

Sharrie Campbell

From: Eve Williams <Eve.Williams@hortnz.co.nz>
Sent: Friday, 24 October 2014 4:14 p.m.
To: Mailroom Mailbox
Subject: Submission on Proposed Variation 2 to the Proposed Canterbury Land and Water Regional Plan
Attachments: FINALISED Submission Var2 October 24 2014.pdf
Categories: Orange Category

EC128942

Good afternoon,

On behalf of Horticulture New Zealand, please find attached submission on the Proposed Variation 2 of the Proposed Canterbury Land and Water Regional Plan.

Please email confirmation of the receipt of this submission.

Kind regards,

Eve Williams | Executive Assistant to Chris Keenan & Angela Halliday

Horticulture New Zealand

P +64 4 472 3795 | **D** +64 4 470 5668 | **M** +64 27 333 4447 | **W** www.hortnz.co.nz

PO Box 10232, The Terrace, Wellington 6143

SUBMISSION ON PROPOSED VARIATION 2 TO THE PROPOSED CANTERBURY LAND AND WATER REGIONAL PLAN

TO: Environment Canterbury

SUBMISSION ON: Proposed Variation 2 to the Proposed Canterbury Land and Water Regional Plan Section 13 Ashburton

NAME: Horticulture New Zealand

ADDRESS: PO Box 10 232
WELLINGTON

1. Horticulture New Zealand's submission, and the decisions sought, are detailed in the attached schedules:

Schedule 1: Overall comments
Schedule 2: Section 13 – Ashburton
Schedule 3: Section 13.1A Ashburton Sub-Regional Section definitions
Schedule 4: 13.4 Policies
Schedule 5: 13.5 Rules
Schedule 6: 13.6 Fresh water outcomes
Schedule 7: 13.7 Environmental Flow Regime and water quality targets/limits
Schedule 8: 13.10 Schedules
Schedule 9: Growers in Ashburton zone

This submission is also made on behalf of the Horticulture Canterbury which incorporates fruit, vegetable and berry growers in Canterbury. The growers in the Ashburton zone are listed in Schedule 9. Contact details are available from Horticulture New Zealand.

2. Horticulture New Zealand wishes to be heard in support of this submission.

3. Background to Horticulture New Zealand and its RMA involvement:

3.1 Horticulture New Zealand was established on 1 December 2005, combining the New Zealand Vegetable and Potato Growers' and New Zealand Fruitgrowers' and New Zealand Berryfruit Growers Federations.

3.2 On behalf of its 5,454 active grower members Horticulture New Zealand takes a detailed involvement in resource management planning processes as part of its National Environmental Policies. Horticulture New Zealand works to raise growers' awareness of the RMA to ensure effective grower involvement under the Act, whether in the planning process or through resource consent applications. The principles that Horticulture New Zealand considers in assessing the implementation of the Resource Management Act 1991 (RMA) include:

- The effects based purpose of the Resource Management Act,
- Non-regulatory methods should be employed by councils;
- Regulation should impact fairly on the whole community, make sense in practice, and be developed in full consultation with those affected by it;
- Early consultation of land users in plan preparation;
- Ensuring that RMA plans work in the growers interests both in an environmental and sustainable economic production sense.

4. Trade Competition

Pursuant to Schedule 1 of the Resource Management Act Horticulture NZ is not a body that could gain an advantage in trade competition through this submission.

Thank you for the opportunity to submit on the Proposed Variation 2 to the Proposed Canterbury Land and Water Regional Plan.



Chris Keenan
Manager – Resource Management and Environment
Horticulture New Zealand

Dated: 24 October 2014

Address for service:

Chris Keenan
Manager – Resource Management and Environment
Horticulture New Zealand
PO Box 10-232 WELLINGTON

Tel: 64 4 472 3795
DDI: 64 4 470 5669
Fax: 64 4 471 2861
Email: chris.keenan@hortnz.co.nz

Schedule One: Overall comments: Approach to Ashburton Variation

1.1 General comments

There are 70 fruit and vegetable growers in the Hinds catchment. Many of those growers undertake other farming activities as well, particularly arable activities. Significant rotation, sharing and leasing occurs and the systems are transient for that reason. Vegetable growing is often attached to arable production. A schedule of horticultural growers and crop categories is attached as an appendix to this evidence.

