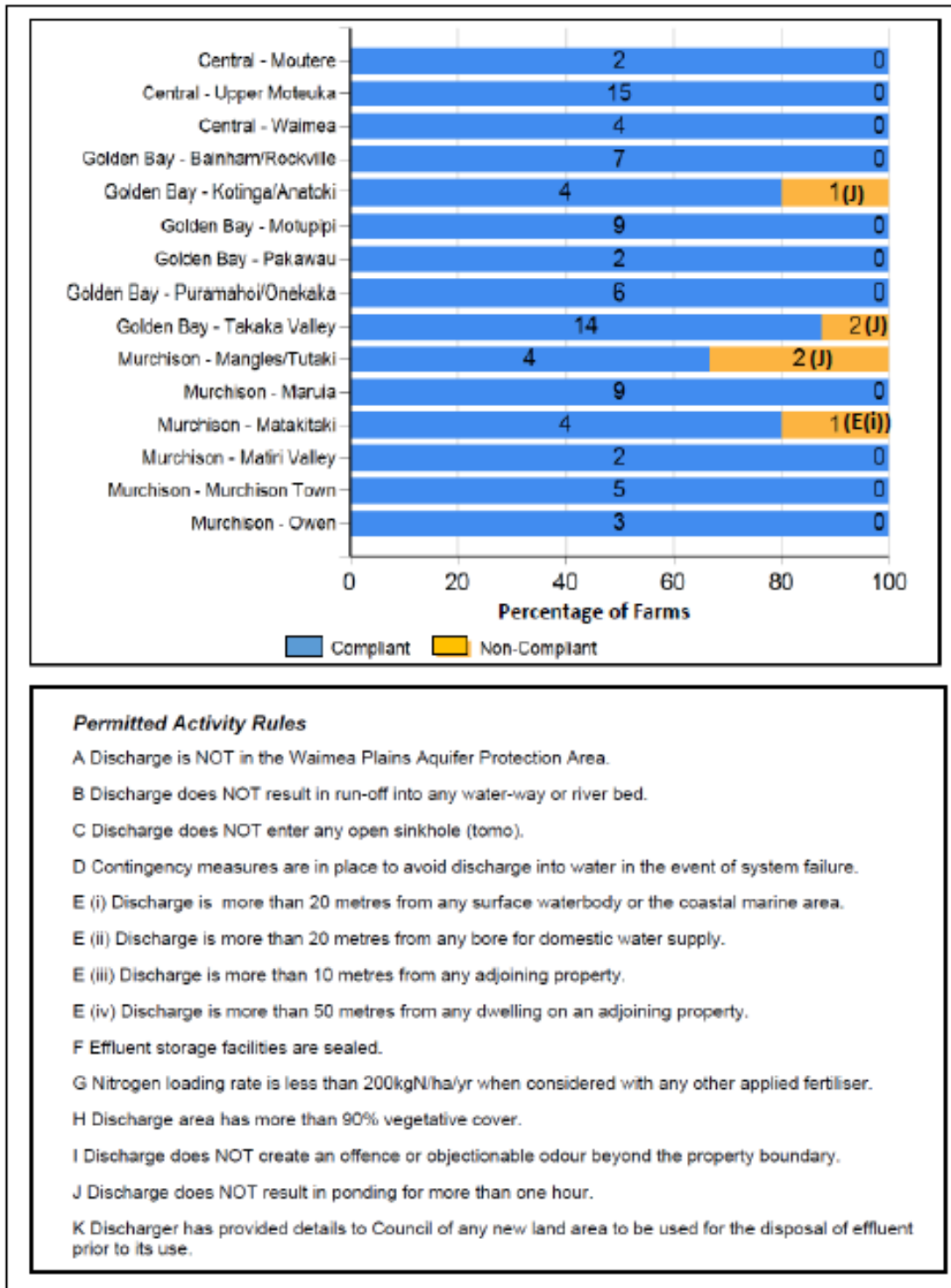


Figure 6 The spatial spread of non-compliance within Tasman District during the 2017/2018 milking season

5.8 From Figure 6 it is apparent that all but one instance of non-compliance related to ponding. These were farms were located in Murchison (two farms in the Mangles/Tutaki Valleys) and Golden Bay (two farms in the Takaka Valley and one farm in Kotinga/Anatoki). The one

2017-2018 FARM DAIRY EFFLUENT COMPLIANCE SURVEY

non-compliance relating to setback distances to water was on a farm located in the Matakitaki Valley although effluent could not physically enter water due to the land sloping away from the waterway. No examples of non-compliance were found in the Central Zone, which comprises of farms located in Moutere, the Upper Motueka Catchment, and Waimea Plains.

