

Marlborough Stream Crossings Report



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**Stream Crossings Surveys
for Havelock/Kaituna, Linkwater and Wider Marlborough
and
Update on Previous Stream Crossings Surveys for
Catchments of Rai, Pelorus and Tuamarina Rivers**

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Before



Culvert under State Highway 1



After

Introduction

There is increasing concern with regard to the decline in water quality throughout New Zealand, particularly in rural catchments. Stakeholders in the Marlborough community have identified that local water quality is highly valued and that action is required to preserve and improve this essential resource. The impact of dairying, particularly from stream crossings, has been identified as a factor potentially contributing to the decline in water quality.

Resource Consent is required to disturb the bed of a waterway and to discharge contaminants to water, pursuant to sections 13 and 15 of the Resource Management Act 1991. The activity of walking dairy herds through waterways results in discharges of contaminants and stream bed disturbance. Therefore resource consent is required.

To promote environmentally sustainable practices and to carry out its functions under the Resource Management Act 1991, the Marlborough District Council (“Council”) has a programme of carrying out stream crossing surveys on an area by area basis throughout Marlborough. The overall aim of these surveys is to work with dairy farms in Marlborough to reduce the effects of dairy herds crossing waterways.

Stream crossing surveys were completed in Rai Valley, Pelorus and Tuamarina during 2003, 2004 and 2005 respectively. The results of these surveys have been outlined in previous reports. The progress made in each area since the initial surveys is presented in Part II of this report.

During January and February 2007 three stream crossings surveys were carried out with dairy farmers in Linkwater, Havelock/Kaituna and the wider Marlborough area (includes Northbank, Wairau Valley and Wairau Plains). The results of these surveys are outlined in Part I of this report.

Although stream crossing sites are not permitted under the Resource Management Act 1991, it is acknowledged that to eliminate all crossings in a short timeframe may be financially devastating to some farmers. When initially presented with this issue it was considered necessary to have a practical way of dealing with the crossings having the greatest impact in each area of Marlborough. After consultation with farmers in target areas it was determined that each stream crossing site would be prioritised based on herd size, frequency of use, size of waterway crossed and continuity of flow in the waterway.

A decision on how stream crossings should be dealt with on dairy farms in the Linkwater, Havelock/Kaituna and wider Marlborough is yet to be made by the Marlborough District Council. In making this decision they will take into account the opinions of dairy farmers in each area, which are summarised in this report.

Fonterra have also had an important role in encouraging farmers to consider and address the impact of their farming practices on water quality. To encourage good environmental on-farm practices and to maintain the vital overseas markets Fonterra has, in conjunction with groups representing central and local government, produced the Clean Streams Accord. The overall goal of this Accord is *clean healthy water in dairying areas*. The Accord sets 5 targets to achieve this goal including *50% of regular crossings points have bridges or culverts by 2007 and 90% by 2012*.

For the purpose of this report the term “stream crossing” refers to any site where a dairy herd crosses through a waterway and does not include general stock access. The term “waterway” refers to any sized drain, ditch, swamp, creek or river, whether it is dry, flowing or ephemeral.

Part 1 – Stream Crossing Survey Results

1.1 Introduction

The 2007 Stream Crossing Surveys involved Council staff visiting dairy farms in Havelock/Kaituna, Linkwater and the Wider Marlborough area. These visits occurred during January and February 2007. The purposes of these surveys were:

1. To determine the location of all stream crossing sites and collect information regarding each site;
2. To hear farmers views of how stream crossings should be managed in each area.

The questions asked by Council and the answers provided by farmers is divided by area and summarised below.

1.2 Linkwater Stream Crossing Survey

Data Collected

There are 7 dairy farms in the Linkwater area. Council staff visited each farm and collected data on each stream crossing site. The table below summarises some of the quantitative data gathered in the area.

Linkwater	2007
Number of Dairy Farms	7
Number of Dairy Farms with Stream Crossings	6
Total Number of Dairy Cows	1777
Total Number of Stream Crossing sites	17
Total Number of Priority 1 & 2 Crossings	12

Farmers Opinions

Opinions were sought from representatives from each farm with regards to how stream crossings in the area should be managed. Below is a summary of the questions asked by Council and the answers provided.