1.2 Transitional interim plan

In the absence of information such as MGM, Variation 2 should be regarded as an interim plan with a variation notified by the end of 2017 that will provide greater certainty.

1.3 Timeframes:

Horticulture NZ seeks that the timeframes in Variation 2 be amended to provide greater time for the regulatory framework to be applied to enable adjustment by land owners.

It would also enable the MGM project to be completed and provide certainty as to what will be required to meet the good management practices.

Horticulture NZ also seeks that the intergenerational nature of over-allocation is addressed by setting longer timeframes for transition to managing within the new limit that is set. Given that the state of water quality in the water management unit has been created over significant time periods, we consider it may be necessary to transition to a more desirable state over a longer and perhaps an intergenerational timeframe.

Decision sought:

Amend all 2017 timeframes to 2022

1.4 Crop survival water

Horticulture NZ seeks specific inclusion for crop survival water in Variation 2.

Crop survival water is water that is able to be taken during restrictions to enable capital root stock and food crops to be maintained. The investment profile for horticultural crop production is different to other forms of farming. Crops produced directly for human consumption require greater levels of investment than other crops. Without survival water the crops could die and the investment be totally lost. It is also not possible to move trees and crops during a drought. For permanent crops if lost it would take years to re-establish.

With seasonal crops, it is recognised that there will always be some risk; but the economic consequences are significantly higher for growers of those crops, and in our view this deserves recognition through a higher reliability standard provided for as a matter of discretion in consent application.

Decision sought:

Add an issue:

Add a policy: In times of water shortages provide for taking of water for the sole purpose of avoiding the death of horticultural root stock or crops as provided for in consent conditions.

Add definition of rootstock and crop survival water: water provided for the protection of root stock of permanent horticulture, and protection of crops, excluding pasture species, animal fodder crops and maize through a reliability standard set at 100%.

Include an additional consent assessment matter: Within the Hinds/ Hekeao Plains Area
The need for crop survival water as determined using Schedule 10 Method 1

Amend Schedule 10 Reasonable Use Test Method 1: Within the Hinds/ Hekeao Plains Area method 1 shall determine seasonal irrigation demand for horticultural crops for crop survival water as 10 years out of 10.

Include the following in the s32 Report.

Crop Survival Water

An identified issue is the enabling of existing surface water and stream depleting groundwater abstractors to take water at times when the minimum flows are breached (and when irrigations takes are normally on 'ban') to prevent the death of permanent root stock.

In the Tukituki catchment, SKM modelled the effects of 409 L/s instantaneous abstraction for crop survival water on surface water flows using their SOURCE model. This resulted in a cumulative reduction in the simulated 7-day MALF of less than 50 L/s at all sites which was considered to be a minor adverse effect. A figure of 200 L/s was agreed between the parties. HBRC sought advice from Dr Hayes on the likely impact of such crop survival takes occurring when the rivers are below their minimum flow limits. Dr Hayes advised that it is unlikely that the cumulative effects of surface water depletion by groundwater abstraction and a 200 L/s crop survival abstraction below the minimum flows will result in large reductions in fish abundance or growth. He concluded that the provision for crop survival water to that extent (ie 200 L/sec) ought to result in little change in instream values (including flow critical key fish species) from the status quo.

As a result in the Tukituki catchment priority is given to the protection of root stock of permanent horticulture and protection of crops, excluding pasture species, animal fodder crops and maize.

It is anticipated that a similar situation would arise in Hinds/ Hekeao Plains so enabling crop survival water is likely to have no more than minor effects on water bodies but have significant economic benefits by enabling crops to survive through a drought. Such an

approach will assist in giving effect to the NPSFM by providing for the food production value which is important in the Hinds/ Hekeao Plains area.

