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**Wairau/ Awatere Resource Management Plan
Proposed Plan Change No. 62: New Dairy Farms**

**Marlborough Sounds Resource Management Plan
Proposed Plan Change No. 27: New Dairy Farms**

Report prepared to fulfil the requirements of Section 32 of the Resource Management Act 1991



Table of Contents

1. Introduction	1
2. Issue	1
3. Consultation	3
4. Proposed Provisions	4
5. Section 32 of the RMA	4
6. Objectives	5
7. Section 32 Assessment	6
8. Risk of Uncertainty or Insufficient Information	11
9. Determination	11
10. Conclusion to the Section 32 Assessment	12
Appendix 1: Areas with potential for dairy farming	13
Appendix 2: Schedule of Changes	17

1. Introduction

The impacts of discharges from rural land use intensification present one of the most serious freshwater management challenges in New Zealand. Contaminants such as nitrogen and phosphorous in non-point discharges are of particular concern. Typically these nutrients are derived from animal effluent and fertiliser applications that discharge to water from run off, drainage and leaching.

In Marlborough there is concern over the vulnerability of water resources in various parts of the District to actual and potential land use intensification through the discharge of nutrients. The 2011 MDC State of the Environment Surface Water Quality Monitoring Report¹ shows a clear link between pastoral agriculture and degraded water quality.

The most prevalent type of intensive pastoral activity in the district is dairy farming. There are over 61 dairy farms in the district with a small number of dairy farm conversions taking place in the last 5 years. Similar to other areas in New Zealand this trend can be expected to continue given the financial returns available from dairying.

While there are controls in the WARMP and the MSRMP relating to such matters as point effluent discharges, water takes and the construction of effluent ponds there are no controls in respect of non-point discharges from animal effluent and fertiliser applications or in relation to stock access to water bodies. These types of matters have been the subject of considerable debate in other regions of New Zealand where dairying has become increasingly prevalent. MDC is conscious of the need to put controls in place to manage such matters before dairying becomes established on a potentially larger scale in Marlborough.

To address this issue Council proposes to introduce a plan change to each resource management plan under the Resource Management Act (RMA) that sets out new policies and rules relating to dairy farm conversions.

MDC is also required to implement the National Policy Statement Freshwater Management (NPS). The Council anticipates that it will be able to implement most of the policies through the Plan review except for Policy A1 of the NPS which requires Council to establish cumulative contaminant limits for all water bodies. This is a complex task and requires a good understanding of the relationship between land use and water quality. Council does not hold the necessary data to implement such limits and proposes a staged programme to introduce cumulative limits by 2024. The programme for this staged implementation was notified by Council in November 2012 in accordance with Policy E1 of the NPS. The programme includes as an interim measure proposed controls on new dairy farming, which will be introduced in the above plan changes.

This report addresses Council's obligations under Section 32 of the RMA in respect of the plan changes.

2. Issue

The issue of the potential impact of land use intensification on water quality in New Zealand is a critical matter that is the subject of considerable debate. The primary driver for land use intensification is dairying.

The high economic returns available from dairying in New Zealand in recent years have resulted in a large number of conversions of less intensive farming activities such as sheep farming to dairy

¹ State of the Environment Surface Water Quality Monitoring Report, 2011 Marlborough District Council Technical Report No:11-015 June 2011.

farming. In the last 10 years the volume of milk processed has increased from 13.6 billion litres to 19.1 billion litres and the number of dairy cows has risen from 3.6 million to 4.6 million. In the same period the total hectares have increased from 1.4 million to 1.6 million and dairying itself has intensified with an increase in the average herd size from 271 to 393 cows. This trend does not show any signs of a significant slow down with further farm conversions planned, particularly in the South island and the government committed to investment in irrigation to enable further land intensification.

While there are clear economic benefits from dairy farming it is clear that it is contributing to declining water quality. Although dairying is not the only contributor to this decline, it is having a significant impact in a number of areas of the country, including areas in which conversions are occurring.

While point source discharges, such as those from effluent dairy sheds are generally controlled, it is the non point (diffuse) discharge of contaminants such as pathogens and nutrients (and in particular nitrogen and phosphorus) which are more difficult to control. These contaminants arise from direct stock defecation into waterways and seepage and run off of cow manure and urine, and fertiliser into groundwater and surface water. Contaminants in water can result in animal and public health risks, and kill sensitive organisms. Nutrients can lead to excessive plant growth and algal blooms and depletion of oxygen in the water, which in turn affects aquatic species. The effects on water quality from activities such as intensive farming is discussed in the report by the Parliamentary Commissioner for the Environment "Water Quality in New Zealand: Understanding the Science" March 2012.

Locally the dairy farm sector is relatively small with 61 dairy farms in the district and a combined herd size of approximately 17,300 cows. There are 42 dairy farms in the WARMP area and 19 in the MSRMP area. The major areas for dairying in the district are the Rai, Pelorus, Kaituna and Tuamarina River catchments and the Canvastown area. As indicated above, a small number of conversions have occurred in recent years. However it is clear that there is potential for significant expansion in not only the above areas but also in other localities in which dairying is not currently present. In Marlborough, dairying is limited by the availability of water for irrigation (which is essential in low rainfall climate of Marlborough) and returns from other competing land uses, which is primarily likely to be viticulture. The potential expansion of dairying onto existing pasture is shown in a number of potential areas in the district at Kaituna, the Wairau Valley, the Awatere Valley and in the Flaxbourne area in Appendix 1.

At Kaituna there is a number of existing dairy farms and no vineyard development. There is potential for expansion given the absence of viticulture and water from the Kaituna River may be available for further allocation. There is also the possibility of conveying water from the Wairau River which has significant capacity for allocation.

The Wairau Valley has some vineyard development and a small number of existing dairy farms. There is potential for dairy conversion on both sides of the river. The availability of water in this area is good as the Wairau River has the capacity for a significant amount of further water allocation. In addition, most of the properties with existing water permits have water allocations at pastoral irrigation rates and there is also a consented (but yet to be built) community scheme that has the capacity to service all of this area.

The Awatere Valley has significant vineyard development with no dairy farms, although it is understood there have been enquiries of dairy conversions in the area. There is a reasonable potential for conversion on both sides of the river although the Awatere River is a constraint as it is considered to be fully allocated. However there are existing water permits that have not been fully utilised which could be utilised for dairying.

At Flaxbourne there has been a small amount of vineyard development. Currently there are no existing dairy farms, although landowners in the area are currently in the process of

developing a large scale community irrigation scheme. Should the scheme come to fruition there is considerable potential for conversion to dairying. Even if the scheme does not eventuate, historical water permits indicate that transportation of water from outside of the catchment is a viable option to enable conversion.

While the above areas appear to offer the most potential there may also be other areas in the district suitable for conversion.

While expansion into dairying offers considerable economic benefits to the district, Council is concerned to protect the District's groundwater and surface water from the actual and potential adverse effects arising from dairying. Current monitoring indicates a correlation between pastoral land use (such as dairying) and declining water quality and Council wants to put steps in place to at least address effects from new conversions.