Is it important to prevent dairy herds walking through waterways?

Six farmers believed it was important to prevent dairy herds walking through waterways, although one of these farmers stressed the importance of allowing cows access to waterways for drinking. One farmer was uncertain and did not provide comment.

Ideas for action to be taken by MDC to encourage farmers to prevent dairy herds walking through waterways

The concept of prioritising crossings was considered important by most farmers, although they had varying ideas of what factors resulted in a crossing being a priority. Farmers suggested that frequently used crossings, bigger crossings, crossings over permanently flowing waterways and crossings visible from State Highways were the priority and should be eliminated first. One farmer suggested that crossings should be prioritised given the cost of the bridge/culvert per the size of the herd as this was a fair method of dealing with income versus costs. Another farmer suggested a farm plan that identified and prioritised crossings should be produced for each property.

It appeared that the design of the culvert/bridge was an issue for some farmers with 3 farmers suggesting that Council provide more assistance with the structural design, as one farmer put it “give us ideas and information so we can decide what to do”.

Five farmers advised that resource consents should be processed free of charge. There were also comments about keeping the consent as simple as possible.

One farmer advised that he found the biggest hurdle to be organising the contractors to do the works and suggested that someone should co-ordinate contractors and engineers.

The issue of enforcement and education was raised by a small number of farmers. One farmer considered farmers should be encouraged by education not enforcement, where another advised Council to “get tough with consistent offenders”. Another farmer was concerned that he will put a crossing in and others will not and he does not want to see others doing nothing.

One farmer was of the opinion that Council should just set a date when crossings must be eliminated and see what happens, although he did stress the importance of flexibility with genuine cases of hardship.

Two farmers were of the opinion that farmers should just get on with eliminating crossings as there had been plenty of warning, as one farmer put it “farmers should not get to uptight about stream crossings as Council has been talking about them needing doing for a long time so there has been plenty of time to prepare”.

Generally farmers seemed keen to work with Council and appreciated the importance of give and take on both sides. As one farmer put it “he appreciated the opportunity Council has given him to improve his systems over time”.

Do you have plans to prevent dairy herds walking through waterways on your farm?

All farmers with stream crossings had put a lot of thought into how to address their issues and some of these farmers were already planning their crossings.



1.3 Havelock Stream Crossing Survey

Data Collected

There are 7 dairy farms in the Havelock/Kaituna area (includes farms on SH6 between Havelock township and the Wairau Bridge). Council staff visited each farm and collected data on each stream crossing site. The table below summarises some of the quantitative data gathered.

Havelock/Kaituna	2007
Number of Dairy Farms	7
Number of Dairy Farms with Stream Crossings	6
Total Number of Dairy Cows	1452
Total Number of Stream Crossing sites	14
Total Number of Category 1 & 2 Crossings	9

Farmers Opinions

Opinions were sought from representatives from each farm with regards to how stream crossings in the area should be managed. Below is a summary of the questions asked by Council and the answers provided. Two farms in this area are owned by one farmer so only 6 farmers were interviewed.

Is it important to prevent dairy herds walking through waterways?

One farmer was of the opinion that it was important to prevent dairy herds walking through waterways. The remaining five farmers had varying opinions, but generally agreed that dairy herds should only be prevented from walking through waterways in some cases, e.g. one farmer considered that herds of 1000 plus cows should not walk through waterways and another farmer gave the opinion of “yes and no”.

One of these farmers commented that he has seen some bad crossings and would not like to swim in waterways full of effluent, however he was of the opinion that the occasional stream crossing that are visible from the road made everyone look bad and that most crossings were acceptable.

Ideas for action to be taken by MDC to encourage farmers to prevent dairy herds walking through waterways

Three farmers suggested that a priority system was the best method, with crossings being prioritised depending on waterway size, frequency of use, herd size and whether the waterway is permanently flowing. Contrary to this one farmer was of the opinion that all crossings should be eliminated.

Two farmers raised the issue of beef, pig and sheep farmers, one stated “work with all farmers on a catchment to get it fenced. It is not right to have dairy farmers forking out thousands for bridges when neighbours have beef cows in the river every day”.

