

Hearing: at Palmerston North: 17 to 19 April 2012

DECISION: PART 4 – SUSTAINABLE LAND USE/ACCELERATED EROSION

Counsel and parties participating in this topic:

P R Gardner for Federated Farmers of New Zealand

H A Atkins for Horticulture NZ and for Fonterra Co-operative Group Ltd

C J Sinnott for New Zealand Transport Agency

J A Burns for Wellington Fish and Game Council and the Minister of Conservation

N Jessen and J W Maassen for the Manawatu-Wanganui Regional Council



PART 4 – Sustainable Land Use/Accelerated Erosion	Page
Introduction.....	[4-3]
The Regional Policy Statement.....	[4-4]
The Policy Framework in the Regional Plan	[4-8]
The Rule Framework.....	[4-9]
Small-scale Land Disturbance.....	[4-11]
Regulation of Activities in Riparian Setbacks	[4-11]
The Council’s position	[4-12]
Fish and Game’s position.....	[4-12]
Horticulture New Zealand’s position.....	[4-13]
Should the condition apply to intermittently flowing streams with active bed widths greater than one metre or greater than two metres?	[4-15]
Activity Status of Sediment Mitigation Measures Inside the Setback.....	[4-16]
Findings on Setbacks	[4-17]
Should cultivation and ancillary activities in a HCEMA require consent?	[4-17]
What should certain performance conditions for the permitted activity cultivation rule require?	[4-20]
Should the visual quality standard apply?.....	[4-20]
Default Activity Status.....	[4-22]
General Approach in the Rule Framework	[4-23]
Overlap with Decision Part 5 - Surface Water Quality decision	[4-24]
Summary of Conclusions – Part 4.....	[4-25]



Introduction

[4-1] The issue of sustainable land management, including hill country land use, was a key focus of the POP. The wider dimensions of the negative effects on water quality were another important element, such as erosion accelerating the transport of Phosphorus (P) into waterways, contributing to the problems considered in Part 5 of the Decision.

[4-2] The DV-POP made some significant changes to the NV-POP, and further changes were made as a consequence of mediation and expert planning conferencing arising from appeals. While there were still differences on the policies, the focus of the hearing was largely about the rules, with Horticulture NZ, Federated Farmers and Fish and Game still having concerns about several of the provisions.

[4-3] The issues requiring resolution were:

- Whether the objectives and policies of Chapter 5 (the RPS), with its cross-references to Chapter 6 reflected the integrated management of land and water.
- Some policies in Chapter 12 - the Regional Plan.
- What should the threshold size be for small-scale land disturbance as a *permitted* activity in the rules?
- Riparian setbacks – what should their width be and how should land use activities associated with cultivation and ancillary erosion and sediment control land uses, as well as other activities within the setbacks, be treated in the rules?
- Should cultivation and ancillary erosion and sediment control land uses in a Hill Country Erosion Management Area (HCEMA) require a consent?
- What should the *permitted* activity performance conditions be for cultivation for land use works to minimise sediment runoff to water?
- Should cultivation and ancillary erosion control and sediment land uses be required to comply with a visual quality condition or standard to be a *permitted* activity?
- Should the default activity status for the rules requiring resource consents where there is non-compliance with the conditions and standards be *restricted discretionary* or *discretionary*?



- Could the reserved-discretionary matters in the *controlled* and *restricted discretionary* rules be redrafted to better achieve effectiveness and efficiency?

The Regional Policy Statement

[4-4] Chapter 5 (the Land chapter) of the RPS part of the POP, as now proposed by the Council,¹ contains the following objectives:

Objective 5-1: Managing accelerated erosion

By the year 2017, 50% of farms within hill country land subject to an elevated risk of accelerated erosion will have in place, or be in the process of putting in place, farm-wide sustainable land management practices to minimise accelerated erosion and to provide for the water management values set out in Schedule AB by reducing sediment loads entering waterways as a result of accelerated erosion.