The report concludes:

- There are very few point discharges to surface waters in Marlborough and the biggest threat to water quality comes from diffuse pollution from land use.
- Water quality is seen to deteriorate in agricultural and urban areas ,particularly where there has been little or no riparian management and/or where there are extensive pastoral areas
- Nitrate levels are of most concern in spring fed rivers such as Mill stream and Doctors Creek and therefore the need to carefully manage groundwater quality.
- Land use (in particular pastoral land use) shows a significant correlation with water quality indicating that diffuse pollution is the main problem.

In light of the less than desirable situation in respect of existing water quality and its correlation with pastoral intensification and the potential for increased dairy conversions, Council propose to address the issue of declining water quality from diffuse sources by implementing plan changes to control new dairy farms. As indicated above these changes form part of Council's response to the NPS and may eventually be overtaken by a catchment wide approach rather than a particular land uses. However a catchment wide approach is unlikely to be implemented for some time and the proposed provisions provide interim control.

Council is aware that while significant conversions to dairy farms has not yet occurred it wishes to be proactive and put in controls before new dairy farms are established and further deterioration of water quality occurs. Council is conscious of the extremely large sums of money that are being spent retrospectively to rectify degraded water quality in such catchments as Lake Rotorua, Lake Taupo and Te Waihora /Lake Ellesmere which have received significant amounts of nutrients over many years.

3. Consultation

To date consultation has taken place with Fonterra, Federated Farmers, Dairy NZ and Fish & Game.

A teleconference between a representative (Matt Harcombe) of Federated Farmers and Council staff was held in August 2012 in respect of the proposed plan changes. A number of issues were discussed including Council's approach, nutrient management plans and the status of activities with a preference of Federated Farmers for either permitted or controlled activity status.

A meeting with representatives of Fonterra (John Hutchings), Federated Farmers (Matt Harcombe and Michael Bennett) and Dairy NZ (James Ryan) was held by Council officers in November 2012. Issues discussed included rationale for the plan changes, status of the activity Council's implementation of the NPS, dairy industry initiatives in respect of water quality, equity with other land uses and timing of the plan changes.

The above industry parties requested an audience with the Council's Plan Review Sub-Committee. Representatives from Fonterra and Federated Farmers gave presentations to the Sub-Committee in February 2013. The presentations focused on the programmes the dairy industry had in place, the new dairy industry accord and the parties' relationships with farmers.

Consultation with Fish and Game has also taken place over the last few months.

Consultation has assisted the Council in the preparation of the plan change including the identification of alternatives, and costs and benefits.

4. Proposed Provisions

The new provisions comprise policies and methods relating to the requirement for a land use consent to be obtained for the establishment and operation of any new dairy farm. The proposed provisions are attached as Appendix 2.

The purpose of the provisions is not to prevent the establishment of new dairy farming, but to ensure that each new development is sustainable with respect to potential impacts on water quality. As such, two new policies are proposed for each plan relating to the requirement for land use consent for new dairy farms and the matters to be addressed including stock access to water bodies, riparian buffers, storage of effluent and a nutrient management plan.

The new policies direct that land use consents should be granted where the proposed farming will have no more than minor effects on groundwater or surface water quality. To reach this determination, applicants must identify the risks of the new activity and set out the measures that will address those risks. As a minimum this includes measures to address stock entering any river, lake or wetland, no-grazed buffers along these water bodies and provisions for the storage of dairy effluent (including appropriate separation distance to water bodies) and a nutrient management plan. These actions also form part of the dairy industry's response to the freshwater challenge and are recorded in the document "Sustainable Dairying: Water Accord".

The methods to achieve the relevant objectives and policies are the introduction of a rule requiring new dairy farms to apply for resource consent as a discretionary activity including the requirement for a Nutrient Management Plan and the encouragement of Water Quality Management Plans.

A definition of "New Dairy Farming" is to be introduced into the two plans.

Collectively, the provisions recognise that the best time to implement management to minimise the impacts of the dairy farming operation on water quality is at the time of conversion. At this time, the farmer is determining the appropriate set-up of the farm operation and integrating the above (and other) actions into this process will save them both time and money.

5. Section 32 of the RMA

Section 32 of the RMA requires consideration of alternatives and assessment of the benefits and costs of adopting any objective, policy, rule, or method in the Plan.

Sections 32(3)(a)(b) and (4) of the Act are as follows:

(3) *An evaluation must examine—*

(a) *the extent to which each objective is the most **appropriate** way to achieve the purpose of this Act; and*

(b) *whether, having regard to their **efficiency and effectiveness**, the policies, rules, or other methods are the most appropriate for achieving the objectives.*

(4) *For the purposes of the examinations referred to in subsections (3) and (3A), an evaluation must take into account—*

(a) ***the benefits and costs** of policies, rules, or other methods; and*

(b) *the **risk of acting or not acting** if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.*

Appropriateness refers to the suitability of any particular provision to its proposed purpose.

Effectiveness refers to how successful a particular option is in achieving the desired outcomes as stated in the objectives.

Efficiency refers to measuring by comparison of the benefits and costs. The most efficient method will achieve the environmental outcome at the least overall cost.

6. Objectives

The proposed plan change does not introduce new objectives. The relevant existing objectives which are to be achieved by the new policies and methods are as follows:

Wairau/ Awatere Resource Management Plan

Wairau Plain (12.2.2.3)

To maintain or enhance ... the quality of surface and groundwater.

General Rural (12.4.2.3)

Manage the land resource and associated waste discharges in such a way as to protect ... surface and groundwater quality ... (consistent with human consumption of groundwater and fish from surface waters) ... and the maintenance of the natural ... values of the water resources and their associated ecosystems.

Marlborough Sounds Resource Management Plan

Rural Environments (11.3.1)

Sustainable management of rural resources and integrated resource use to ... avoid, remedy or mitigate adverse effects of activities

As indicated above two new policies and one new rule are proposed for the Wairau/Awatere and Marlborough Sounds Resource Management Plans.

The appropriateness of the new policies and rules and other options are therefore assessed against the above objectives of the Plans below in Section 5. The respective objectives from the two plans are discussed together.

7. Section 32 Assessment

This section assesses the different options considered to achieve the relevant objectives having regard to the requirements of section 32 of the RMA including the proposed option for the plan change of regulating land use.

OBJECTIVES

Wairau/ Awatere Resource Management Plan

Wairau Plain (12.2.2.3)

To maintain or enhance ... the quality of surface and groundwater.

General Rural (12.4.2.3)

Manage the land resource and associated waste discharges in such a way as to protect ... surface and groundwater quality ... (consistent with human consumption of groundwater and fish from surface waters) ... and the maintenance of the natural ... values of the water resources and their associated ecosystems.

Marlborough Sounds Resource Management Plan

Rural Environments (11.3.1)

Sustainable management of rural resources and integrated resource use to ... avoid, remedy or mitigate adverse effects of activities

OPTION 1

Status Quo

This option continues the MDC's current approach towards the management of dairy farms with no changes to the provisions of the Plan, the Regional Policy Statement (RPS) or any other regulatory document that manages land use or regional water quality.