Schedule Two: Section 13 – Ashburton

- 2.1 Section 13 is a description of Ashburton zone. It describes the issues arising from water use and land use, including agriculture. While the section describes a number of matters it does not describe the importance of the area in terms of agriculture, in particular food production and contributions to social and economic wellbeing.

It is important that a description adequately describes the zone therefore changes are sought to better reflect the importance of agriculture.

Decision sought:

Amend Section 13 by adding a new paragraph:

The Hinds/ Hekeao Plains Area is an important area for agriculture and food production which provides significant employment in the area, both on-farm and in processing and service industries. The social and economic wellbeing of the community is reliant on the agricultural industry and it is important that it is retained so that the communities can thrive.

- 2.2 Values and Freshwater objectives

The Variation does not include any specific objectives for Ashburton or specify the values for the zone, rather relying on the framework in the proposed Land and Water Plan.

However given the proposed regulatory approach to the Hinds/ Hekeao Plains Area it is important that the values for the zone are stated and that there are objectives that reflect the values. In particular there needs to be a value relating to food production and the importance to the social and economic wellbeing of the community.

Decision sought:

Add a new Objective to recognise and provide for the nationally significant benefits of food and fibre production and their contribution to economic, social and cultural wellbeing.

Amend policies, rules, and methods consequentially.

Schedule Three: Section 13.1A Ashburton Sub-Regional Section definitions

3.1 Adaptive management conditions

There needs to be the ability to have flow sharing regimes and the definition for adaptive management conditions should include such a provision.

Decision sought:

Amend the definition of adaptive management conditions by adding "or provide for flow sharing between users."

3.2 Baseline land use

The definition of baseline land use is reliant on the definitions of 'property' and 'nitrogen baseline' in Section 2.9 of the Plan.

The definition for baseline land use only refers to the land use, or uses on a property between 1 July 2009 and 30 June 2013 to be used to determine a property's 'nitrogen baseline'.

The definition of nitrogen baseline provides for a baseline to be based on the farming enterprise in accordance with Rule 5.46 – that is 'an aggregation of parcels of land held in single or multiple ownership that constitutes a single operating unit for the purpose of nutrient management.'

It is important that the provisions in Chapter 13 adequately provide for farming enterprises where the nutrient baseline is a total kg per annum from the identified operational area of land. This is particularly relevant to growers who share or lease land with the operation spanning a range of properties.

Decision sought:

Amend the definition of Baseline land use: means that land use, or uses, on a property or farming enterprise either between 1 July 2009 and 30 June 2013, or for horticultural crops over the crop rotation, and used to determine the 'nitrogen baseline' as defined in section 2.9 of this Plan.

3.3 Good management practice nitrogen loss rates

The definition of good management practice nitrogen loss rates is also based on 'property'.

The definition is used as a basis for rules in the Variation but there is uncertainty as to how the loss rates will be derived, especially for horticultural production systems where the range of factors in the farm system vary. Caution is sought on the application of this definition.

Decision sought:

Amend the definition of 'Good management practice nitrogen loss rates' by adding after 'property': 'or farming enterprise'.

Schedule Four: 13.4 Policies

Managing land use to improve water quality

4.1 New policy

As indicated above Horticulture NZ considers that Variation 2 is an interim measure and so the Variation should explicitly state that a further variation will be required once further information is available.

Decision sought:

Add a new policy:

Targets and limits set in this variation will be reviewed before 2017 to ensure that the refinements in methodology and models used are reflected in the allocation and targets and limits set and changes notified in a plan change once the MGM outcomes are known.

4.2 Policy 13.4.11

Policy 13.4.11 seeks to cap nitrogen discharges at 114 tonnes of nitrogen per year in the Upper Hinds/ Hekeao Plains Area and require all farming activities to operate at good management practice to maintain current phosphorous losses. Horticulture NZ supports the use of good management practices but given our experience in the Selwyn plan change we consider very little emphasis should be placed on numeric modelling of loads due to the uncertainty that the numeric figure can be achieved or is even accurate.