- 5.9 All enforcement action undertaken during the 2017/2018 season is detailed below in section 5.15 of this report.
- 5.10 A considerable amount of work has been done since 2012 by the dairy industry (Dairy NZ, Fonterra, and Westland Milk) by working one-on-one with farmers with respect to system and wet weather contingencies. This is particularly so in the Murchison area, where inspections made in past seasons identified that non-compliance associated with ponding was far more prevalent here than any other area of the District. Over the past three seasons both supply companies have repeatedly audited effluent systems that were of concern and recommendations to the respective farmers made as to how to improve them. At the end of the previous season (2016/2017) many of them were in the process of either designing improved systems or actively constructing improved containment facilities. It is pleasing to report this work continues with three more contingency storage facilities that have been sized to industry standards have been commissioned during the 2017/2018 milking season. Another four farms are well underway to have their new system fully commissioned by the start of the 2018/2019 milking season. However, there remains a small minority who will not move forward unless pushed to do so. Such a push will likely have to come from industry as the permitted activity rules do not provide Council enough leverage and our intervention requires detection of an offence. These farms are predominantly located in the southern area around Maruia and Mangles. The owners typically cite financial constraints as prohibiting any investment in improved effluent management systems. All farms concerned were advised to consider progressing matters by working with their respective supply company and doing the necessary research to determine the most suitability sized storage facility and storage options to fit their circumstances.
- 5.11 Council and Industry are actively promoting to farmers the benefits of engaging professionals who have gained accreditation through the Farm Dairy Effluent Accreditation Scheme. Regardless of whether the farmer chooses to engage such a person, they are required to demonstrate that any new system or modification to any existing system meets Dairy NZ's Farm Dairy Effluent Design Code of Practice and Standards. These standards include among other things, adequate sizing and the sealing of effluent storage systems.
- 5.12 Much focus has been placed on ponding in past years as this was the most common issue of non-compliance found during the surveys. Many of the farms that presented ponding in past seasons have now installed storage that has been designed and constructed to industry standards. The uptake of these new systems, including having adequate storage combined with correct management regimes, has seen ponding and in particular the severity of ponding decrease as an area of noncompliance in the Tasman Region.
- 5.13 Figure 7 shows a comparison of the compliance rates from the past 14 milking seasons (2004/2005 – 2017/2018).

2017-2018 FARM DAIRY EFFLUENT COMPLIANCE SURVEY

5.14 From Figure 7 it can be seen that full compliance continued to improve from season to season up until 2011-2012 when it reached a very high standard. Since this time it is pleasing to report that Tasman farmers continue to maintain this high level of compliance and that the 2017/2018 season was no exception to this positive trend. Only six inspections found non-compliance all of which were considered a minor breach of the TRMP rules that resulted in no adverse environmental effect. This continual high standard of compliance can be directly attributed to the commitment of most farm owners and their staff to employ best farm practices with respect to the disposal of farm dairy effluent.

