

## 9.1 2016-2017 DAIRY EFFLUENT SURVEY

Information Only - No Decision Required

<b>Report To:</b>	Environment and Planning Committee
<b>Meeting Date:</b>	3 August 2017
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<b>Report Number:</b>	REP17-08-02

### 1 Summary

- 1.1 This report presents the compliance results from the 2016/2017 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 2016/2017 season a total of 139 dairy active discharges in the Tasman District. Of those 134 farm dairies operated as Permitted Activities and the remaining five held Resource Consents to discharge treated effluent to water.
- 1.3 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 effluent to land). The final compliance results for all 139 farms were:
  - 93% - Fully Compliant
  - 4% - Non- Compliant
  - 3% - Significantly Non-Compliant

### 2 Draft Resolution

**That the Environment and Planning Committee receives the 2016-2017 DAIRY EFFLUENT SURVEY report.**

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<b>3 Purpose of the Report</b>
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- 3.1 The purpose of this report is to present the results of compliance for the 2016/2017 dairy season, with respect to those farm dairies that hold Resource Consent to discharge treated dairy effluent to water, or discharge to land 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 other general farm management practices associated with effluent.
- 3.3 Routine sampling of waterways or receiving soils does not form part of this monitoring programme and is only undertaken during investigation phases where offences are suspected. The monitoring programme and summary report does not therefore assess wider effects of water quality, amenity, or aquatic ecology in these catchments, which are covered by other environmental monitoring reports to Council.

<b>4 Background and Discussion</b>
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**The Survey Process**

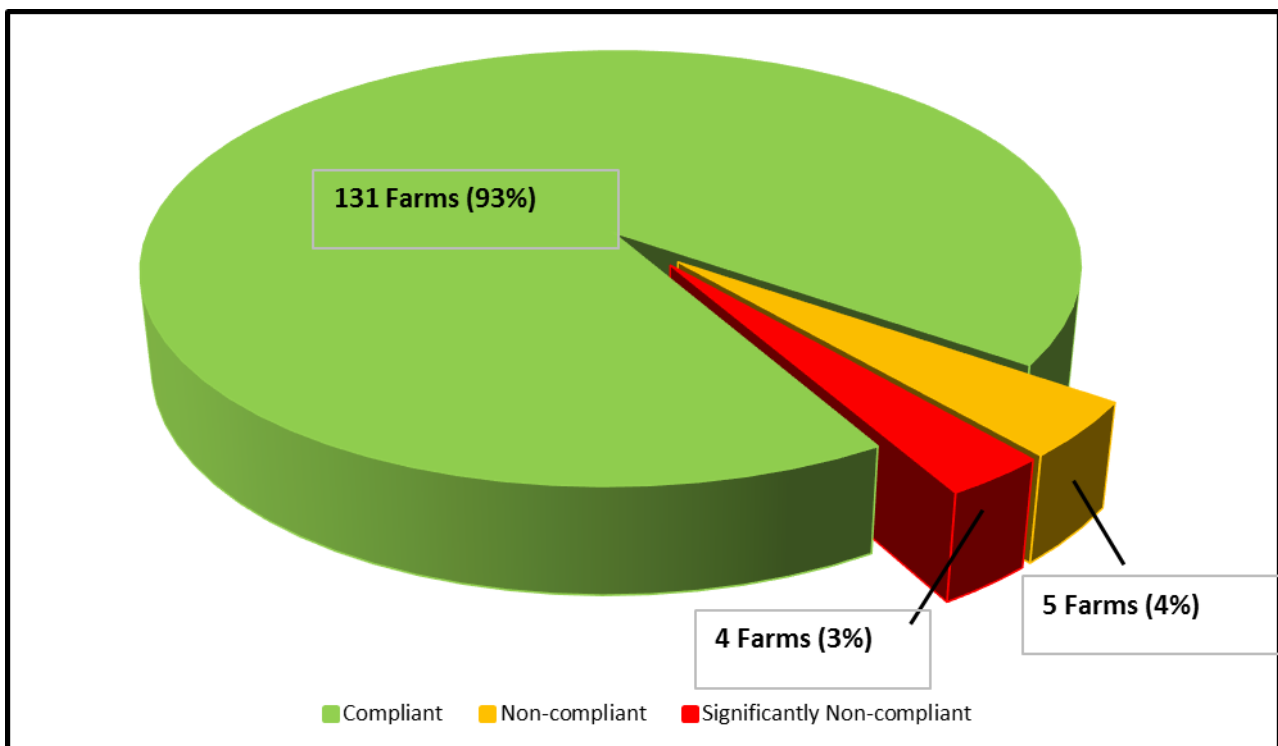
- 4.1 The survey process used on farm was identical to that of previous surveys. It is not intended to detail that survey method in this report and the reader is referred to an earlier staff report EP06/05/18 for the methodology that is used in the farm assessment, including the geographical boundaries of the three “sub-regions” (Golden Bay, Central, and Murchison) specified in this report.
- 4.2 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:
- **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 effect.
  - **Significantly Non-compliant:** refer to Attachment 1 for a full list of criteria within this category.
- 4.3 The 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.

