

Report No:	C653
File No:	REP11-07-05
Date:	22 June 2011
<b>Information Only - no decision required</b>	

## REPORT SUMMARY

**Report to:** Environment & Planning Committee  
**Meeting Date:** 14 July 2011  
**Report Author:** Kat Bunting, Compliance Officer  
**Subject:** **Farm Dairy Effluent Compliance 2010/2011**

### EXECUTIVE SUMMARY

This report presents the compliance results from the 2010/2011 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). Also presented are Tasman's current statistics with respect to the national targets of the Clean Stream Accord.

In the 2010/2011 season a total of 147 dairy sheds had active discharges in the Tasman District. Of those 141 farm dairies operated as Permitted Activities and the remaining six held Resource Consents to discharge treated effluent to water.

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 36.1.3 (the discharge of dairy effluent to land). The final compliance results for all 147 farms were:

- 90% - Compliant
- 7% - Non-Compliance
- 3% - Significant Non-Compliance

Tasman District currently has 137 farms that supply Fonterra and are therefore subject to the national targets of the Clean Streams Accord. The 2010/2011 reporting period saw further efforts by most farms towards meeting the Accord targets. At the end of this current season, Tasman's Accord statistics have increased to:

- 95% of streams have stock excluded from them.
- 100% of estuaries and lakes have stock excluded from them.
- 95% of regular crossings have bridges or culverts
- 100% of farms have a nutrient budget.
- 92% of Fonterra farms fully comply with their consent conditions and/or regional rules.

Heading into the 2011/2012 dairy season Tasman District farmers have for the most part continued to show very good rate of compliance with respect to farm dairy effluent management, now meeting all of the set Accord targets with respect to nutrient management, Stock exclusion to water, and estuaries. Unlike previous reports there is one issue of non-compliance that stands out as being a common issue of concern, this being the ponding of effluent on farm paddocks. This non-compliance was typically observed where farms did not have sufficient wet weather contingencies in place and were left in a situation where effluent was applied to saturated pasture. A further trend that was observed was that this non-compliance was by far more prevalent in the Murchison area than any other area of the District. We will monitor this situation and work with farmers and industry to address this issue.

<b>RECOMMENDATION/S</b>
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**That the report be received.**

<b>DRAFT RESOLUTION</b>
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**THAT the Environment & Planning Committee receives the Farm Dairy Effluent Compliance 2010/2011 Report REP11-07-05**

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## **1. Introduction**

### 1.1 Purpose

The purpose of this report is twofold. Firstly it is to present the results of compliance for the 2010/2011 dairy season with respect those farm dairies that hold Resource Consent to discharge treated dairy effluent to water. Also compliance with respect to those farms that operate under the Permitted Activity Rule 36.1.3 of the Tasman Resource Management Plan (TRMP) - Discharge of Dairy Effluent to Land.

Secondly this report serves to up-date where Tasman District lies with respect to the five national targets as set out in the Clean Streams Accord (the Accord).

Presently Tasman District has 147 dairy farms. The results presented in this report come from a comprehensive survey of all farms with resource consents and all permitted activities in Tasman District that operated during the reporting period (2010/2011 dairy season). The survey specifically looked at the collection, containment, and disposal of effluent from the farm dairy and general farm management practices.

No sampling of waterways or soils was undertaken as part of this study. This report does not assess effects of water quality, amenity, or aquatic ecology.

## **2. The Farm Dairy Survey**

### 2.1 The survey process

The survey process 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 staff report EP06/05/18 for the methodology including the geographical location of the three "sub-regions" (Golden Bay, Central, and Murchison) specified in the reports.

### 3. Compliance

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 36.1.3 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” e.g. technical non compliance with no adverse effect.
- **Significantly Non-compliant:** refer to Appendix 1 for a full list of criteria

These compliance terms are use by all regional councils (supported by the Regional Managers Group) when reporting on dairy compliance and will be referred to throughout the remainder of this report.

#### 3.1 2010/2011 Survey Results and Enforcement

##### Survey results

Compliance with respect to an individual’s consent conditions, Rule 36.1.3 of the TRMP and Section 15(1)(b) of the RMA 1991 as assessed from the farm inspections are presented in Figure 1.

Of the 147 inspections made during 2010/2011 season, 132 (90%) of all inspections were graded “Compliant”.