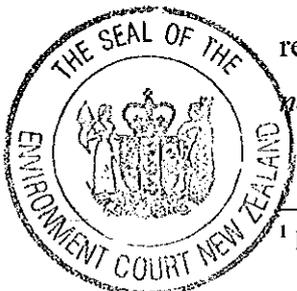
Objective 5-2: Regulating potential causes of accelerated erosion

Land is used in a manner that ensures:

- (a) accelerated erosion and increased sedimentation in water bodies (with resultant adverse effects on people, buildings and infrastructure) caused by vegetation clearance, land disturbance, forestry or cultivation are avoided as far as reasonably practicable, or otherwise remedied or mitigated, and
- (b) sediment loads entering waterways as a result of accelerated erosion are reduced to the extent required to be consistent with the water management objectives and policies for water quality set out in Chapter 6 of this Plan.

[4-5] Horticulture NZ and Federated Farmers sought to soften and replace the words *to provide for* with *to advance the achievement of the* water management values set out in Schedule AB in Objective 5-1. Those parties submitted that this approach would align the objective with what was proposed by some parties for water quality – an approach we reject in Part 5 of the Decision and we also do so here for the same reasons: - ultimately, that it would not promote ... *the sustainable management of natural and physical resources* under the RMA.

¹ Exhibit C1 One Plan Sustainable Land Use and Accelerated Erosion Hearing



[4-6] The relevant supporting policies proposed by the Council are²:

Policy 5-1 Encouraging and supporting sustainable land management

The Regional Council will encourage and support the adoption of sustainable land management practices by:

- (a) working with relevant owners and occupiers of farms within hill country land subject to an elevated risk of accelerated erosion to prepare voluntary management plans under the Council's Sustainable Land Use Initiative (SLUI) or Whanganui Catchment Strategy, which identify sustainable land management practices for each farm and work programmes for implementing any agreed changes.
- (b) monitoring the implementation of voluntary management plans and sustainable land management practices within hill country land subject to an elevated risk of accelerated erosion and reporting this information on a two-yearly basis, and reviewing the effectiveness of the sustainable land management practices, and
- (c) responding to requests from owners or occupiers of land that is not within hill country land subject to an elevated risk of accelerated erosion to prepare a management plan, provided this does not impede the achievement of (a).

Policy 5-2A Regulation of land use activities

- (a) In order to achieve Objective 5-2, the Regional Council must regulate vegetation clearance, land disturbance, forestry and cultivation through rules in this Plan and decisions on resource consents, **so as to minimise any increase in the risk of erosion, minimise discharges of sediment to water, and maintain the benefits of riparian vegetation for water bodies.**
- (b) ...
- (c) The Regional Council will generally allow vegetation clearance, small-scale land disturbance, forestry and cultivation to be undertaken without the need for a resource consent if conditions are met. Vegetation clearance and land disturbance require a resource consent if they are undertaken in Hill Country Erosion Management Areas or in coastal



² Exhibit C 1

foredune areas. Any other large-scale land disturbance activities will also require resource consent.

[4-7] Horticulture NZ and Federated Farmers did not support the addition of the bolded words in Policy 5-2A(a). We consider that those words give guidance that would otherwise be lacking on what is required of regulation and the management of activities to achieve the objective. The evidence of Mr Phillip Percy, a planner giving evidence for Fish and Game, and Mr Phillip Hindrup, a planner giving evidence for the Council supported this.

[4-8] In addition there is the following policy:

Policy 5-5: Supporting codes of practice, standards, guidelines, environmental management plans and providing information on best management practices

The Regional Council must ...