NB The WARMP and the MSRMP currently require resource consents for activities such as point source effluent discharges, water takes and the construction of effluent ponds. However their scope does not enable conditions to be imposed in respect of non-point source discharges.

Benefits / Costs	Effectiveness / Efficiency
<p>Benefits</p> <ul style="list-style-type: none"> No additional requirements for new dairy farms or increased administration for Council. <p>Costs</p> <ul style="list-style-type: none"> Initially no additional costs for new activities. 	<p>Effectiveness</p> <ul style="list-style-type: none"> The 2011 State of the Environment Monitoring indicates water quality is deteriorating as a consequence of land uses such as intensive pastoral agriculture (under the status quo approach). Therefore

<p>In the longer term there will potentially be greater economic and environmental costs to address deteriorating water quality (including potential restrictions on further dairy farm conversions).</p> <ul style="list-style-type: none"> • Will not assist in meeting the NPSFM. 	<p>maintaining the status quo would not be effective in meeting the respective objectives in the Plans of maintaining or enhancing water quality and sustaining rural resources.</p> <p>Efficiency</p> <ul style="list-style-type: none"> • As this option no longer achieves the objectives, given increased awareness of effects, it is not considered to be an efficient option.
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OPTION 2

Non-regulatory

This option seeks to improve water quality through the development of voluntary or education programs.

Existing examples include Council’s Dairy Environmental Farm Programme and Fonterra operates the Clean Streams Accord.

Benefits / Costs	Effectiveness / Efficiency
<p>Benefits</p> <ul style="list-style-type: none"> • No additional direct costs or regulation on new activities • Through education some changes to management practices is anticipated <p>Costs</p> <ul style="list-style-type: none"> • Initially no additional costs for new activities. • Further programmes likely to be required. • In the longer term there will potentially be greater economic and environmental costs to address deteriorating water quality (including potential restrictions on further dairy farm conversions) due to limited effectiveness. 	<p>Effectiveness</p> <ul style="list-style-type: none"> • Evidence suggests that, while these voluntary programmes such as the Dairying and Clean Streams Accord are laudable, and there is some buy in from participants, they do not fully address the issue as it does not capture all participants nor deliver a consistent result. • Even with wider community awareness, water quality in some parts of Marlborough would remain vulnerable to deterioration (no consistent effectiveness across the District). • Auditing of the effectiveness of voluntary accords can only be undertaken retrospectively. <p>Efficiency</p> <ul style="list-style-type: none"> • Given the limitations in terms of effectiveness it is considered that relying on this option alone is likely to have long term environmental and economic costs on water quality which outweigh the benefits of avoiding additional regulation and unlikely to achieve the objectives.

OPTION 3

Effects based approach

Two options were considered:

- The setting of catchment based load limits for contaminants.

- The setting of maximum concentration limits of contaminants in discharges that are required to be met by individuals.

Benefits / Costs	Effectiveness / Efficiency
<p>Benefits - Catchment based load limits:</p> <ul style="list-style-type: none"> • Allow an approach to be tailored to each catchment. • Allows for dilution of contaminants by taking into account the assimilative capacity of receiving water bodies. • Does not distinguish between land uses • Generally requires a collaborative approach. <p>Costs - Catchment based load limits:</p> <ul style="list-style-type: none"> • Time consuming and expensive - as indicated Council does not have sufficient data and is unlikely to be in a position to fully implement such a programme until 2024. • Retrospective action against individual properties may be required if loads not being met. • Additional Council resources for education and monitoring. 	<p>Effectiveness - Catchment based load limits</p> <ul style="list-style-type: none"> • Relies on a robust data upon which to set the appropriate limits. Council does not yet have this level of data available. • Even if it were, non-compliance would be difficult to trace back to individuals without in depth property auditing. • With a focus on the water catchment it does not directly address land based practices on individual sites that could have benefits on minimizing the effects on water quality (such as buffer strips and nutrient management) <p>Efficiency - Catchment based load limits</p> <ul style="list-style-type: none"> • With significant cost and time required to assess load limits and to monitor compliance, potential environmental and economic effects of this approach (including upon economic growth) and the absence of the necessary data upon which to make robust decisions this approach is not considered to an efficient or safe way to achieve the objectives at this point in time.
<p>Benefits - Contaminant limits:</p> <ul style="list-style-type: none"> • Flexibility to choose the best option by the farm to manage activities and meet the discharge limits. • Allows development of innovative technology to meet the discharge limits. • Allows for further land intensification as long as the discharge limits are met. • Easily identifiable for enforcement action: non-compliance with the discharge limits can be traced to the individual. • Does not distinguish between land uses • Directly addresses the criteria for measuring water quality <p>Costs - Contaminant limits:</p> <ul style="list-style-type: none"> • Non-point source discharges are difficult to monitor • On-site sample analysis will be difficult and samples will need to be analysed by an accredited water testing laboratory which is costly. • No investment security for land managers. 	<p>Effectiveness – Contaminant limits:</p> <ul style="list-style-type: none"> • Non-point source discharges from land are difficult to control and monitor. • No easy on-site sample analysis available. • Does not take into account the assimilative capacity of the water bodies. <p>Efficiency - Contaminant limits:</p> <ul style="list-style-type: none"> • While the contaminant limits provide some flexibility in discharging of contaminants there are no direct controls on land use activities which would also have benefits to minimizing the effects on water quality. • Sampling and monitoring will be costly. • Encourages but does not require best practicable solutions specific to local conditions.

<p>Land managers investing in system upgrades or changing their behaviour have no guarantee that they will meet the off-site discharge limits.</p>	
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OPTION 4

Regulating land use (activity based approach)

1. Requiring resource consent for new dairy farm conversions as a **discretionary activity** and setting a range of conditions for the management of effects on the land prior to the activity commencing.

Benefits / Costs	Effectiveness / Efficiency
<p>Benefits</p> <ul style="list-style-type: none"> • Simple to administer and provides certainty by specifying activity. In terms of administration only affects new dairy farms and no consents for existing dairying proposed. • Consistent approach to all new dairy farm conversions including clarity around expectations and information requirements. • Best practice measures can be set in place at the outset (rather than in a reactive and retrospective manner). • Buffer areas along watercourses can be set prior to the commencement of dairy farming on the site. • Council has the discretion to decline applications where the effects are likely to be more than minor or where the supplied information is not of a sufficient standard to address the identified risks. • Conditions can be tailored to the activity, the site and the surrounding context. • Compliance monitoring is more straightforward with lower costs. • Maintaining water quality in areas where dairy conversions are occurring has wider benefits to other farmers and water users within the downstream catchment and it maximizes the subsequent use that can be made of water in the area. • Discretionary consent process allows flexibility in determining most appropriate land management practice. 	<p>Effectiveness</p> <ul style="list-style-type: none"> • The proposed provisions provide a statutory framework to deal with the management of the effects of this type of intensive land use on water quality as soon as the Plan Change is notified. Consequently, this will put in place management practices and mitigation measures to prevent a decline in water quality in catchments where dairy conversions are proposed. • The establishment of a management plan framework sets out how effects will be addressed such that they are no more than minor while allowing flexibility in the approach adopted. • Conditions imposed will require best practice measures. • The time of establishment of a dairy farm is considered to be the most appropriate time to effectively assess matters around how dairy farm waste management will affect water quality rather than having to undertake retrospective treatment. <p>Efficiency</p> <ul style="list-style-type: none"> • As the framework targets new rather than existing activities, the costs associated with gaining consent and implementing appropriate mitigation measures as required by consent conditions can be built into decisions about conversion or property purchase.