Eleven (7%) inspections found issues that were graded as “Non-compliant”. Such non-compliance included:

- Having a nitrogen loading rate 1-10% greater than 200kgN/ha/yr (as shown by a recently completed nutrient budget).
- Failing to adhere to setback rules regarding property boundaries and neighbouring dwellings.
- Failing to submit sampling results by a due date prescribed by a condition of consent.

Four (3%) inspections found issues that were graded as “Significantly Non-compliant”. Some inspections found more than one issue that was graded as being significantly non-compliant. Such non-compliance included:

- Severe ponding of effluent on the ground surface.
- The breach of an Abatement Notice.
- The breach of an Enforcement Order.

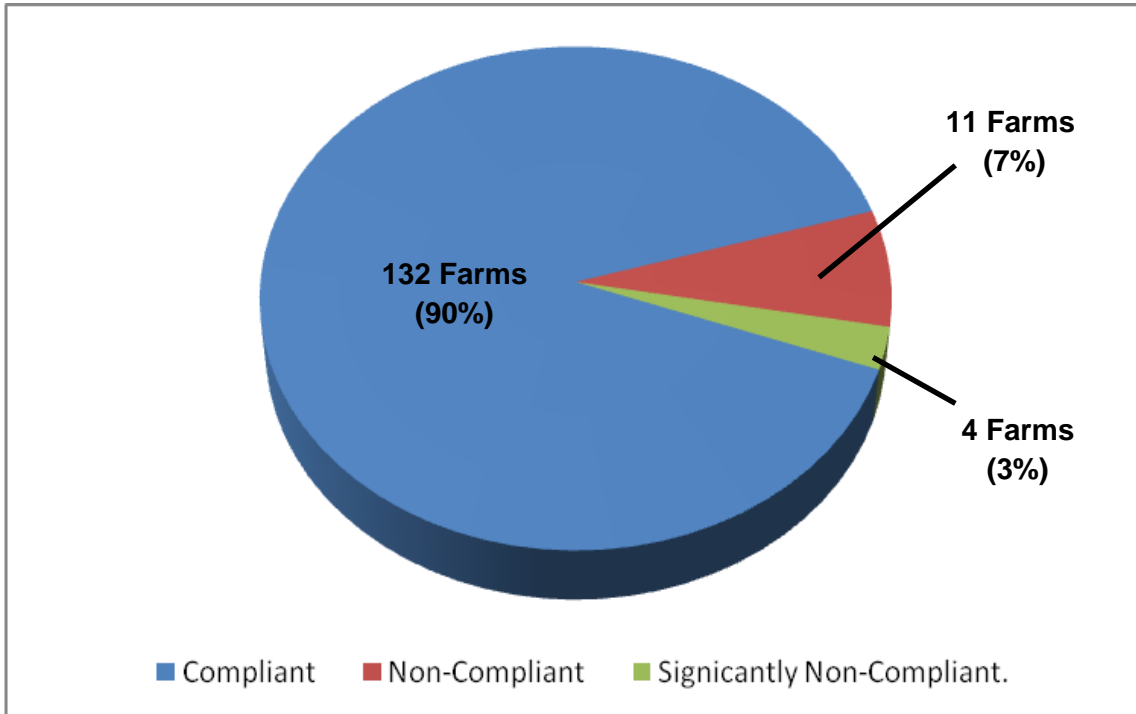


Figure 1: Compliance with respect to Rule 36.1.3 of the TRMP, Resource Consent conditions, and Section 15(1) of the RMA 1991 following the inspection of all farms in Tasman District.

It is worth noting that two of the four farms graded “Significantly Non-compliant” during the 2010/2011 season survey were repeat offenders. They still continue or elect not to comply with their respective Enforcement Orders/Abatement Notices that have been placed on them during a previous season. In response to this unwillingness to comply Council is again left with no option but to undertake consequential enforcement action that again may involve action before the courts. Any such actions will be determined once Council staff have completed a full and thorough investigation of the circumstances surrounding the non-compliance found. The other farms were first time offenders. All parties involved received an Abatement Notice. Enforcement Action undertaken for the 2009/2010 season is detailed below in section 3.2 of this report.

Unlike previous reports there is one issue of non-compliance that stands out as being common issue of concern, this being ponding of effluent on the grounds surface. This non-compliance was typically observed where farms did not have sufficient wet weather contingencies in place and were left in a situation where effluent was applied to saturated pasture. A further trend that was observed was that this non-compliance was by far more prevalent in the Murchison area than any other area of the District. We will monitor this situation and work with farmers and industry representatives to address this issue. Currently staff are working to develop two farm plans with the farmers involved in the hope of them transferring this knowledge to others.