Two farmers raised the issue of resource consents, one suggested they should be processed for free another wanted help completing the application forms and the other wanted to minimise third party involvement.

One farmer considered advice on methods of eliminating crossings would be useful.

Financial matters were raised by three farmers, who advised there should be subsidies provided and highlighted the importance of considering the Fonterra payout and the farmer’s individual financial resources.

One farmer advised Council should not use enforcement as it did not help.

Another farmer did not consider that Fonterra or Council should be involved. He was of the opinion that it is not fair to have someone telling him to how to run his farm when he is not doing a bad job managing the environment on his own.

Another farmer did not give any suggestions on how to manage stream crossings, but highlighted the importance of a common sense approach.

Do you have plans to prevent dairy herds walking through waterways on your farm?

Of the five farmers that had crossings, two farmers had definite plans to eliminate crossings whilst two indicated they were not intending eliminating crossings and one was re-considering the use of the land over the waterway.

One farmer advised that his stream crossing sites were on land he was leasing and could not afford to construct culverts on land he did not own.

If Council was to set a time by when all farmers in your area were to have ceased walking dairy herds through creeks what is a fair time?

Three farmers suggested timeframes between 2 – 5 years, however one of these farmers considered the timeframe should depend on whether or not the river was permanently flowing.

The importance of Fonterra Stream Accord was raised by one farmer who said that “the timeframes have been set by Fonterra and Council should go with that”.

Another farmer did not give a timeframe as he considered this would be dependant on the Fonterra payout.



Wider Marlborough Stream Crossing Survey

Data Collected

There are 9 dairy farms in the Wider Marlborough area (includes Wairau Valley, Northbank and the Wairau Plains). All 9 farms were visited and data collected on each stream crossing site. The table below summarises some of the quantitative data gathered.

Wairau Plans	2007
Number of Dairy Farms	9
Number of Dairy Farms with Stream Crossings	1
Total Number of Dairy Cows	2150
Total Number of Stream Crossing sites	5
Total Number of Category 1 & 2 Crossings	2

Farmers Opinions

Opinions were sought from representatives from each farm with regards to how stream crossings in the area should be managed. One farmer chose to respond “no comment” to all of the questions, the summary below outlines the questions asked by Council and answers provided by the other 8 farmers.

Is it important to prevent dairy herds walking through waterways?

Eight farmers agreed it was important to prevent dairy herds walking through waterways, but of that some farmers indicated that this depended on the waterway.

One farmer summed up the opinion of others by saying “No-one wants to ruin natural resources, its about finances”.

Ideas for action to be taken by MDC to encourage farmers to prevent dairy herds walking through waterways

Five farmers advised that they considered that stream crossings should be prioritised. There were various opinions regarding what crossings were the most important such as crossings over permanently flowing waterways, crossings used by larger herds, crossings that are having the greatest effect and crossings over larger waterways and rivers.

The importance of taking into account the use of land accessed by the crossing was raised, as some land is used for hay etc so is not used all season for grazing.

One farmer suggested Council should set a maximum number of times a waterway could be crossed.

It was suggested by one farmer that there should not be a requirement to eliminate crossings over ephemeral waterways, as permanently flowing waterways are more important.

Two farmers raised the issue of subsidising crossings, it was considered that Council and DoC should assist financially.

Two farmers commented that bridges are a capital expense so are not tax deductible. One of these farmers advised that Council should lobby Central Government to make bridges tax deductible or to get an equivalent figure in depreciation to give farmers a tax break.

Other issues raised were the need to work within the Clean Stream Accord, the benefits of Council processing resource consents for free, the impact of the Fonterra payout, potential for bridges to create issues with public access and it was suggested that Fonterra and Council have a pool of money to assist farmers with genuine hardship.

Do you have plans to prevent dairy herds walking through waterways on your farm?

The one farmer with stream crossings in this area has and continues to research options.

If Council was to set a time by when all farmers in the wider Marlborough area were to have creased walking dairy herds through creeks what is a fair time?