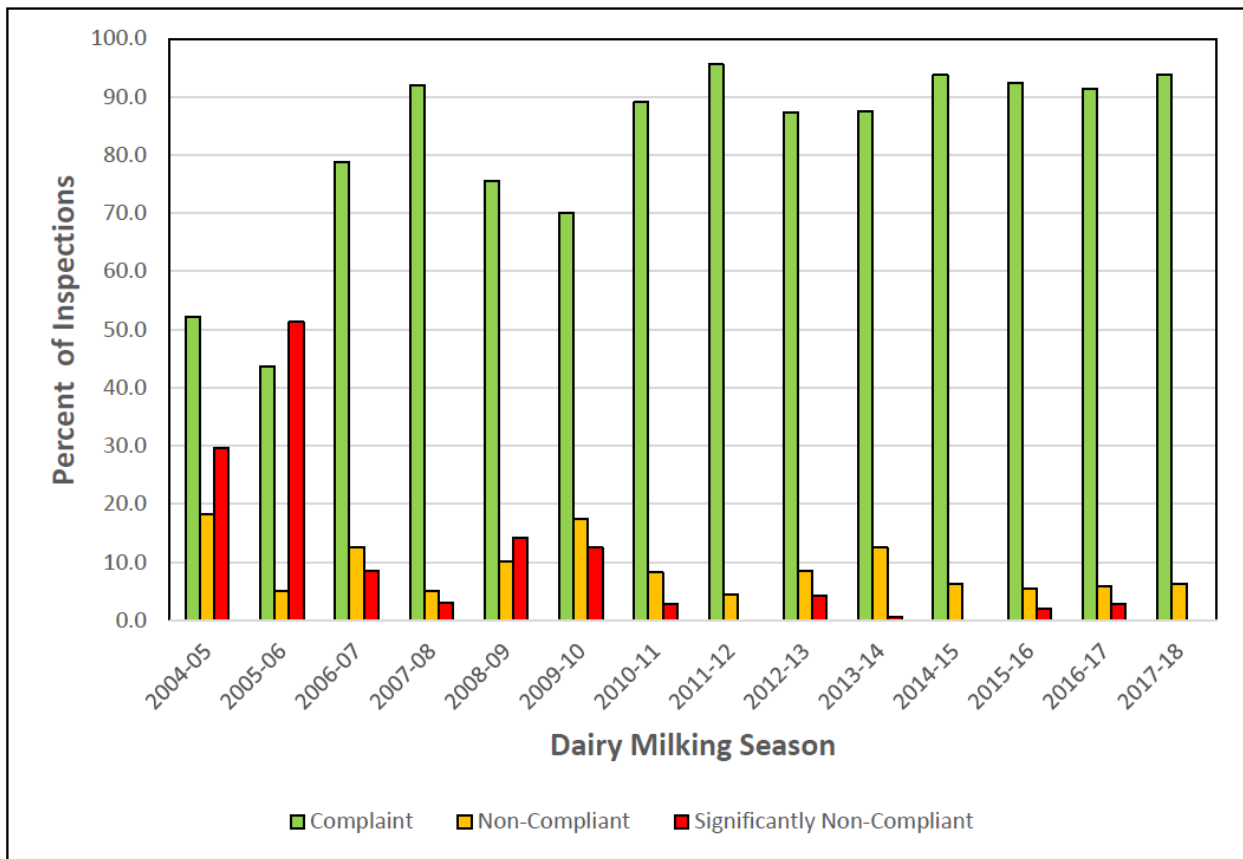


Figure 7 Historic district-wide compliance rates with respect to Rule 36.1.2.3 of the TRMP, Resource Consent conditions, and Section 15(1) of the RMA 1991.

2017/2018 Enforcement Action

5.15 As in previous years, five modes of enforcement action were available for use to address the non-compliance that arose from these farm inspections. These being: warning letters/letters of direction, Abatement Notices, Infringement Fines, Prosecutions, and Enforcement Orders. Six inspections resulted in Council taking enforcement action during the 2017/2018 season. The type of enforcement action taken is largely determined by the resulting adverse environmental effect arising from that non-compliance.

Formal Warning Letter/Letter of Direction

2017-2018 FARM DAIRY EFFLUENT COMPLIANCE SURVEY

- 5.16 A formal warning letter or letter of direction acts as a first enforcement response for the particular level of offending and environmental effects. This is retained on file and forms part of a history. Further non-compliance that receives enforcement action will take into account that the operator had previously received a warning.
- 5.17 A total of six formal letters were issued this season. All six inspections that were graded non-compliant with respect to minor ponding or setback received a formal written warning with directions for improvements. This action was appropriate in each case given the circumstances, lack of any actual adverse environmental effect and each farm having a previous good compliance history. Despite this all farm owners/workers were made aware that continued, un-announced inspections would be made for the remainder of the season. It was also made clear that further formal enforcement action could result if non-compliance was found again. It is pleasing to report that this was not necessary as return visits to all farms concerned found full and continued compliance.