Figure 2 shows a comparison of the compliance rates from the 2005/2006, 2006/2007, and 2007/2008-2008/2009 surveys with this survey. Due to the limited nature of the 2009/2010 survey (just 37 farms surveyed) those statistics are not included in Figure 2.

From Figure 2 it can be seen that full compliance has continued to improve from season to season with this reporting period being no exception. The percentage of farm inspections graded as “Compliant” has improved each year since the initial survey in 2005/2006. Correspondingly, those inspections graded either non-compliant or significantly non-compliant have continued to fall. This continual improvement 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.

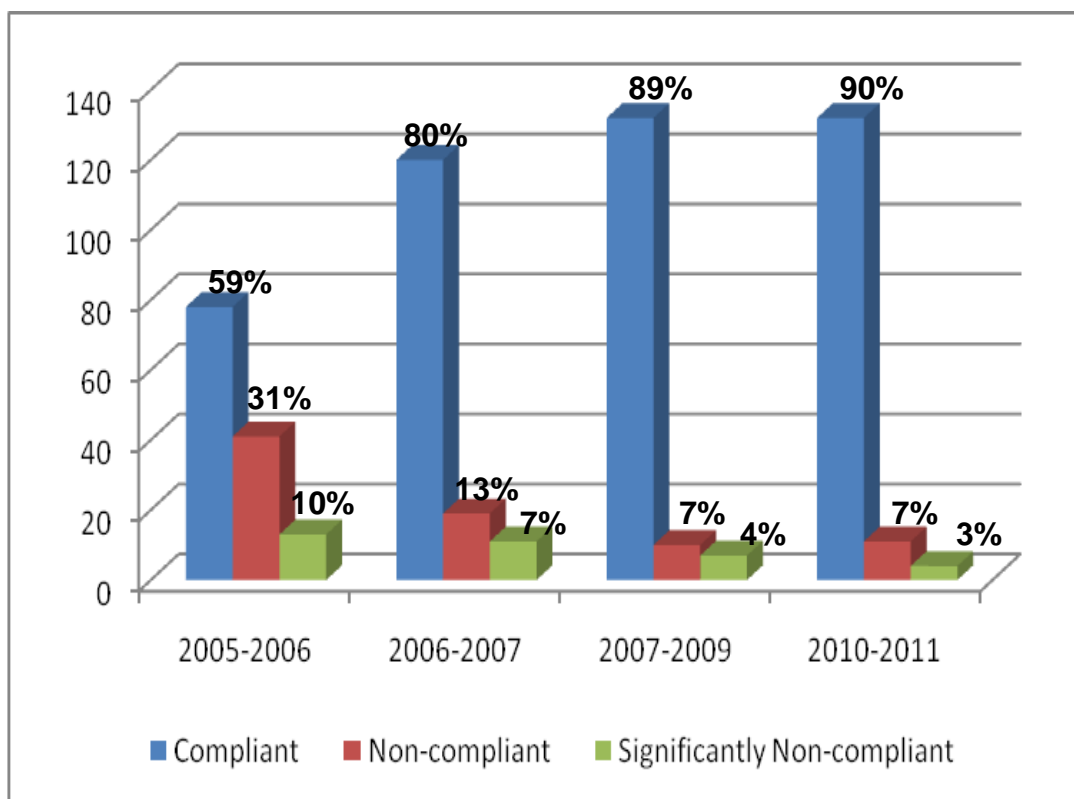


Figure 2: Comparison of Compliance with respect to Rule 36.1.3 of the TRMP, Resource Consent conditions, and Section 15(1) of the RMA 1991 from previous dairy seasons.

### 3.2 Enforcement Action

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. Fifteen inspections resulted in Council taking enforcement action during the 2010/2011 season. The type of enforcement action taken is largely determined on the resulting adverse environmental effect arising from that non-compliance.

### **Formal Warning Letter**

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 have taken into account that the operator had previously received formal direction. All eleven inspections that were graded non-compliant 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 concerned had a previous good compliance history. In each case the farm owner/worker was made well aware that continued, un-announced inspections would be made for the remainder of the season. It was also made clear the further formal enforcement action could result if non-compliance was found again.

### **Abatement Notices**

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.

Three Abatement Notices were issued during this reporting period. These notices required that an actual or potential unauthorised direct or indirect discharge to water be ceased immediately. These notices also required immediate improvements to effluent systems to avoid remedy or mitigate further discharges occurring.