Costs

- Only affects new dairy farms and no consents for existing dairying proposed and therefore water quality may continue to deteriorate. However existing dairy farms and other uses will ultimately be captured by catchment load limits.
 - The plan change only requires new dairying to obtain resource consent. However the only other significant intensive land use in the district, viticulture, does not require significant water or the same nutrient inputs as dairy farming. There is the potential to add other land uses at a later date.
 - Consent application and processing fees. However, resource consent applications are generally currently required for point source effluent discharges, water takes and the construction of effluent ponds. The proposed new rules will require an additional consent to authorise the land use which will result in further costs and potential delay although it is anticipated that the land use consent will be able to build on the information that already has to be supplied for the other consent applications. The costs will therefore be less than if a single standalone application was being prepared.
 - Preparation of a Nutrient Management and Water Quality Management Plans. However increasingly these types of measures are encouraged by industry groups such as Fonterra and are likely to be prepared in any event. Fertiliser companies regularly prepare plans for clients. Sharing of plan templates as far as possible will also assist with minimizing cost;
 - Implementation of mitigation measures such as stock exclusion zones and buffer strips along waterways. However, such measures are being encouraged by groups such as Fonterra may become mandatory.
 - The potential that a consent application could be declined may also result in some prospective land purchasers choosing to invest in regions where dairy conversion does not require consent, with a consequent effect on the regional economy. However, it is noted that regional councils in which intensive farming such as dairying is becoming prevalent are introducing additional controls on this type of activity. Council costs in the preparation and provision of advice and assistance to consent applicants and consent holders as well as compliance monitoring.
- Any opportunity cost represented by the implementation of the proposed provisions is considered to be outweighed by the environmental benefits of ensuring that water quality in subject catchments is not further adversely affected.
 - On balance therefore the inclusion of the proposed provisions in the Wairau/Awatere and Marlborough Sounds Resource Management Plans is considered to be efficient.

Regulating land use (activity based approach)

2. Requiring resource consent for new dairy farm conversions as a **controlled activity** and setting a range of conditions for the management of effects on the land prior to the activity commencing.

Benefits / Costs	Effectiveness / Efficiency
<p>As per comments above and</p> <p>Benefits</p> <ul style="list-style-type: none"> • Gives applicants more certainty as application must be granted subject to conditions. <p>Costs</p> <ul style="list-style-type: none"> • Does not provide Council with the ability to refuse consent which could result in significant adverse effects on water quality. 	<p>As per comments above and</p> <p>Effectiveness</p> <ul style="list-style-type: none"> • Reasonably effective but effectiveness in achieving objectives is reduced by inability to refuse consent. <p>Efficiency</p> <ul style="list-style-type: none"> • Reasonably efficient but efficiency is reduced by inability to refuse consent.

8. Risk of Uncertainty or Insufficient Information

In this section, the risk of acting or not acting where there is uncertainty or insufficient information about the subject matter of the policies, rules, or other methods is examined (Section 32(4)(b) of RMA). “Not acting” means retaining the current situation (ie status quo) whereas “acting” means adopting the most effective and efficient method.

It is acknowledged that water quality science is evolving in respect of land use but the risk of waiting for more comprehensive information is considered too great in terms of a deterioration of water quality. The option of delaying until the science is better known was rejected by the Environment Court in the case *Andrew Day and others v Manawatu –Wanganui Regional Council (NZEnvC 182 (2012))*. MDC monitoring has however established that its freshwater resource is vulnerable to the deterioration in water quality. Intensification of land use, particularly where high nutrient values are involved, presents a major risk to water quality particularly if dairy farm conversions continue to grow. The risk of not acting, as set out above, is that the Council does not have the tools to ensure the potential effects of new land uses are being remedied or mitigated from the outset. It could result in Council having to undertake retrospective improvements in water quality which is likely to be time consuming and expensive. Not acting could also inhibit Council’s approach to catchment wide limits and meeting the NPS.

In summary, it is concluded that the risk of acting is low and the risk of not acting is higher.

9. Determination

Overall, the proposed Plan Change is the most appropriate option for achieving the relevant objectives of the respective resource management plans. The plan change, which is an activity based approach, is considered straightforward and simple to administer compared with an effects

based approach. The status quo of non regulatory measures and point discharge resource consents are not considered robust or comprehensive enough to stop a deterioration of water quality by non-point source discharges.

While cumulative catchment wide limits are an attractive option the reality is that Council does not have the data to implement such an approach in the short to medium term. Contaminant limits for individual discharges are likely to be difficult to control and monitor

In terms of equity while other intensive land uses are not captured it is apparent that the only other significant intensive land use, viticulture, does not involve the significant discharge of nutrients. If necessary other land uses can be added at a later date.