Six farmers suggested timeframes. Four of these farmers thought 3-5 years was a fair timeframe, one farmers suggested 10 years while another farmer suggested 1-2 years. A couple of farmers thought the timeframe was dependant on the importance of the crossing and the farmer's financial situation. Another farmer advised "farmers have had plenty of time already and that some people were just stuck in the mud and won't comply, they should just get all the stream crossings done."



1.5 The Next Step?

The information collected during the Havelock/Kaituna, Linkwater and Wider Marlborough stream crossing surveys will be presented to the Councillors of the Marlborough District Council who will determine whether the best course of action is to eliminate stream crossings in these areas. When making this decision they will be taking into account the opinions expressed by farmers in these areas and summarised in this report and the approach used to deal with stream crossings in other areas of Marlborough. Dairy farmers will be advised of this decision during July 2007.

Whilst a decision on how to manage stream crossings in the newly surveyed areas is yet to be determined it is appreciated that this is important for farmers for future financial planning. Thus, the crossings have been prioritised based on the Rai Valley model. These priorities are shown on the maps in Appendix One. This is a preliminary indication only to provide a starting point. The final decision will be made by Councillors of the Marlborough District Council.

Part 2 – Update on Previous Stream Crossings Surveys

2.1 Rai River Catchment Stream Crossing Survey

The Rai River Catchment Stream Crossing Survey was carried out in 2003. The results of this stream crossings survey have been extremely positive with the Rai leading the way in dealing with crossings.

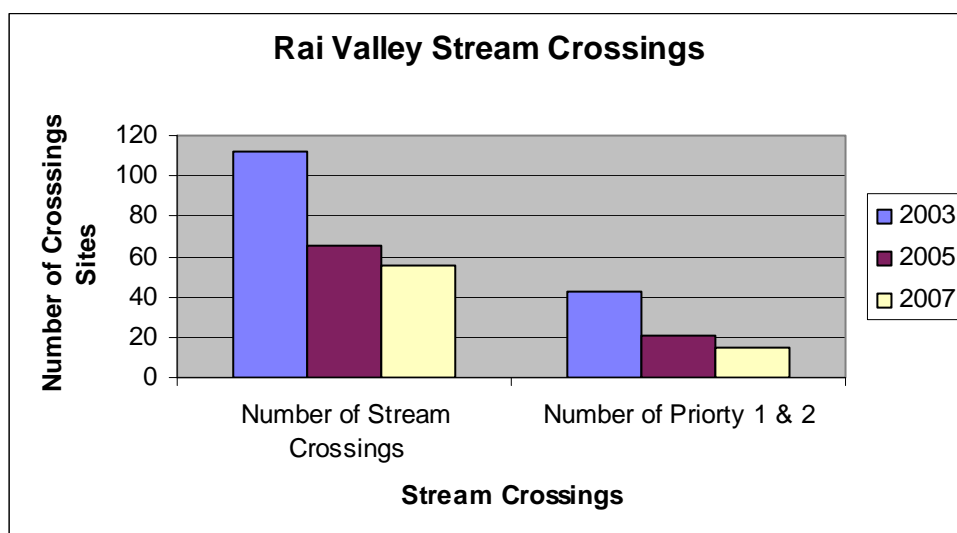
The Rai area was challenging in that there was generally a high number of crossings per farm and some of the crossings were over very large rivers that would take considerable financial inputs to eliminate. It was also the first area surveyed so farmers had not as much time to consider the issue and identify solutions.

The Council prioritised crossings and determined that all priority 1 and 2 crossings were to be eliminated by August 2006, however a 2-3 year extension to this date was given for 7 of these crossings as exceptional circumstances existed.

There are still 15 priority stream crossing sites to be eliminated in this catchment which most farmers are working towards.

The table and graph below summarises data on stream crossings in the Rai and shows the progress made towards eliminating crossings.

Rai River Catchment	2003	2005	2007
Number of Farms	27	21	20
Number of Dairy Cows	5587	4916	4686
Number of Stream Crossings	112	65	56
Number of Priority 1 & 2 Crossings	43	21	15
Number of Priority 1 & 2 Crossings Eliminated		22	6
Number of Stream Crossings Eliminated		47	9



Excellent progress was made between 2003 and 2005 to eliminate crossings, with 47 crossings being eliminated in this 2 year period. However, between 2005 and 2007 the effort to eliminate stream crossings has slowed considerably with only 9 crossings being eliminated in the last 2 years.