Decision sought:

Provide for the 114 tonnes of nitrogen per year as an interim target not a limit, and indicate a deadline of 2018 for catchment hydrological and economic modelling using a model that provides similar functionality to the "Source" model used to measure load in the Selwyn Variation. Use the modelling to describe an NPS limit from 2018 onwards.

4.3 Policy 13.4.12

Policy 13.4.12 seeks to improve water quality in the Lower Hinds/ Hekeao Plains Area to achieve a nitrogen target load of 3,400 tonnes of nitrogen per year by 2035.

Horticulture NZ is concerned as to how the 3,400 tonnes has been derived. Differences in methodology in Selwyn Waihora have demonstrated that the ECAN model may not accurately estimate the nitrogen load, so a review of the methodology and calculations is sought, based on the Source model. Therefore the policy and load limit should be interim until further review and testing of the methodology and model can be completed.

Decision sought:

Describe the 3,400 tonnes of nitrogen per year as an interim target not a limit, and indicate a deadline of 2018 for catchment hydrological and economic modelling using a

model that provides similar functionality to the "Source" model used to measure load in the Selwyn Variation, to calculate an actual limit.

4.4 Policy 13.4.13

Policy 13.4.13 seeks to limit a property's nitrogen loss calculation

The policy is based on, from 1 January 2017, the replacement of the nitrogen baseline with the loss rates calculated using the good management practice nitrogen loss rates for the property's baseline land use. The policy means that:

- The calculation is tied to the land use from 2009 – 2013, even if the land use has changed or is in a different cropping rotation phase;
- The good management practices for the property or enterprise will apply regardless of the nitrogen baseline.

The MGM project is not yet complete so the effect of this policy cannot be determined. Given the uncertainty a tool that is currently in development should not be implemented in a regulatory manner without a s32 analysis being undertaken and be inserted into the Plan through a First Schedule process.

The policy seeks to limit the discharges of nitrogen to no more than the nitrogen baseline, which is taken as a rolling four year average between 2009- 2013. Such an approach provides no flexibility for operations that vary over time because of rotations across multiple properties. There needs to be provision to make adjustments to the nitrogen baseline where it can be demonstrated that the four years 2009 – 2013 do not accurately represent the nature of the operation. In a horticultural operation where crops are grown rotationally, the nature of the rotation in those 4 years will determine the nitrogen baseline, but may not accurately reflect the nature of the operation over a longer or different time span. There needs to be flexibility for such variations to be assessed as part of a consent process so the nitrogen baseline for horticultural crops should be based on the highest number of the crop rotation.

As sought elsewhere in this submission amendments to the timeframes are sought.

In addition there should not be a limitation on the area for land use change. Rather land use change should be provided for where it is able to have a nitrogen loss of no more than 27kg per hectare per year.

Decision sought:

Amend Policy 13.4.13 a) by changing 1 January 2017 to 1 January 2020

Amend Policy 13.4.13 b) by changing 1 January 2020 to 1 January 2022.

Amend Policy 13.4.13 c) by deleting 'on a maximum of 30,000 hectares of land'

Add a new policy: The nitrogen baseline for a property or enterprise can be reassessed where it can be demonstrated that the 4 years 2009-2013 do not accurately reflect the nature of the operation.

4.5 Policy 13.4.16

Policy 13.4.16 seeks to improve flows by a range of mechanisms but also to meet economic, cultural, social and environmental outcomes.

Methods include the reasonable use calculated using Schedule 10 Method 1 and also prohibiting increase use arising from the transfer of consented volumes of water.

Horticulture NZ seeks specific changes to Schedule 10 Method 1 to provide for crop survival water which is important to meet economic, cultural, and social outcomes.