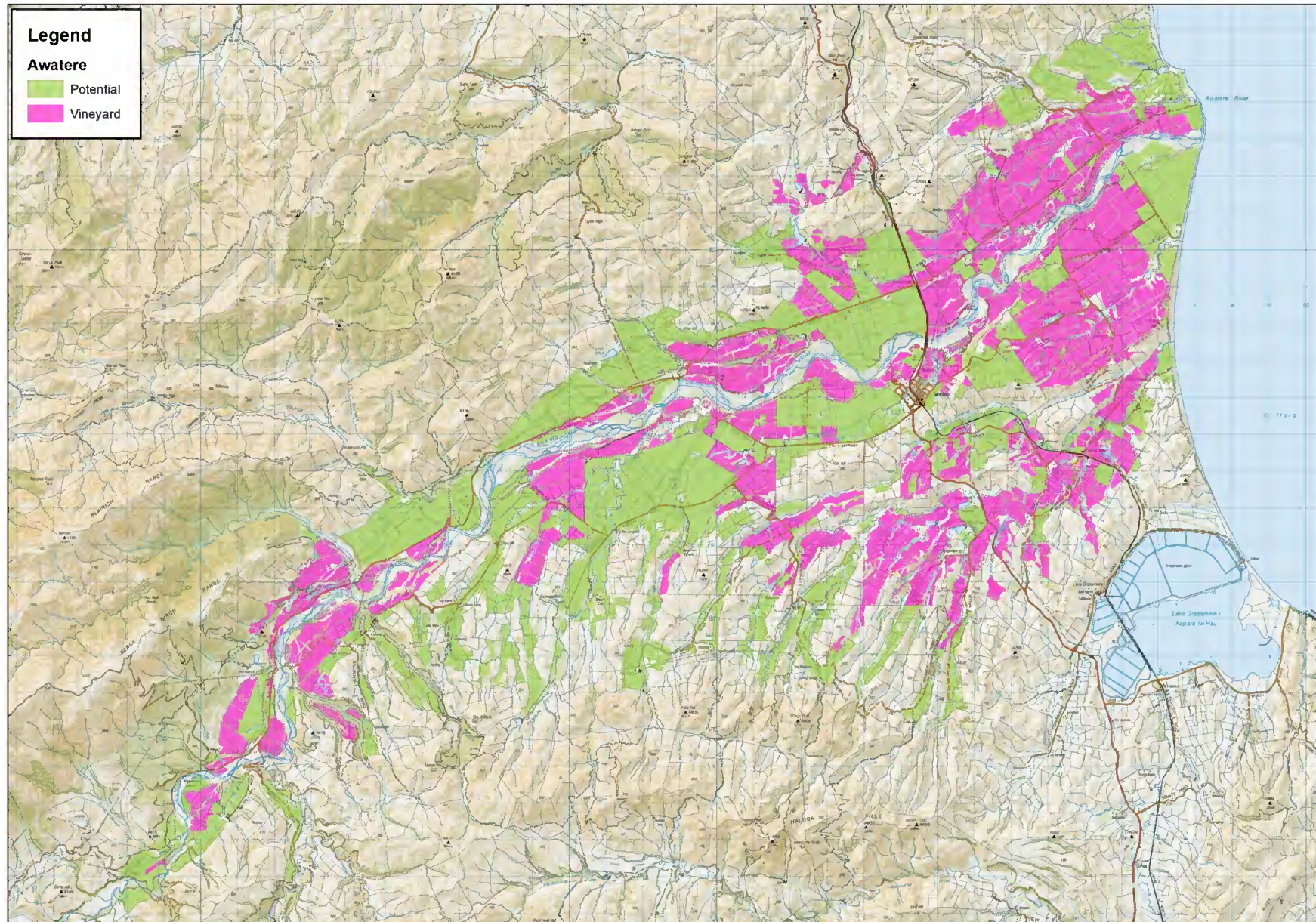
The Plan Change will also assist MDC to give effect to the provisions of the NPS Freshwater Management.

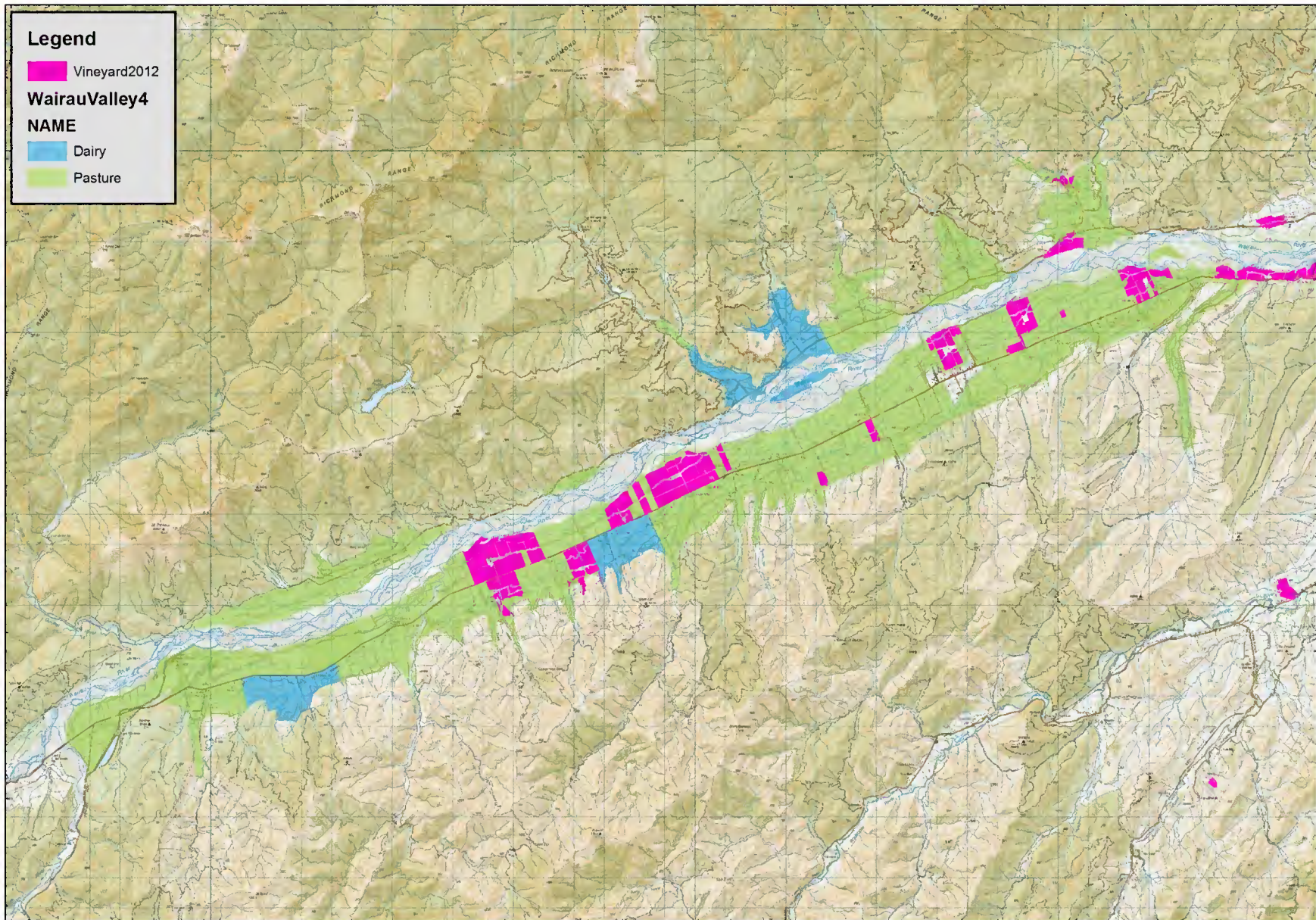
The Plan Change reinforces the relevant objectives by providing a mechanism for protection of water quality in a way that still provides for people to provide for their social and economic well-being while avoiding, remedying or mitigating any adverse effects of new dairy farming on the environment. As such the plan change is in accordance with Part 2 of the Act.