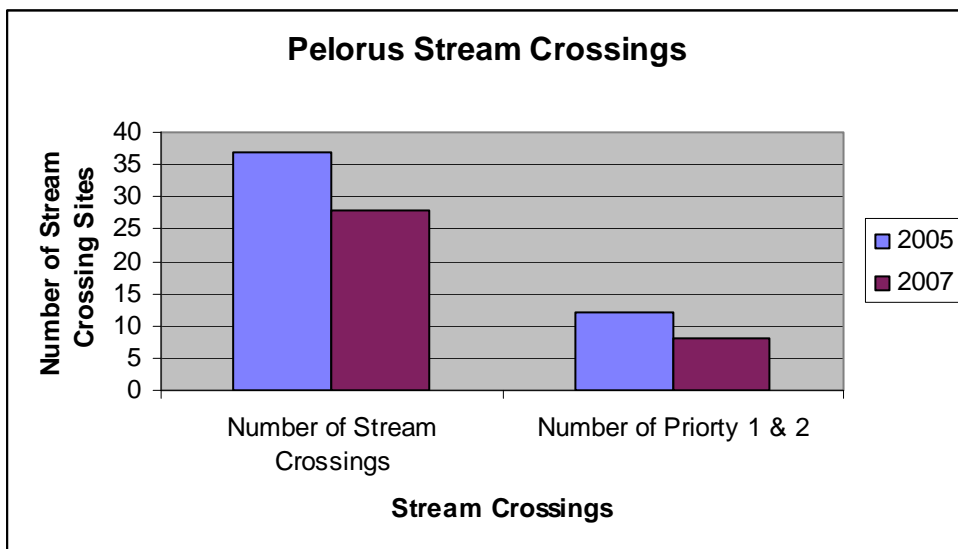
2.2 Pelorus River Catchment Stream Crossing Survey

The Pelorus River Catchment Stream Crossing Survey was carried in 2004. The Council prioritised crossings and determined that all priority one and two crossings are to be eliminated by August 2007.

A total of nine stream crossings have been eliminated since 2004. There are a further eight priority stream crossings that must be eliminated prior to August 2007. There are also 20 lower priority crossings that should be eliminated as time and resources allow.

The table and graph below summarises data on stream crossings and shows the progress made towards eliminating crossings.

Pelorus River Catchment	2004	2007
Number of Farms	12	10
Total Number of Dairy Cows	3485	3015
Total Number of Crossing Sites	37	28
Total Number of Priority 1 & 2 Crossings	12	8
Total Number of Priority 1 & 2 Crossings Eliminated		4
Total Number of Stream Crossings Eliminated		9



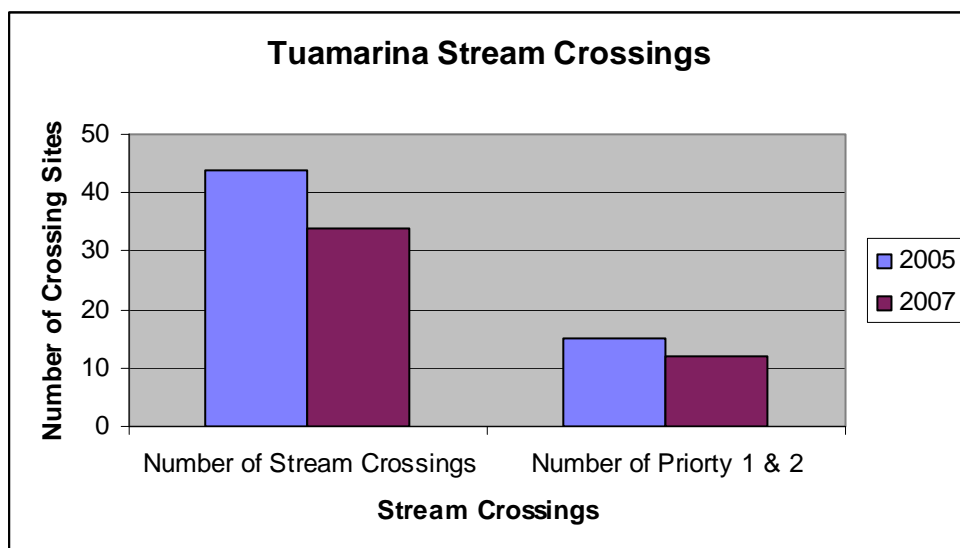
2.3 Tuamarina River Catchment Stream Crossing Survey