Prohibiting the use of consented volumes that are transferred is not supported. These are allocated volumes which should be able to be used, whether transferred or not.

Decision sought:

Make changes as sought to Schedule 10 Method 1 to provide for crop survival water.

Amend Policy 13.4.16 by deleting 'prohibiting increased use arising from the transfer of consented volumes of water'.

4.6 Policy 13.4.17

Policy 13.4.17 provides for adaptive management conditions for groundwater takes. Adaptive management should not reduce the reliability of water takes for horticultural crops, given the differential effects of reliability on those crops.

Decision sought:

Provide for survival water as per the submission above and exempt horticultural crops from the flow sharing regime.

4.7 New Policy

There needs to be provision in the Variation for a transfer regime for nitrogen to ensure that there is the ability to change land use, while still being limited by the catchment load limit.

Decision sought:

Add a new policy and commensurate permitted activity rules and methods to enable transfer of nitrogen within and between enterprises and farms within the same water management unit, or similar rules and methods to give effect to development of a transfer system.

Schedule Five: 13.5 Rules

Nutrient management, sediment and microbial contaminants

Upper Hinds/ Hekeao Plains Area

5.1 Rule 13.5.9

Rule 13.5.9 provides for the farming activity to be permitted subject to not exceeding the nitrogen baseline and other conditions. However the provisions are all related to 'property' and do not provide for 'farming enterprise.'

Decision sought:

Amend Rule 13.5.9 by adding after the words 'property': 'or farming enterprise'.

5.2 Rule 13.5.10

Rule 13.5.10 provides for assessment of a farming enterprise as a discretionary activity if the nitrogen loss calculation has not increased above the nitrogen baseline. Where an operation includes multiple properties the 'farming enterprise' assessment provides the opportunity for the whole operation to be assessed.

However it is considered that a discretionary activity status is not required and farming enterprise should be included in the rules relating to properties or a specific restricted discretionary rule that includes assessment of the crop rotational system and compliance with industry good practices.

Decision sought:

Delete Rule 13.5.10 and provide for farming enterprises in Rules 13.5.8– 13.5.9.

Or:

Provide an RDA rule for farming enterprises that takes into account the rotational nature of the operation and industry good management practices.

5.3 Rule 13.5.11

Rule 13.5.11 makes farming activities that don't comply with permitted activity conditions 2 or 3 in Rule 13.5.9 or for farming enterprises not meeting condition 3 in 13.5.10 to be non-complying

It is considered that the leap from permitted to non-complying is unjustified and should be assessed as a discretionary activity.

Horticulture NZ has sought that Rule 13.5.10 be a Restricted Discretionary Activity so the default if Condition 3 relating to farm environment plan is not met should be Discretionary.

Decision sought:

Amend Rule 13.5.11 to Discretionary activity.

5.4 Rule 13.5.12

Rule 13.5.12 makes farming activities that don't comply with permitted activity condition 1 in Rule 13.5.9 or for farming enterprises not meeting conditions 1 or 2 in Rule 13.5.10 to be prohibited.

It is considered that prohibited activity status is unjustified and should be assessed as a non-complying activity to allow consideration given the uncertainties with establishing the nutrient baseline and the methodology on which it is based. A non-complying rule allows for consideration of an application where a land user can demonstrate the effects of the activity.

Decision sought:

Amend Rule 13.5.12 to Non-complying activity.

Lower Hinds/ Hekeao Plains Area

5.5 Rule 13.5.14

Horticulture NZ does not support the limitation of land use change to 30,000ha if the nitrogen threshold is met.

Decision sought:

Delete the reference to Row B Table 13 i) does not exceed 30,000 hectares

5.6 Rule 13.5.15

Rule 13.5.15 provides for farming activity to be a Permitted Activity until January 2017 provided conditions are met.

Decision sought:

Amend the date to 2020 and include farm enterprises within the provisions.

5.7 Rule 13.5.16

Rule 13.5.16 provides for farming activity to be a Permitted Activity from January 2017 provided conditions are met.