### **Infringement Fines**

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.

No infringement fines have been issued in response to farm inspections so far this season.

### **Prosecutions and Enforcement Orders**

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.

At the time of the writing of this report no Infringement Fines, Enforcement Orders, or Prosecutions have been initiated for offences found during the 2010/2011 season. Staff continue to investigate the circumstances surrounding each case of Serious Non-Compliance, following which a decision as to what enforcement action(s) will be taken will be made.

It is encouraging to report that two of the three farms that have current Enforcement Orders against them demonstrated full compliance with the requirements of these orders, and the permitted activity rules. However, one farm, whom Council has taken assertive action against in past seasons, (including Abatement Notices, Infringement Fines, Prosecution, and Enforcement Orders) continues to show disregard or simply elects not to comply with the effluent rules despite been given the same opportunities as others. This farm is again under investigation for Significant Non-Compliance.

#### **4. Clean Streams Accord National Targets**

There are five separate targets to the Accord. In broad terms these are:

- that dairy cattle be excluded from larger streams;
- that regular dairy crossings be bridged or culverted;
- that all dairy farmers comply with resource consent or permitted activity standards;
- that all dairy farmers carry out nutrient budgeting;
- and that all regionally significant wetlands on dairy farms be fenced out.

Tasman District's performance in relation to each of the five targets is discussed in detail below. The statistics presented relate only to the 137 farm dairies in Tasman that supply Fonterra Ltd. The remaining ten farms supply Westland Milk Products Ltd and are not subject to the Accord. During the 2010/2011 season all of the 137 Fonterra supply farms were inspected.

##### 4.1 Preventing Stock Access to Waterways

###### **Accord Target:**

**Dairy cattle are excluded from 50% of streams and rivers by 2007, 90% by 2012.**

**Dairy cattle are excluded from 100% of estuaries and lakes by 2007.**

In most cases, fencing is the only practical method of excluding stock access to waterbodies. However, there may be circumstances where fencing is not required due to natural barriers, such as dense vegetation and steep river and stream banks.

Table 1 shows the average "rate of stock exclusion" for each of the sub-regions for Tasman District has increased from 76% to 92% between the 2005/2006 and 2007/2009 reporting periods and increased further to be 95% by the end of the current reporting period. Considerable effort has been made within the last 24 months to exclude stock from Tasman's waterways, this is particularly so for the Maruia and Motupipi zones. These two zones have up until now lagged behind the rest of the district in terms of excluding stock from waterways, but no longer stand out as being behind any other area of Tasman. In fact all zones now meet the 2012 Accord target of 90% of waterways having stock exclusion.



However, there are still a small handful of farms that when considered alone have made little progress and have some way to go.

All estuaries and lakes have 100% stock exclusion and meet the 2007 target.

**Table 1:** Comparison of the 2005/2006, 2006/2007, 2007-2009, and 2010/2011 seasons with respect to the percent of streams on Fonterra supply farms in Tasman District that have stock excluded from them

Sub-Region	Zone	Average % of streams with stock exclusion			
		2005/2006	2006/2007	2007/2009	2010/2011
Central	Waimea	92%	92%	96%	100%
	Upper Motueka	88%	91%	91%	99%
	Moutere	80%	100%	100%	100%
Golden Bay	Bainham/Rockville	70%	82%	89%	95%
	Pakawau	79%	89%	93%	95%
	Puramahoi/Onekaka	75%	92%	93%	94%
	Motupipi	75%	85%	85%	99%
	Kotinga/Anatoki	95%	97%	97%	97%
	Takaka Valley	76%	98%	98%	97%
	Owen	70%	83%	86%	90%
Murchison	Matiri Valley	95%	95%	97%	97%
	Murchison Town	71%	81%	96%	98%
	Mangles/Tutaki	85%	90%	90%	90%
	Matakitaki	68%	95%	96%	96%
	Maruia	25%	75%	75%	91%
	<b>TOTAL</b>	<b>76%</b>	<b>90%</b>	<b>92%</b>	<b>95%</b>

#### 4.2 Stock Crossings

A “regular stock crossing” is defined under the Accord as a stream that is “deeper than a “Red Band” (300mm) and “wider than a stride” (1m), and permanently flowing”...“where stock regularly (more than twice a week) cross a watercourse”.