<b>5 Compliance - Present Situation</b>
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**2016-2017 DAIRY EFFLUENT SURVEY****2016/2017 Survey Results**

- 5.1 Compliance with respect to an individual's consent conditions, or 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 1.
- 5.2 Of the 139 inspections made during **2016/2017** season, 130 (93%) of all farms were graded "Compliant".
- 5.3 Inspections on five (4%) farms found issues that required a grading of "Non-Compliant". Some farms presented more than one issue of non-compliance; such non-compliance included:
- Minor ponding present after more than one hour had passed since effluent had been applied to land (three farms). In all cases the ponding was intermittent over an area less than 10m<sup>2</sup> and was just deep enough to splash.
  - Failing to adhere to setback rules for effluent application near property boundaries (three farms). In all cases, the wetted width of the discharge came within ten meters of a public road.
  - Failing to take and submit sampling results by the due date specified by a condition of consent (one farm).
- 5.4 Inspections on four (3%) farms found an issue that was graded as "Significantly Non-compliant". Such non-compliance included:
- Major ponding present after more than one hour had passed since effluent had been applied to land (two farms). One case involved a drag hose pulling apart at a join. This meant effluent was discharge directly to land through the hose end and not the irrigator. The result was the over application of effluent in one location causing ponding over approximately 10m<sup>2</sup> and was at least 5-10cm in depth.
- The second case involved the failure at the termination of a mainline that carries effluent from the storage facility to the disposal field. This was a temporary fix undertaken a few years prior; a permeant fix was never completed. The subsequent failure gave rise to a large volume of effluent being discharged to land from the hose end. The ponding that resulted flowed over land and also entered surface water. This being a secondary offence.
- A serious lack of contingency storage or back-up plan to avoid discharge to water (one farm). In this case the new storage pond was lapping at the brim and a heavy rain warning was in place. Should this pond have over-topped the flow would have entered a waterway.
  - Failing to ensure effluent storage facilities are sealed (one farm). This case involved a stormwater diversion system allowing an intermittent discharge containing contaminants (washdown from the yard) to enter a farm drain that flowed to a stream.