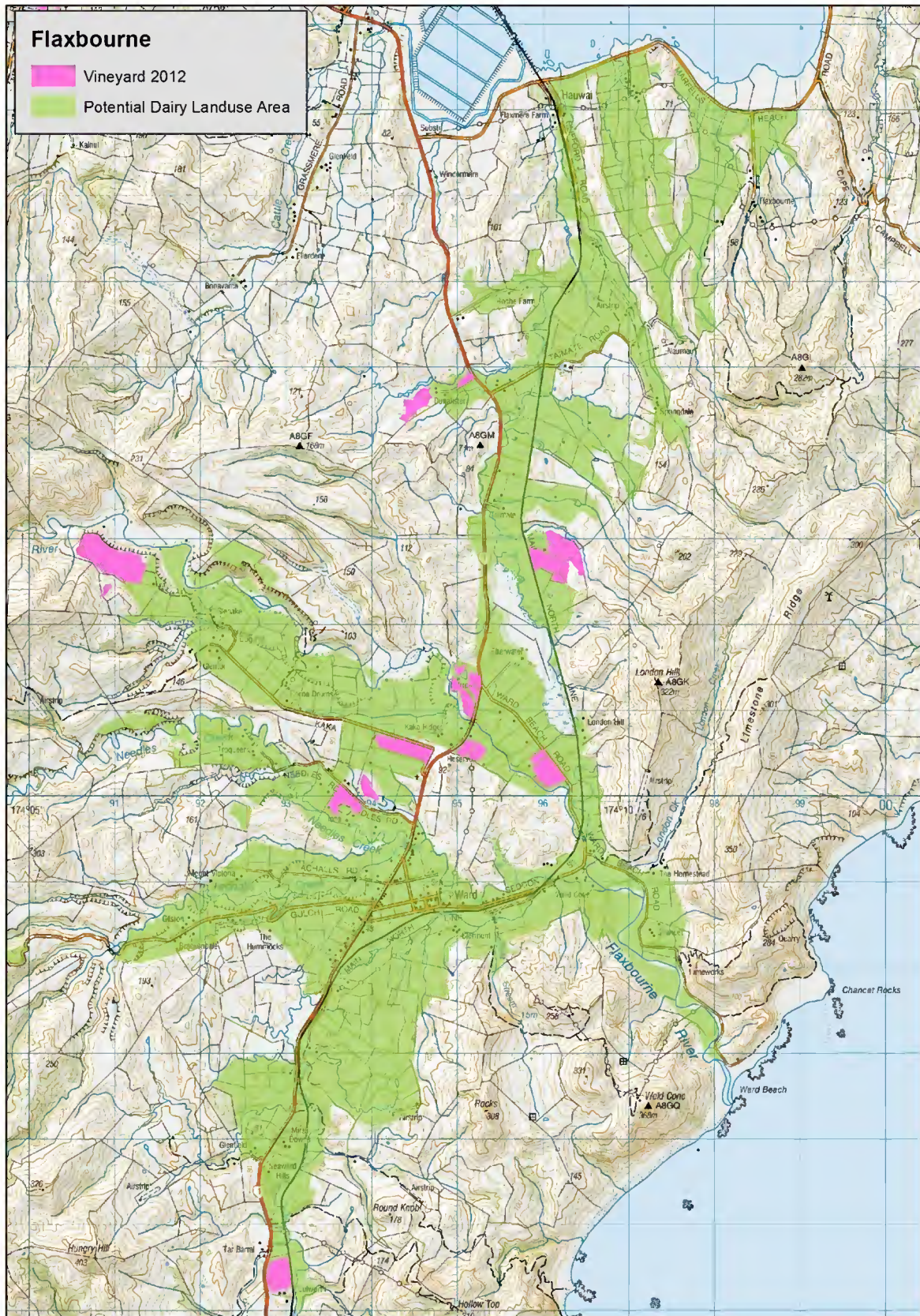
10. Conclusion to the Section 32 Assessment

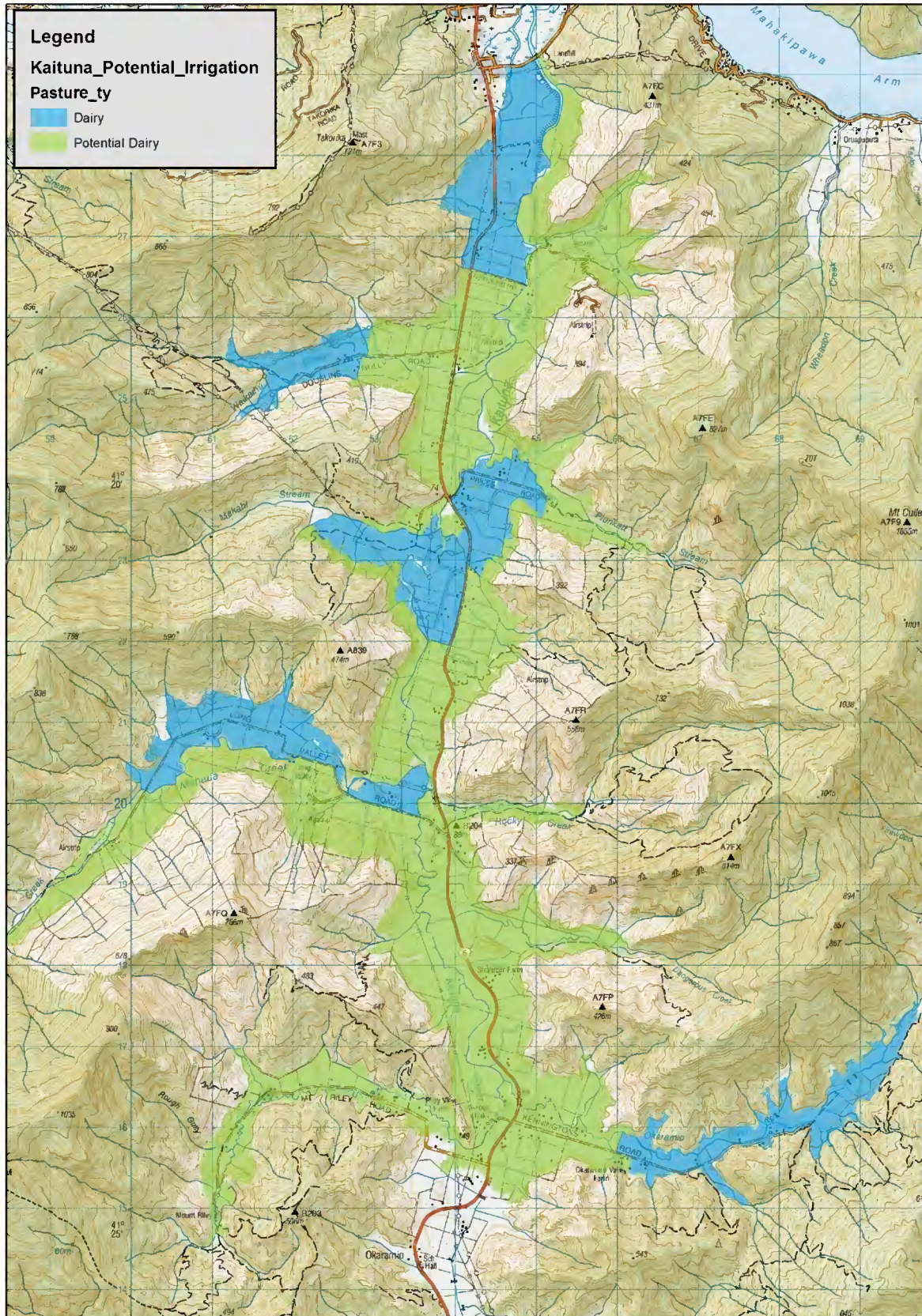
Based on the assessments undertaken, it is concluded that the proposed provisions are most appropriate way to achieve the objectives of the Wairau/Awatere and Marlborough Sounds Resource Management Plans. Further the benefits of the Plan Change outweigh the costs and the provisions achieve a high level of effectiveness and efficiency. The risk of acting is considered to be low compared with a higher risk of not acting.