##### **Accord Target:**

**50% of regular crossing points have bridges or culverts by 2007, 90% by 2012.**

During the 2005/2006 farm survey a total of 244 stock crossings, were identified as being subject to the Accord definition in Tasman District. By the end of the 2008/2009 dairy season 93% (227) of the regular crossings had been improved such that cattle do not access the waterway. This accomplishment meant that Tasman District, as a whole had already met the 2012 Accord target. Although this accord target has been met, it is encouraging to report that dedicated farmers are continuing to bridge the last remaining crossings in the District. The final results from the 2010/2011 survey show that a further five regular crossings have been eliminated. Four culverts/bridges were installed, and one crossing has been removed as the

land that was being accessed by the crossing is now not a part of the grazing rotation. From this survey, 95% (232) of the regular crossings on Fonterra Supply farms have been improved such that cattle do not access the waterway. This means Tasman District as a whole meets the 2012 target of regular 90% of crossings points having bridges. However, there are still a handful of significant crossings in terms of size and potential environmental impact in that remain Tasman.

#### 4.3 Nutrient Management

**Accord Target:**

**100% of dairy farms to have in place systems to manage nutrient inputs and outputs by 2007.**

The 2010/2011 survey found that all of Tasman's 137 Fonterra farms have a current nutrient budget completed for the dairy platform of the farm. In most cases a separate budget had also been completed for the effluent disposal area.

#### 4.4 Management of Farm Dairy Effluent

**Accord Target:**

**100% of farm dairy effluent discharges to comply with resource consents and regional plans immediately.**

Compliance with respect to Resource Consents and the TRMP is discussed in full in Section 3 of this report. Presented below in Figure 3 is the number of fully compliant Fonterra supply farms (both Permitted Activities and those with Discharge Permits).

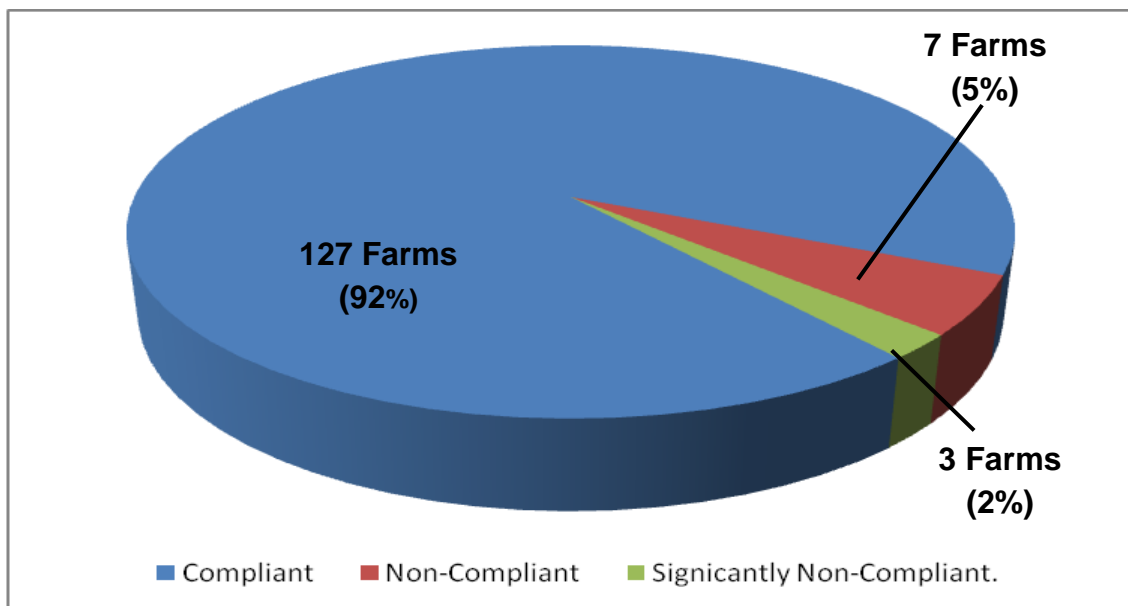


Figure 3: Compliance with respect to Rule 36.1.3 of the TRMP, Resource Consent conditions, and Section 15(1) of the RMA 1991 following inspections of all 137 Fonterra supply farms.

Figure 3 shows that of the 137 Fonterra Supply Farms in Tasman, 127 inspections (92%) fully complied with Section 15(1)(b) of the RMA 1991, all sections Rule 36.1.3 of the TRMP or consent conditions during the 2010/2011 season.