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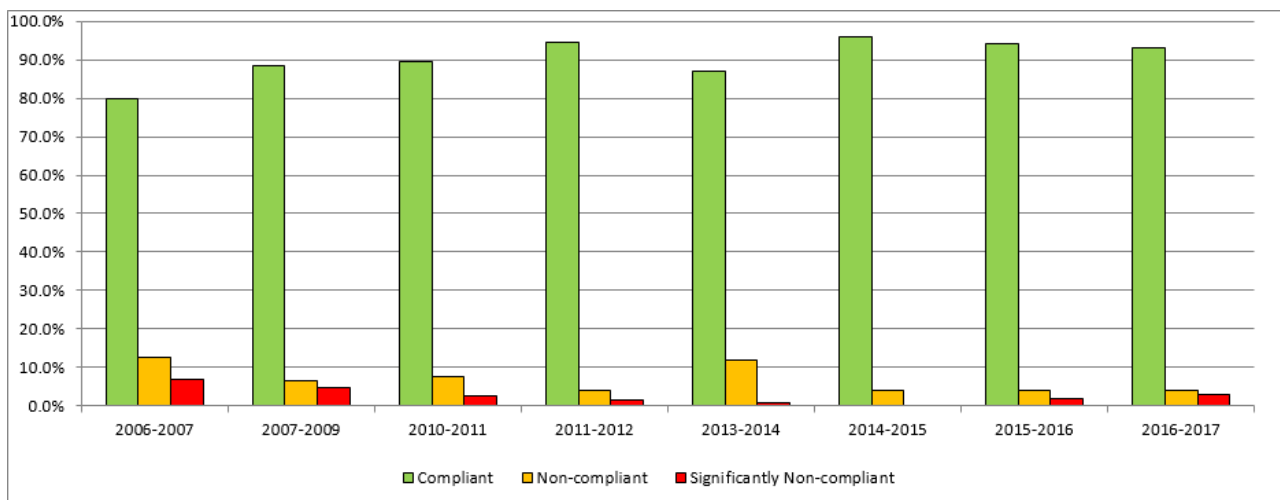


**Figure 1** Compliance with respect to Rule 36.1.2.3 of the TRMP, Resource Consent conditions, and Section 15(1) of the RMA 1991 following the inspection of all farms in Tasman District.

- 5.6 All enforcement action undertaken during the 2016/2017 season is detailed below in section 5.12 of this report.
- 5.7 Council recognises that a lot of work has been done by the dairy industry (Fonterra, Westland Milk, and Dairy NZ) in recent years, by working one-on-one with farmers with respect to system performance 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 four seasons, Council is aware that both supply companies have audited effluent systems that were of concern and that recommendations have been made to the respective farmers. It is pleasing to report that most of these farmers have now completed or are well underway to having their new system fully commissioned by the start of the 2017-2018 dairy season. There remains a very small minority of those who will not move forward unless pushed to do so. Such a push will have to come from industry as the permitted activity rules of the TRMP do not provide Council the ability to set these standards and our intervention requires detection of a breach.
- 5.8 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.

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- 5.9 Much focus has been placed on ponding in previous years, as this was the most common issue of non-compliance found during the surveys. It is disappointing to report that the 2016/2017 season was no different even though many large storage facilities have been installed around the district, particularly the Murchison area. The ponding encountered this season was not as a result of the lack of storage, rather it was poor management of these storage facilities, poor system maintenance, and equipment failing, or in some cases just poor farm practice of over application due to not having the irrigator traveling at its maximum speed. It is anticipated that with these new purpose built storage facilities, combined with correct management regimes and better industry education we should see ponding decrease as an area of non-compliance in the Tasman Region. If not, Council will be required to apply further regulatory pressure in order to resolve this issue.
- 5.10 Figure 2 shows a comparison of the compliance rates from the 2005/6, 2006/7, 2007/8-2008/9, 2010-2011, 2013/2014, 2014/2015, 2015/2016 surveys with this latest survey. Due to the interrupted surveys of 2009/2010 (just 37 farms surveyed) and the more recent 2012/2013 (34 farms) those statistics are not included in Figure 2.
- 5.11 From Figure 2 it can be seen that full compliance has continued to improve from season to season up until 2014-2015 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 2016/2017 (although it had more instances of significant non-compliance than last season) was keeping this positive trend. Only seven inspections found non-compliance with four of these relating to either a technical breach or a minor breach with 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 2** Comparison of the compliance rates from previous surveys

**2016/2017 Enforcement Action**

- 5.12 As in previous years five modes of enforcement action were employed to address the non-compliance that arose from these farm inspections. These being: warning letters, Abatement Notices, Infringement Fines, Prosecutions, and Enforcement Orders. Nine

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inspections resulted in Council taking enforcement action during the 2016/2017 season.

The type of enforcement action taken is determined by the resulting adverse environmental effect arising from that non-compliance and use of the Enforcement Policy for guidance.