Decision sought:

Amend the date to 'From 1 January 2020' and include farm enterprises within the provisions.

5.8 Rule 13.5.17

Rule 13.5.17 provides for the farming activity after 1 January 2017, if nitrogen loss

exceed 20kg /ha/yr, as a Restricted Discretionary rule subject to meeting conditions. However the provisions are all related to 'property' and do not provide for 'farming enterprise.'

The discretion includes consideration of the Good Management Practice Nitrogen Loss rates. Horticulture NZ seeks the deferral of the use of these rates until the MGM project is complete as they are not yet known and it is unreasonable to include in a plan tools that are not yet developed. Therefore matters 2 and 3 should be deleted.

Decision sought:

Amend Rule 13.5.17 by: changing the date to 'From 1 January 2020' by adding after the words 'property': 'or farming enterprise' and delete Matters of discretion 2 and 3.

5.9 Rule 13.5.18

Rule 13.5.18 provides for assessment of a farming enterprise as a discretionary activity if the nitrogen loss calculation has not increased above the nitrogen baseline. Where an operation includes multiple properties the 'farming enterprise' assessment provides the opportunity for the whole operation to be assessed.

However it is considered that a discretionary activity status is not required and farming enterprise should be included in the rules relating to properties or a specific restricted discretionary rule that includes assessment of the crop rotational system and compliance with industry good practices. It appears that a consent for a farming enterprise would be required before 2017. This presents some difficulties as prior to incorporation of the GMPNPLR through a Plan Change it would not be possible to base the consent on the un-incorporated practices.

Decision sought:

Delete Rule 13.5.18 and provide for farming enterprises in Rules 13.5.15 – 13.5.17.

Or:

Amend Rule 13.5.18 to an RDA rule for farming enterprises that takes into account the rotational nature of the operation and industry good management practices.

5.10 Rule 13.5.19

Rule 13.5.19 makes farming activities that don't comply with permitted activity conditions 2 or 3 in Rule 13.5.15 or for farming enterprises not meeting condition 3 in 13.5.18 to be non-complying

It is considered that the leap from permitted to non-complying is unjustified and should be assessed as a discretionary activity.

Horticulture NZ has sought that Rule 13.5.18 be a Restricted Discretionary Activity so the default if Condition 3 relating to farm environment plan is not met should be Discretionary.

Decision sought:

Amend Rule 13.5.19 to Discretionary activity.

5.11 Rule 13.5.20

Rule 13.5.20 is a prohibited activity rule if the nitrogen loss calculation is increased over the nitrogen baseline. It is considered that Rule 13.5.20 should be non-complying to allow consideration given the uncertainties with establishing the nutrient baseline and the methodology on which it is based. A non-complying rule allows for consideration of an application where a land user can demonstrate the effects of the activity.

Decision sought:

Amend Rule 13.5.20 to non-complying.

Transfers

5.12 Rules 13.5.33 and 13.5.34

Horticulture NZ supports the transfer of water permits as a mechanism to enable efficient allocation and use of water, consistent with the National Policy Statement for Freshwater Management.

However Rules 13.5.33 and 13.5.34 prohibit both temporary and permanent transfers of both groundwater and surface water within the Hinds/ Hekeao Plains Area.

Such an approach removes the potential for use of the transfer tool to achieve efficient use of water.

Prohibiting transfers is not an effective mechanism to address overallocation.

Decision sought:

Amend Rules 13.5.33 and 13.5.34 to Discretionary.

5.13 New rule sought: nitrogen transfer.

To enable flexibility of land use Horticulture New Zealand seeks a controlled or permitted activity transfer rule to be overseen by Council to provide for transfer of nutrients within or between properties within the water management unit where it can be demonstrated the transfer will not cause an increase that exceed the provision for the total nutrient load limit for the water management unit.

Decision sought:

Construct a new rule and method framework to support the policy requested on transfer of nutrients.