The Tuamarina River Catchment Stream Crossing Survey was carried in 2005. The Council prioritised crossings and determined that all priority 1 and 2 crossings were to be eliminated by August 2007.

A total of 10 stream crossings have been eliminated since 2005. There are a further 12 priority stream crossings that must be eliminated prior to August 2007. There are also 22 lower priority crossings that should be eliminated as time and resources allow.

The table and graph below summarises data on stream crossings and shows the progress made towards eliminating crossings.

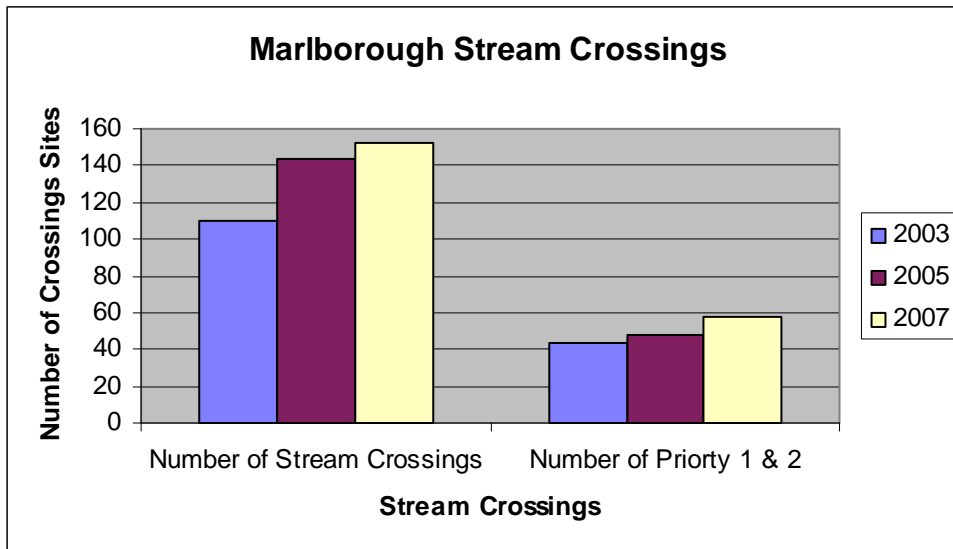
Tuamarina River Catchment	2005	2007
Number of Farms	9	8
Total Number of Dairy Cows	1828	1651
Total Number of crossing sites	44	34
Total Number of Priority 1 & 2 Crossings	15	12
Total Number of Priority 1 & 2 Crossings Eliminated		3
Total Number of Stream Crossings Eliminated		10



Part 3 - Marlborough Stream Crossings

All dairy farms in Marlborough have now been subject to a stream crossing survey. These 6 separate surveys have identified a total of 229 crossings in the Marlborough area, of which 93 were considered to be a priority 1 or 2.

The graph below shows the number of crossings. It is important to note that the reason the number of stream crossings has increased is because Council has surveyed over a period of 4 years. In 2007 Council completed surveying all the farms in Marlborough so in years to come we will see the graph trending downwards as more farmers eliminate stream crossings in all areas.



The dairy farmers of Marlborough have risen to the challenge of dealing with stream crossings and Council is aware of 75 stream crossings that have already been eliminated, the majority are located in the Rai Valley area.

As Council has moved through Marlborough carrying out surveys we have seen some innovative approaches to some challenging stream crossing sites. We would like to acknowledge the farmers that have invested considerable time and resources installing bridges and culverts on their farms.