**Formal Warning Letter**

5.13 A formal warning letter acts as a formalised staff direction and is retained on file. This is not a court process although further non-compliance that receives enforcement action will take into account that the operator had previously received formal direction. A total of four warning letters were issued this season. All inspections that were graded non-compliant with respect to minor ponding and/or setback distances to property boundaries received a formal written warning. This line of enforcement action was taken as each circumstance of non-compliance did not result in any actual adverse environmental effect and each farm had a previously good compliance history. In each case the farm owner/worker was made well aware that 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 these farms found full and continued compliance.

**Abatement Notices**

5.14 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.

5.15 Three Abatement Notices were issued during this reporting period. One related to the serious lack of contingency storage or back-up plan to avoid discharge to water. In this particular circumstance this was not a case of not having a storage facility, but rather the poor management of it and the potential adverse environmental effects that this poor management could have had. The newly commissioned storage pond had been allowed to fill to such a level that no contingency remained. This situation presented an unacceptable risk given the heavy rainfall event that was forecast to occur later that same day. Should this pond have over-topped, effluent would have entered a waterway. In this case the Abatement notice served to address the management of the system in its entirety both short and long-term. The other two Abatement Notices were served to address the incidence where ponding of effluent had resulted from infrastructure failings. All three parties were made well aware and any breach of the Notices or any further non-compliance may result in further enforcement action being taken. All three Abatement Notices are still remaining active heading into the new season and will remain so until Council is satisfied that the parties concerned can demonstrate full and continued compliance.

**Infringement Fines**

5.16 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.

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5.17 One infringement fine was issued in response to farm inspections during the 2016/2017 season. This fine accompanied the Abatement Notice issued to the farm owner and involved an incidence of ponding.

**Prosecutions and Enforcement Orders**

5.18 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.

5.19 No orders were sought in this period.

5.20 One prosecution was initiated for offences found during the 2016/2017 season. The main offence involved the discharge of effluent to land where it entered water as a result of a range of poor on-farm practices. This matter is currently before the Environment Court.

5.21 Another significant non-compliance has been investigated and is currently making its way to the Courts with charges due to be filed in the near future.

5.22 It is encouraging to report that the three farms in the District that have current Enforcement Orders against them demonstrated full compliance with the requirements of these orders and the permitted activity rules.

**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 Policy / Legal Requirements / Plan**

7.1 Presently there is no legislative ability for Council to recover the costs incurred in the monitoring of farm dairies operating under permitted activity rules. As the majority of farms within the district operate as 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, however, penalties such as infringements and court fines do provide some monetary return if and when these mechanisms are used. As the majority of farms are achieving full compliance it is fair to say that the greater part of the program 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.

**2016-2017 DAIRY EFFLUENT SURVEY****8 Consideration of Financial or Budgetary Implications**

- 8.1 This is not relevant to this monitoring programme except that we will report these results publicly and continue to work with farmers and the Tasman dairy industry.

**9 Conclusion**

- 9.1 A total of 139 dairy sheds had active discharges in the Tasman District during the 2016/2017 season. Of these, 134 farm dairies operated as Permitted Activities and the remaining five held Resource Consents authorising discharge treated effluent to water.
- 9.2 All farms were inspected this season. The results of this survey were:
- 93% - Compliant.
  - 4% - Non-Compliant
  - 3% - Significantly Non-Compliant
- 9.3 Where non-compliance was detected the Council took appropriate action (in accordance with its Enforcement Policy) to address any adverse environmental effects and provide an appropriate punitive response to the level of offending. This ranged from education and warnings for minor breaches, through to prosecution before the Environment Court for two serious offences with significant adverse environmental effects.
- 9.4 Heading into the new dairy season Council hopes to see continuity of a good rate of compliance with respect to farm dairy effluent management in the district, however, it recognises that improvements can always be made and will target resources to achieve this outcome.

**10 Next Steps / Timeline**

- 10.1 Farm Surveys for the 2017/2018 season commence in September 2017 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.
- 10.2 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 by a high standard of compliance in Tasman.
- 10.3 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 Dairy NZ's Farm Dairy Effluent Design Code of Practice and Standards, and the new Farm Dairy Effluent Design Accreditation Scheme.



**11 Attachments**

Nil