Schedule Six: 13.6 Fresh water outcomes

6.1 13.6 Fresh water outcomes

The tables in 13.6 set out the freshwater outcomes for the Ashburton catchment.

Horticulture NZ has raised concerns with the methodology and reports on which these figures are based. It is considered that the tables need to be reconsidered along with a revised s32 Report and informed by a scientific review and the attributes required to meet the proposed National Objectives Framework.

Decisions sought:

Reconsider Tables 13 a), and 13 b) as part of a revised Section 32 Report informed by a scientific review and the attributes required to meet the proposed National Objectives Framework

Schedule Seven: 13.7 Environmental Flow and Allocation and water quality targets/limits

- 7.1 Section 13.7 establishes environmental flow and allocation regime and water quality targets and limits.

Horticulture NZ has raised concerns with the methodology and reports on which these figures are based. It is considered that the tables need to be reconsidered along with a revised s32 Report and informed by a scientific review and the attributes to meet the proposed National Objectives Framework.

Decisions sought:

Reconsider Tables 13 d), 13 e) 13 f) 13 g), 13 h) 13 i), 13 j) and 13 k) as part of a revised Section 32 Report informed by a scientific review and the attributes to meet the proposed National Objectives Framework.

- 7.2 Table 13 g) and Table 13 h).

Table 13 g) sets the target and limits for nitrogen losses from farming activities.

Table 13 (h) sets the required nitrogen loss rates beyond good management practices.

Table 13 i) sets the load calculator for irrigation schemes.

As stated above there are concerns about the methodology used to derive the 3400 tonnes/yr. Given the uncertainties the limits and targets should be interim numbers until further review and testing have been undertaken.

Decisions sought:

Revise Tables 13 i) and 13 j) to provide an equal allocation across the catchment, reflecting a differing ratio (a 2:1 ratio) across 2 slope classes (>15degrees, less than 15 degrees).

Amend Table 13 g) to be interim targets or limits to be reviewed by 2017.

Schedule Eight: 13.10 Schedules and Amendments to Section 16 Schedules

8.1 Schedule 7 Farm Environment Plan

The Variation seeks to amend Schedule 7 in the Proposed Land and Water Plan by applying additional matters to the Ashburton catchment. These include achieving the Good Management Practice Nitrogen Loss Rates from 2017.

As stated elsewhere in this submission the Good Management Practice Nitrogen Loss Rates are not yet known and the effects have not been assessed. Therefore it is inappropriate to include these within Variation 2 until 2020.

Further reductions are predicated on the reductions using Good Management Practice Nitrogen Loss Rates. Reductions post 2022 need to be reassessed when the impact of the Good Management Practice Nitrogen Loss Rates are known.

Decisions sought:

Amend Schedule 7 bullet point 1 'Achieve the Good Management Practice Nitrogen Loss Rates from 2020.'

8.2 Schedule 10 – Reasonable Use test

In order to provide for crop survival water as outlined in this submission, method 1 in Schedule 10 needs to be amended to provide a 10 out of 10 year reliability factor.

Decision sought:

Amend Schedule 10 Reasonable Use Test Method 1: Within the Hinds/ Hekeao Plains Area method 1 shall determine seasonal irrigation demand for horticultural crops for crop survival water as 10 years out of 10.

8.3 Schedule 24 Farm Practices

Policy 13.4.10 requires that farming activities implement the practices set out in Schedule 24a, which sets out nutrient management, irrigation management, intensive winter grazing, cultivation and collected animal effluent practices.

Horticulture NZ generally supports the practices identified in the schedule but understands that the schedule is interim while the Matrix of Good Management Practices is being developed. Schedule 24 should be retained until a plan changes incorporates Good Management Practice Nitrogen Loss Rates into the Plan.

It is noted that the Schedule is not specific to Ashburton and that it includes with the other Schedules in the proposed Land and Water Plan. There should be clarity that the Schedule will only be applied in Ashburton where it is linked to the policy framework.