Abatement Notices

- 5.17 An abatement notice prescribed under Section 322 of the Resource Management Act is a formal and legal directive from Council to cease an activity and/or undertake an action(s) in order to avoid, remedy, or mitigate an actual or potential adverse effect on the environment. An abatement notice is used by Council to immediately deal with an illegal activity and to instigate corrective action. Further enforcement action can follow the issuing of an abatement notice and it is an offence under the Act to fail to comply with the notice and its deadlines.
- 5.18 No Abatement Notices were required for offences found during the 2017/2018 season.

Infringement Fines

- 5.19 An infringement fine prescribed under Section 343C of the Resource Management Act is an instant fine issued by Council to a person(s)/company who has committed an offence against the Act.
- 5.20 No infringement fines were issued for offences found during the 2017/2018 milking season.

Prosecutions and Enforcement Orders

- 5.21 An enforcement order prescribed under Section 319 of the Resource Management Act is a directive from the Court to a person(s)/company to cease an activity and/or undertake an action(s) in order to avoid, remedy or mitigate an actual or potential adverse effect on the environment from their activity.
- 5.22 No new orders were sought during the 2017/2018 milking season.
- 5.23 It is encouraging to report that there is just one farm in the District that has a current Enforcement Order against them and they demonstrated full compliance with the requirements of this order, and the permitted activity rules.
- 5.24 No prosecutions were initiated for offences found during the 2017/2018 milking season.
- 5.25 There were two prosecutions still active in the reporting period one of which was concluded recently.

2017-2018 FARM DAIRY EFFLUENT COMPLIANCE SURVEY

- 5.26 In early 2017 the Council laid a number of charges in the Nelson Environment Court against a Golden Bay farm, Amberglen Farm Limited, the farm owner, Hayden Pomeroy and the farm manager. The charges related to offences against section 338(1)(a) of the Resource Management Act 1991 for discharges in September of 2016. The charges related to the discharge of contaminants, namely effluent from dairy cows contained on a stand-off area, which resulted in that effluent entering water, namely Swamp Creek, a tributary of the Kaituna River.
- 5.27 Both the company and owner have pleaded guilty however, the manager pleaded not guilty and elected trial by jury. This matter was heard on July 18 2018 and the manager found not guilty. Sentencing for the company and farm owner will happen in the next month.
- 5.28 In December 2017 the Council laid a charge in the Nelson Environment Court against Golden Bay dairy farmer, Travis Langford. The charges related to an incident in April 2017 where dairy farm effluent was discharged to land in circumstances which may have resulted in that contaminant entering water, namely an unnamed water course adjacent to the dairy farm, a tributary to Anatoki River.
- 5.29 The farmer pleaded guilty and sentencing occurred on the 29 May 2018 where a fine of \$35,000 was imposed. The effluent system has also been extensively upgraded since this prosecution.

6 Strategy and Risks

- 6.1 Although risks are not significant under the current Council monitoring strategy, there is always high public interest in dairy effluent disposal due to the known risk to the environment and the frequency of issues appearing in the national media. For that reason, there is potential for strong public comment if the programme does not maintain high levels of compliance and provide adequate performance reporting. Likewise, as part of the collective agreement of all regional councils to adhere to the “every farm, every year” monitoring strategy including audit, a failure to maintain the programme will not only put us out of sync with the rest of the country, but limit our ability to meet national reporting requirements.

7 Consideration of Financial or Budgetary Implications

- 7.1 Presently there is no robust legal means open to Council to recover the costs incurred in the monitoring of farm dairies with respect to the Permitted Activity Rules. As the majority of farms within the district operate as a Permitted Activity the Council cannot charge for routine inspections. When non-compliance is detected the cost of enforcement processes generally falls to the Council, as it does in any area of activity, but penalties such as infringements and court fines do provide some monetary return if and when these mechanisms are used. However, as the majority of farms are achieving full compliance it is fair to say that the greater part of the programme costs for permitted activity monitoring in dairy are presently borne by Council via general rates.
- 7.2 For the five consented activities the costs associated with monitoring are recovered by way of annual charges.