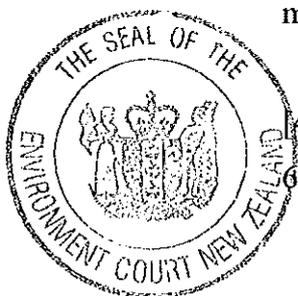
- (a) support the development of codes of practice, standards, guidelines and other sector-based initiatives targeted at achieving sustainable land use,
- (b) recognise appropriately developed and administered codes of practice, standards, guidelines or environmental management plans targeted at achieving sustainable land use, and incorporate them within the regulatory framework where applicable, and
- (c) make information describing best management practices for reducing erosion and maintaining water quality and soil health available to all available landowners, occupiers, asset owners, consultants, developers and contractors.

[4-9] The Council also proposed to add the words *accelerated erosion* to the *Anticipated Environmental Result* in 5.6:

By 2017, there will be a net reduction in the adverse effects on water quality, people, buildings and infrastructure caused by accelerated erosion, and hill country and coastal foredune wind erosion in the Region.

Without these words the provision does not make sense and we agree that this is a minor change that can and should be made.

[4-10] Horticulture NZ and Federated Farmers did not support the links to Policies 6-1, 6-2, 6-3, 6-4 and 6-7 and the indicators of:



- Level of achievement of Schedule D numerics for deposited sediment, visual clarity and Phosphorus
- Changes to long-term mean sediment discharges of rivers to sea
- % of farms within the SLUI priority catchments that have Whole Farm Business Plans (WFBPs) in place and are being implemented.

[4-11] While Horticulture NZ questioned whether there is *scope* to add matters to the Anticipated Environmental Results, we conclude that these are consequential changes (requiring some amendment) in the light of the following points:

- There is undeniably a link between erosion and sediment and water quality, a point we do not understand any of the parties to take issue with. The integrated management of land and water resources would seem to justify the cross-referencing of water quality policies. Indeed Objective 5-2 refers to Chapter 6 of the RPS.
- Part 5 of this decision on the issue of the approach to and naming of Schedule D limits.
- Given the emphasis in the POP on the voluntary adoption and implementation of WFBPs as a method of reducing the risk of erosion and sedimentation, it would seem reasonable to have the percentage of such farms in the SLUI priority catchments as a measure (accepting that by itself it would not confirm the effectiveness of these Plans which is a reason for other additional indicators).
- The Anticipated Environmental Result indicators reflect the approach in the objectives and policies. The implementation of voluntary management plans is closely aligned to measuring progress in the achievement of Objective 5-1 and Policy 5-1 in particular, as reducing sediment loads entering waterways (and flowing into the sea) is aligned to Objective 5-2 and Policy 5-2A.

[4-12] Horticulture NZ and Federated Farmers also opposed some wording in the *Explanations and Principal Reasons* in 5.7, seeking that vegetation clearance, land disturbance and cultivation within or close to waterbodies be softened to activities with *increased potential to cause discharges of sediment to water*. We prefer the expression *high risk of causing discharges of sediment to water* as a better reflection of Policy 5-2A and the evidence.



The Policy Framework in the Regional Plan

[4-13] The regional plan part of the POP must give effect to the RPS – see s67(3)(c). Chapter 12 of POP (Land Use Activities ...) contains one objective:

Objective 12-1: Accelerated erosion – regulation of vegetation clearance, land disturbance, forestry and cultivation.

The regulation of vegetation clearance, land disturbance, forestry and cultivation in a manner that ensures:

- (a) accelerated erosion and any associated damage to people, buildings and infrastructure and other physical resources of regional or national importance are avoided as far as reasonably practicable, or otherwise remedied or mitigated.

[4-14] It contains two policies that specify how activities will be regulated and provide guidance on consent decision-making respectively.

[4-15] The first policy at issue (with the difference in parties' positions noted) was:

Policy 12-1A Regional rules for vegetation clearance, land disturbance, forestry and cultivation:

The Regional Council must:

- (a) ... (relevant to biodiversity)
- (b) manage the effects of vegetation clearance, land disturbance and cultivation by requiring resource consents for those activities:
 - (i) adjacent to some water bodies,
 - (ii) involving the removal of some woody vegetation in Hill Country Erosion Management Areas,
 - (iii) involving land disturbance [Fish and Game sought to add *or cultivation*] in Hill Country Erosion Management Areas,
 - (iv) involving large-scale land disturbance, or
 - (v) within a coastal foredune.