Appendix 1: Areas with potential for dairy farming









Appendix 2: Schedule of Changes

SCHEDULE OF CHANGES

Where text is proposed to be added to the Wairau/Awatere Resource Management Plan and the Marlborough Sounds Resource Management Plan (the Plans) through this plan change, it has been shown as underlined. All other text in this schedule of changes is either existing text from the Plans and has been included for context to assist the reader in determining where the changes occur, or provides the reader with information and does not form part of the plan change. For the sake of clarity, there are no deletions proposed to the existing text in the Plans.

**SUBMISSIONS MAY ONLY BE MADE ON THE
TEXT WHICH IS UNDERLINED**

Wairau/Awatere Resource Management Plan

Volume 1, Chapter 12 - Rural Environments – Issues, Objectives and Policies

12.2.1 Issue

Insert the underlined text into paragraph two of 12.2.1.4 as follows:

Water resources, both ground and surface waters, are vulnerable to contamination from various activities undertaken on land or on the surface of lakes and rivers. Sources of contamination may include dairy farm effluent run off; septic tank effluent disposal; waste disposal from wineries; offal and refuse pits; mining operations; roading and tracking; spray or fertiliser application; or discharge of inadequately treated urban sewage.

12.2.2 Objectives and Policies

Insert the underlined text under Objective 12.2.2.3 (in accordance with the numerical order) as follows:

12.2.2.3.6 Require land use consent for the establishment and operation of any new dairy farm.

12.2.2.3.7 Approve land use consent applications for new dairy farms where the proposed farming would have no more than minor adverse effects on groundwater or surface water quality. A land use consent application must identify the risks of new dairy farming and provide measures to address those risks, including as a minimum:

- (a) Measures to prevent stock entering onto, or passing across, the bed of any river, lake or wetland;**
- (b) Provision of an appropriate, non-grazed, buffer along the margins of any water body, including a river, lake, or wetland, and any drain, to intercept the runoff of contaminants from grazed pasture;**
- (c) Provision for storage of dairy effluent, with all storage ponds sufficiently sized to enable deferral of application to land until**

soil conditions are such that surface runoff and/or drainage do not occur;

- (d) Demonstration of appropriate separation distances between effluent storage ponds and any surface waterbodies to ensure contamination of water does not occur (including during flood events);
- (e) A nutrient management plan that includes nutrient inputs from dairy effluent, animal discharges, fertiliser, and any other nutrient input.

12.2.3 Methods of Implementation

Insert the underlined text into 12.2.3 as follows:

Rules

Rural activities with the potential to cause significant adverse effects such as dairy farming, factory farming and intensive livestock farming are provided for as Discretionary Activities.

Insert the underlined text as the last method in 12.2.3 as follows:

Management Plans

Water Quality Management Plans will be encouraged as a means of demonstrating on an ongoing basis that any adverse effects on water quality resulting from dairy farming will be avoided or sufficiently mitigated. They provide the ability to consider all farm management practices that have the potential to adversely affect surface water and groundwater and manage these risks in an integrated way. This also enables the dairy farmer to progressively plan farm upgrades based on priority or, in the case of new farms, at the time of establishment. Water Quality Management Plans can be used to support applications for land use consent to convert the use of land to dairying.

Nutrient Management Plans will be required as a means to demonstrate how nutrient inputs associated with dairy farming are to be managed to ensure any adverse effects on water quality will be avoided or mitigated. Nutrient Management Plans should be written documents that incorporating a nutrient budget developed by an accredited nutrient adviser using OVERSEER® or similar, that describes how the major plant nutrients (nitrogen, phosphorus, sulphur and potassium, and any other of importance to specialist crops) will be managed, including all sources of nutrient, for example discharges from farm dairy effluent systems, animal discharges, atmospheric nitrogen fixation.

Insert the underlined text at the end of the explanation, after the methods, in 12.2.3 as follows:

Management Plans as part of resource consents for new dairy farm conversions will enable rural land to be used in such a way as to avoid adverse effects on water quality, while providing farmers the flexibility to manage their activity in a manner best suited to achieving the outcomes they are seeking.

12.4.1 Issue

Insert the underlined text into 12.4.1 as follows:

The Plan seeks to enable a wide range of appropriate activities to establish in the General Rural area, subject to standards and controls to avoid or mitigate adverse effects on vegetation and soil resources, landscape and amenity values, and water quality.

12.4.2 Objectives and Policies

Insert the underlined text under Objective 12.4.2.3 (in accordance with the numerical order) as follows:

12.4.2.3.6 Require land use consent for the establishment and operation of any new dairy farm.

12.4.2.3.7 Approve land use consent applications for new dairy farms where the proposed farming would have no more than minor adverse effects on groundwater or surface water quality. A land use consent application must identify the risks of new dairy farming and provide measures to address those risks, including as a minimum:

- (a) Measures to prevent stock entering onto, or passing across, the bed of any river, lake or wetland;
- (b) Provision of an appropriate, non-grazed, buffer along the margins of any water body, including a river, lake, or wetland, and any drain, to intercept the runoff of contaminants from grazed pasture;
- (c) Provision for storage of dairy effluent, with all storage ponds sufficiently sized to enable deferral of application to land until soil conditions are such that surface runoff and/or drainage do not occur;
- (d) Demonstration of appropriate separation distances between effluent storage ponds and any surface waterbodies to ensure contamination of water does not occur (including during flood events);
- (e) A nutrient management plan that includes nutrient inputs from dairy effluent, animal discharges, fertiliser, and any other nutrient input.

12.4.3 Methods of Implementation

Insert the underlined text into the existing Management Plan method in 12.4.3, after the existing text, as follows:

Management Plans

Water Quality Management Plans will be encouraged as a means of demonstrating on an ongoing basis that any adverse effects on water quality resulting from dairy farming will be avoided or sufficiently mitigated. They provide the ability to consider all farm management practices that have the potential to adversely affect surface water and

groundwater and manage these risks in an integrated way. This also enables the dairy farmer to progressively plan farm upgrades based on priority or, in the case of new farms, at the time of establishment. Water Quality Management Plans can be used to support applications for land use consent to convert the use of land to dairying.

Nutrient Management Plans will be required as a means to demonstrate how nutrient inputs associated with dairy farming are to be managed to ensure any adverse effects on water quality will be avoided or mitigated. Nutrient Management Plans should be written documents that incorporating a nutrient budget developed by an accredited nutrient adviser using OVERSEER® or similar, that describes how the major plant nutrients (nitrogen, phosphorus, sulphur and potassium, and any other of importance to specialist crops) will be managed, including all sources of nutrient, for example discharges from farm dairy effluent systems, animal discharges, atmospheric nitrogen fixation.