2017-2018 FARM DAIRY EFFLUENT COMPLIANCE SURVEY**8 Significance and Engagement**

8.1 This is an information report so is of low significance. Engagement with farmers takes place as part of the monitoring programme and we report the results publicly and continue to work with farmers and the Tasman dairy industry.

9 Conclusion

9.1 A total of 134 dairy sheds had active discharges in the Tasman District during the 2017/2018 milking season. Of these, 129 farm dairies operated as Permitted Activities and the remaining five held Resource Consents authorising the discharge treated effluent to water.

9.2 96 farms were inspected this season. The results of this survey were:

94% - Compliant.

6% - Non-Compliant

0% - Significantly Non-Compliant

9.3 All farms that hold resource consents fully complied with all conditions of their respective consents.

9.4 Heading into the new dairy season Tasman district continues to present a good rate of compliance with respect to farm dairy effluent management; however, improvement can always be made.

10 Next Steps / Timeline**M.Bovis.**

10.1 M.Bovis is an issue that the Compliance Department must give recognition to given the nature of the monitoring programme and need for farm access. Compliance staff have attended the Ministry of Primary Industries regional presentation and have the latest practice guides from the Ministry and DairyNZ. Compliance will implement this programme along with other teams in Council. In essence this involves a 'clean on' and 'clean off' regime and any additional security measures individual farmers wish to employ.

2018/2019 Dairy Farm Effluent Survey

10.2 Farm Surveys for the 2018/2019 season commence in September 2018 and inspections will begin in earnest with a view to once again completing a full assessment of every farm in regards to dairy effluent disposal. Only time will tell whether the extra time needed to disinfect vehicles, footwear, and equipment against M.Bovis prior to and after each and every inspection will have an effect on the total number of farm inspections that can be completed. Notwithstanding this, those farms not inspected during the 2017/18 milking season will be prioritized, so too will those farms that remain with vulnerable systems.

2017-2018 FARM DAIRY EFFLUENT COMPLIANCE SURVEY

- 10.3 As always there is a risk that some non-compliance will surface however it is expected that the ongoing commitment for best farm practices will be reflected in a continuing high standard of compliance in Tasman.
- 10.4 Next season Council staff will continue to work closely with the industry in order to build upon the positive work achieved during the past year. Such work includes the on-going promotion of on-farm best practice, particularly with respect to wet weather contingencies and also the promotion of DairyNZ's Farm Dairy Effluent Design Code of Practice and Standards, and the new Farm Dairy Effluent Design Accreditation Scheme.

APPENDIX 1

Criteria for assigning a grade of significant non compliance, and examples of situations that would meet the criteria.

Criteria	Examples
Unauthorised discharges that have entered water (Ground or surface water)	<ul style="list-style-type: none"> • Overflowing ponds or sumps into surface water • Overland flow /runoff into surface water • Irrigating over surface water • Race/feedpad/standoff pad runoff into surface water • Discharges in breach of consent or plan rule conditions, and where adverse effects are visible/measurable/likely: e.g. <ul style="list-style-type: none"> • S107 considerations e.g. change in colour or clarity after mixing • Exceeding ammonia limits • Exceeding NTU/SS limits • Exceeding BOD limits • Exceeding faecal limits • Exceeding ground water nitrogen concentration limits
Unauthorised Discharges that may enter water (Ground or surface water)	<ul style="list-style-type: none"> • Significant surface ponding • Irrigating when soil conditions are too wet • Discharge without using an irrigator (e.g. pipe end discharge) • Sludge dumping • Discharges in breach of consent or plan rule conditions, and where adverse effects are visible and/or measurable and/or likely: e.g. <ul style="list-style-type: none"> • Exceeding nutrient application rates • Exceeding effluent application depths/rates
Breach of abatement notice	<ul style="list-style-type: none"> • Any breach of an abatement notice
Objectionable effects of odour	<ul style="list-style-type: none"> • Serious adverse effects of odour have occurred
System shortcomings (where required by a rule in a plan or a resource consent)	<ul style="list-style-type: none"> • Serious lack of contingency storage or backup plan.
Multiple minor non compliances on site with cumulative effects	<ul style="list-style-type: none"> • Multiple minor discharges into a sensitive environment