It was clear from the evidence that cultivation in HCEMAs has similar effects to land disturbance and it should be added.

[4-16] The second policy at issue (with the difference noted) was:

Policy 12-1 Consent decision-making for vegetation clearance, land disturbance, forestry and cultivation



For vegetation clearance, land disturbance, forestry or cultivation and ancillary discharges to and diversions of surface water that requires resource consent under Rule 12-4 or Rule 12-5, the Regional Council must make decisions on consent applications and set conditions on a case-by-case basis, having regard to:

(aa) the Regional Policy Statement, particularly Objective 5-2 and Policies 5-2A and 5-5.

(fa) managing the effects of land disturbance, including large-scale earthworks, by requiring Erosion and Sediment Control Plans or other appropriate plans to be prepared.

(fb) managing the effects of forestry by requiring Erosion and Sediment Control Plans or other appropriate plans to be prepared.

(fc) managing the effects of cultivation on water bodies through the use of sediment run-off control methods and setbacks from water bodies.

Horticulture NZ and Federated Far

managing the effects of cultivation on water bodies through the use of appropriate sediment run-off control methods which may include setbacks from water bodies.

[4-17] We do not accept the version of Policy 12-1(fc) offered by Horticulture NZ and supported by Federated Farmers. The evidence made it clear that sediment run-off control methods and setbacks from waterbodies are required to manage the effects of cultivation and should be considered as part of the consent process; and the addition of the word *appropriate* adds nothing.

[4-18] There may need to be consequential changes to Policy 12-1 to correctly cross-reference rules.

The Rule Framework

[4-19] Mr Jessen, for the Council, submitted that to give effect to the RPS and the Regional Plan the rule framework must:

- (a) Implement Policy 5-2A(c) by providing a permitted rule for land disturbance, vegetation clearance, cultivation and forestry;
- (b) Implement Policy 5-2A(c) by providing a stronger activity classification (requiring a resource consent) for activities that take place on Hill Country Erosion Management Areas (HCEMAs), or adjacent to *some water bodies*;



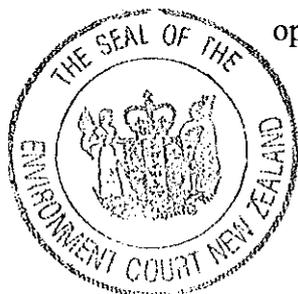
- (c) Implement Policy 5-2A(a) by tailoring performance standards, conditions, or discretions in the rule framework so as to avoid or otherwise remedy or mitigate the effects of accelerated erosion;
- (d) Implement Policy 5-5 by incorporating codes of practice, standards, guidelines or environmental management plans into the regulatory framework where applicable.

[4-20] We pause to note that in the ensuing paragraphs we discuss the issue of riparian margins. In the source documents these are variously described, seemingly at random, as riparian *margins*, riparian *setbacks* and riparian *buffers*. We shall use the term *setback*, or *riparian setback*, but we take all those terms as being synonymous.

[4-21] Mr Jessen submitted that the Council was generally supportive of the approach taken by the Hearing Panel and explained that changes had been agreed to the policy framework, and also to the rule framework, where the Council had agreed to meet concerns raised by some Appellants. The changes are as follows:

- (a) regulatory control over small scale land disturbances (under 2,500m²) through a *permitted* activity rule;
- (b) the lowering of the slope criteria for identifying HCEMAs from 28 degrees to the NV-POP level of 20 degrees;
- (c) larger setback distances from high quality or sensitive waterways;
- (d) riparian setbacks are to apply to ephemeral streams with an active bed width greater than 1m;
- (e) all the *permitted* activity rules require a performance standard condition to regulate ancillary discharges allowed by DV POP, requiring compliance with Schedule D numerics for visual clarity as a minimum water quality standard;

[4-22] Some of these changes are opposed by other parties. For completeness we note that Mr Hindrup also proposed that the default activity status for land uses that could not meet the conditions of a *permitted* activity or *controlled* activity rule should be a *restricted discretionary* activity and not a *discretionary* activity, a change opposed by Fish and Game.