Horticulture NZ is concerned about the application of a mandatory setback of 3 metres

for cultivation. It is acknowledged that potential for sediment loss should be managed, but there are a range of tools available to manage sediment. Relying on and requiring only one method means that the most suitable method may not be used.

Decision sought:

Retain Schedule 24 and clarify that it relates specifically to Ashburton.

Amend Schedule 24a b) Cultivation ii) by adding after '3 metres uncultivated strip' 'or other appropriate sediment control measures.'

Schedule Nine: Growers in Ashburton zone

M N & R A Holdaway	Process Peas
R J Tait	Blackcurrants
Southberry	Berry
Anthony Hampton Ltd	Peas
Ashburton Hydroponic Growers	Lettuce
B G & L R McGuigan	Process Peas
Bird AJ Farm	Process Peas
Bonar Farms Ltd	Process Peas
Bradley Fields Ltd	Process Peas
C A & Est. M K McArthur	Process Peas
C J Bell	Process Peas
D B & N J Copland T/A Mossgrove Farm Ltd & Snake Gully Farm Ltd	Processed Potatoes
E L Rollinson	Process Peas
G & M A Smith	Raspberries
Hoodfields	Process Peas Processed Potatoes
J A & P J Harcourt	Process Peas Process Sweetcorn
J D Sim	Process Peas
K M & V A Wild	Process Carrots Process Peas Processed Potatoes
Leaderbrand South Island Ltd	Asparagus Broccoli Buttercup Squash Process Beans Process Peas Pumpkins
N C & M S Copland Ltd	Process Peas
Pinegrove AG Ltd	Peas
R L & B A Worner	Fresh Potatoes Seed Potatoes
Radfield Farm	Process Peas
V N Thomas	Process Peas
W N Copland	Process Peas Process Sweetcorn Processed Potatoes
G M & K L Tarbottom	Process Peas
Hinds Berry Gardens	Blackcurrants
J D McKenzie	Blackcurrants
K J & M C Read	Blackcurrants
Mahara Farm Limited	Blackcurrants
G W J Small	Process Peas
J R & H E A Cunliffe	Asparagus Courgette Gherkins Pumpkins
P R & M M Taylor	Process Peas
PELF Ltd	Asparagus
J B Tavendale	Blackcurrants
Tavendale Farming Ltd	Blackcurrants
"W J, M J & A J Doak"	Process Peas
Antrim Glen Farming Co Ltd	Sweetcorn
Balle Bros (Canterbury) Ltd	Processed Potatoes Seed Potatoes

Bonnifant P/Ship	Process Peas
Branfield Farm	Process Peas
C J & F M Copland	Peas
D C & L J Redmond	Fresh Potatoes
D J Mitchell	Process Peas
Derrylin Partnership	Process Peas
Dunbarton Land Co Ltd	Peas
G A & T R Bennett	Process Peas
G Vanderweg	Process Peas
J & H Paton	Process Peas Process Sweetcorn
J C & J M Petrie	Process Peas
Joel Hewson Trust	Fresh Potatoes
Kyle Farm	Process Peas Process Sweetcorn
Lovetts Family Farms Ltd	Carrots Onions Process Peas Process Sweetcorn Processed Potatoes
McBain P/Ship	Process Peas
O H & A J Sprott	Process Peas
P N Butterick	Process Peas
P R Williams	Process Peas
Pensarne Partnership	Process Peas
Porter Fields Ltd	Process Peas Sweetcorn
Pye Produce Ltd	Fresh Potatoes Onions
R F G & B M McArthur	Peas
R S & R A Hewson	Onions Process Peas Process Sweetcorn Processed Potatoes
Riverside Farming Ltd	Onions Processed Potatoes
S J Ellis	Squash - NOT Buttercup
Sparks Brothers	Process Peas
T W & B M Lovett	Process Peas
W I Swaine	Process Peas
West Brothers	Process Peas
G J & M C Power	Process Peas
R W & V M Stackhouse	Peas