Seven (5%) of inspections were graded “non-compliant” and three inspections (2%) were graded “significantly non-compliant”. The circumstances of the non-compliance and subsequent enforcement action are detailed in full in Sections 3.1 and 3.2 of this report.

#### 4.5 Wetlands

##### **Accord Target:**

**50% of regionally significant wetlands to be fenced to prevent stock access by 2009, 90% by 2012.**

The Accord acknowledges that over 90% of lowland wetlands in Tasman District have been drained and that natural water regimes of wetlands need to be protected.

The Council is in the process of further developing the inventory of wetlands from which staff will determine the level of significance (at a regional level) of the wetlands on or adjacent to dairy farms. Until this work is completed the level of compliance with respect to each of the Accord targets cannot be accessed.

It is also noted that the Tasman District Council is also involved in the Natural Habitats Tasman project where landowners and Council are actively working together to identify significant habitats on private land and working with the individual landowners to ensure appropriate management and protection of these habitats.

## **5. Costs**

Presently there is uncertainty as to the legal means open to Council in order for it to recover the costs incurred in the monitoring of farm dairies with respect to the Permitted Activity Rules. At present Council has determined that we do not have a robust method to rely on although other regional Councils are exploring charging for such monitoring. Therefore programme costs for permitted activity monitoring are presently covered by the general rate.

The costs associated with consent monitoring are recovered by way of a Section 36 (RMA) charge.

## 6. Conclusion

It will be recalled that the purpose of this report was twofold. Firstly it is to present the final results of compliance of the 2010/2011 dairy season with respect those farm dairies that hold Resource Consent to discharge treated dairy effluent to water, and also compliance with respect to those farms that operate under the Permitted Activity Rule 36.1.3 of the TRMP - Discharge of Dairy Effluent to Land. Secondly this report presents an up-date of where Tasman District lies with respect to the five national targets as set out in the Clean Streams Accord.

Summarised below are the major findings of this report.

A total of 147 dairy sheds had active discharges in the Tasman District during the 2010/2011 season. Of these, 141 farm dairies operated as Permitted Activities and the remaining six held Resource Consents to discharge treated effluent to water.

All farms were inspected this season. The results of this survey were:

- 90% - Compliant.
- 7% - Non-Compliant
- 3% - Significantly Non-Compliant

There was one issue of non-compliance that stood out as being common issue of concern, this being ponding of effluent. This non-compliance was typically observed where farms did not have sufficient wet weather contingencies in place and were left in a situation where effluent was applied to saturated pasture. A further trend that was observed was that this non-compliance was by far more prevalent in the Murchison area than any other area of the District.

Tasman District currently has 137 farms that supply Fonterra and are therefore subject to the national targets of the Clean Streams Accord. The 2010/2011 reporting period saw further positive steps forward by most farms towards meeting the Accord targets. At the end of the season, Tasman Accord statistics were:

- 95% of streams have stock excluded from them.
- 100% of estuaries and lakes have stock excluded from them.
- 95% of regular crossings have bridges or culverts.
- 100% of farms have a nutrient budget.
- 92% of farms comply with their consent conditions or regional rules.

Heading into the new dairy season Tasman District continues to present a good rate of compliance with respect to farm dairy effluent management. These results show that Tasman District now meets the Accord targets relating to stock exclusion to water ways and estuaries, bridging, and nutrient management.

## 7. Where to From Here?

The 2011/2012 season commences in September and inspections will begin in earnest with a view to once again completing a full assessment of every farm in regards to both dairy effluent disposal and clean Streams Accord performance.

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.

The 2010/2011 season's compliance results illustrate that Council needs to work closely next season with the industry in order to improve on farm best practise in the Murchison area, particularly with respect to wet weather contingencies. Some initial discussions have already been held with stakeholders on this issue.

Finally its is pleasing to see that the Dairy Industry is also being proactive with the introduction by Fonterra Ltd of the every-farm every-year farm visit and the release of the Farm Dairy Effluent Design Code of Practice and Standards. Dairy effluent is now more commonly being seen as a valuable resource and not a waste product. This is leading to better on farm management as it has economic benefits, and consequently improved environmental outcomes.

## 8. RECOMMENDATION

It is recommended that the Committee receives this report.

## 9. DRAFT RESOLUTION

**THAT the Environment & Planning Committee receives the 2010/2011 Farm Dairy Effluent Compliance Report REP11-07-05.**



Kat Bunting  
**Compliance Officer**