12.9 Anticipated Environmental Results

Insert the underlined text as the last sub-bullet point under bullet point three in 12.9 as follows:

- Environmentally sound farming practices based on:
 - Strategies avoiding and mitigating adverse effects of land use activities on water quality.

Wairau/Awatere Resource Management Plan

Volume 2, Chapter 30 – Rural 3 and 4 Zones

Insert the underlined text as the last bullet point in 30.4.1 as follows:

30.4.1 Application must be made for a resource consent for a Discretionary Activity for the following:

- New dairy farming.

Insert the underlined text in 30.4.3 (in accordance with the numerical order) as follows:

30.4.3.12 New Dairy Farms

30.4.3.12.1 Standards

New dairy farm activities should be established in such a manner to ensure that no surface and groundwater quality is adversely affected by the operation of the dairy farm.

30.4.3.12.2 Assessment Criteria

(a) **The extent to which the proposed dairy farming operation is consistent with the policies for new dairy farms in this Plan.**

Wairau/Awatere Resource Management Plan

Volume 2, Chapter 26 – Definitions

Insert the underlined text into the definition of Farming as follows:

FARMING means a land based activity, having as its primary purpose the commercial production and sale (other than from a rural selling place) of any livestock, milk or vegetative matter except as excluded below and unless the context otherwise requires, includes the cultivation and reshaping of land necessary and appropriate to normal agricultural activity. For the purposes of the Plan farming does not include intensive farming, commercial forestry and in the case of vegetative matter, does not include the processing of farm produce beyond cutting, cleaning, grading, chilling, freezing, packaging and storage of produce grown on the farming unit.

Insert the underlined text into the Definitions, in accordance with the alphabetical order, as follows:

NEW DAIRY FARMING means a land based activity, having as its primary purpose the farming of dairy cattle for milk production, and related activities on land converted for that purpose after the date of the public notification of the Resource Management Plan Change 62, but does not include any increase in the area or intensity of an existing dairy farming operation that is undertaken without any additional dairy shed.

Marlborough Sounds Resource Management Plan

Volume 1, Chapter 11 - Rural Environments

11.1 Introduction

Insert the underlined text as the last bullet point under paragraph five in 11.1 as follows:

Resource use in the rural environment may result in:

- **Changes to surface and groundwater quality.**

11.2 Issue

Insert the underlined text as a new paragraph at the end of in 11.2 as follows:

Dairy farming has the potential to have significant adverse effects on the quality of surface and groundwater resources. These effects can be avoided or mitigated by using environmentally sound farming practices that include strategies to manage the effects of dairy farming on water quality.

11.3 Objectives and Policies

Insert the underlined text under Objective 11.3.1 (in accordance with the numerical order) as follows:

11.3.1.10 Require land use consent for the establishment and operation of any new dairy farm.

11.3.1.11 Approve land use consent applications for new dairy farms where the proposed farming would have no more than minor adverse effects on groundwater or surface water quality. A land use consent application must identify the risks of new dairy farming and provide measures to address those risks, including as a minimum:

- (a) **Measures to prevent stock entering onto, or passing across, the bed of any river, lake or wetland;**
- (b) **Provision of an appropriate, non-grazed, buffer along the margins of any water body, including a river, lake, or wetland, and any drain, to intercept the runoff of contaminants from grazed pasture;**
- (c) **Provision for storage of dairy effluent, with all storage ponds sufficiently sized to enable deferral of application to land until soil conditions are such that surface runoff and/or drainage do not occur;**
- (d) **Demonstration of appropriate separation distances between effluent storage ponds and any surface waterbodies to ensure contamination of water does not occur (including during flood events);**
- (e) **A nutrient management plan that includes nutrient inputs from dairy effluent, animal discharges, fertiliser, and any other nutrient input.**

Insert the underlined text at the end of the explanation, after the new policy 11.3.1.11, as follows:

The quality and quantity of the District's water resources are essential to the prosperity and pleasantness of the Marlborough Sounds, in terms of their life supporting capacity and availability for domestic and productive use.

11.4 Methods of Implementation

Insert the underlined text at the end of the table in 11.4 as follows:

Management Plans

Water Quality Management Plans will be encouraged as a means of demonstrating on an ongoing basis that any adverse effects on water quality resulting from dairy farming will be avoided or sufficiently mitigated. They provide the ability to consider all farm management practices that have the potential to adversely affect surface water and groundwater and manage these risks in an integrated way. This also enables the dairy farmer to progressively plan farm upgrades based on priority or, in the case of new farms, at the time of establishment. Water Quality Management Plans can be used to support applications for land use consent to convert the use of land to dairying.

Nutrient Management Plans will be required as a means to demonstrate how nutrient inputs associated with dairy farming are to be managed to ensure any adverse effects on water quality will be avoided or mitigated. Nutrient Management Plans should be written documents that incorporating a nutrient budget developed by an accredited nutrient adviser using OVERSEER® or similar, that describes how the major plant nutrients (nitrogen, phosphorus, sulphur and potassium, and any other of importance to specialist crops) will be managed, including all sources of nutrient, for example discharges from farm dairy effluent systems, animal discharges, atmospheric nitrogen fixation.

Insert the underlined text at after the “Methods of Implementation” table in 11.4 as follows:

Management Plans as part of resource consents for new dairy farm conversions will enable rural land to be used in such a way as to avoid adverse effects on water quality, while providing farmers the flexibility to manage their activity in a manner best suited to achieving the outcomes they are seeking.

Marlborough Sounds Resource Management Plan

Volume 2, Chapter 36 – Rural Zones 1 and 2

Insert the underlined text as the last bullet point in 36.4 as follows:

36.4 Application must be made for a Resource Consent for a Discretionary Activity for the following:

- New dairy farming.

Insert the underlined text in 36.4.3 (in accordance with the numerical order) as follows:

36.4.3.15 New Dairy Farms

36.4.3.15.1 Standards

New dairy farm activities should be established in such a manner to ensure that no surface and groundwater quality is adversely affected by the operation of the dairy farm.

36.4.3.15.2 Assessment Criteria

(b) The extent to which the proposed dairy farming operation is consistent with the policies for new dairy farms in this Plan.

Marlborough Sounds Resource Management Plan

Volume 2, Chapter 25 – Definitions

Insert the underlined text into the definition of Farming as follows:

FARMING means a land based activity, having as its primary purpose the commercial production and sale (other than from a rural selling place) of any livestock, milk or vegetative matter except as excluded below and unless the context otherwise requires, includes the cultivation and reshaping of land necessary and appropriate to normal agricultural activity. For the purposes of the Plan farming does not include intensive farming, commercial forestry and in the case of vegetative matter, does not include the processing of farm produce beyond cutting, cleaning, grading, chilling, freezing, packaging and storage of produce grown on the farming unit.

Insert the underlined text into the Definitions, in accordance with the alphabetical order, as follows:

NEW DAIRY FARMING means a land based activity, having as its primary purpose the farming of dairy cattle for milk production, and related activities on land converted for that purpose after the date of the public notification of the Resource Management Plan Change 27, but does not include any increase in the area or intensity of an existing dairy farming operation that is undertaken without any additional dairy shed.

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