Small-scale Land Disturbance

[4-23] Again for completeness, we note and agree with the addition of a total area up to 2500m² per property per 12-month period to rule 12-1A. We had no evidence that any higher figure would achieve the objectives and policies of the Plan, despite submissions by Federated Farmers questioning it.

Regulation of Activities in Riparian Setbacks

[4-24] In the NV POP certain activities in the riparian setbacks of specified water bodies were not a *permitted, controlled or restricted discretionary* activity but were regulated by Rule 12-5 as a *discretionary* activity:

- (b) For rivers, lakes and natural wetlands:
 - (i) In areas where the land slope is between 0 degrees and 15 degrees, within 10m of the bed of a river, lake or wetland.
 - (ii) In areas where the land slope is greater than 15 degrees, within the strip of land bordered by the bed of a river, lake or wetland, and a setback distance (being not less than 10m) at which the slope reduces to 15 degrees or 100m whichever is the lesser. (sic)
- (c) For artificial water bodies, within 5m of the wetted perimeter of the water bodies.

[4-25] The DV POP moved away from this approach to a uniform riparian setback of 5 metres from rivers, lakes and wetlands.

[4-26] Fish and Game had a concern about a uniform setback of only 5m being required for small-scale land disturbance, large-scale land disturbance, cultivation and ancillary land disturbance for the purposes of constructing erosion and sediment control methods to minimise runoff to water, and vegetation clearance and land disturbance in a HCEMA, in which a resource consent would be required to undertake these activities (the question of the resource consent category we deal with later). There now appears to be general agreement (with the exception of Federated Farmers) that for these activities a 10m setback should apply to wetlands and sites valued for trout spawning, as identified in Schedule AB. And for land disturbance and cultivation, Sites Of Significance - Aquatic (SOS-A) as defined in Schedule AB.

We note that Counsel for Federated Farmers submitted, in apparent contradiction to the planning evidence of its witness, Mr Shane Hartley, that 5m setbacks should apply universally. Dr Jack McConchie, a water resources scientist, for Federated



Farmers had questioned the definition and identification of particularly sensitive water bodies and appeared to consider the 5m width adequate.

[4-27] By the time of the hearing there were several questions remaining for the Court:

- (a) what should the setback distances be from those waterways not on the agreed list of sensitive and highly valued waterways?
- (b) should the setback be variable depending on slope?
- (c) should the setback condition apply to intermittently flowing streams with active bed widths greater than 1m, or those with active bed widths greater than 2 metres?
- (d) for cultivation, should ancillary land disturbance for the purposes of constructing erosion and sediment control methods to minimise runoff to water inside a setback be *permitted* or require a resource consent, and if so what category of resource consent?

The Council's position

[4-28] In support of the 5m riparian setbacks the Council called Dr John Quinn, a water quality scientist, and Mr Allan Kirk, the Environmental Coordinator (Whanganui Catchment Strategy) who has a Bachelor of Agriculture Economics degree. Both witnesses supported a well managed 5m setback from 'normal' waterways and water bodies. Dr Quinn suggested that such a setback would result in an up to 80 percent reduction of sediment in surface run-off. This would decrease as hill slope, angle and clay content increase and soil infiltration decreases.

Fish and Game's position

[4-29] Associate Professor Death, a freshwater ecology specialist for Fish and Game, recommended a minimum setback width of 10m (and 20m for sensitive sites). Mr Norm Ngapo, a soil conservation witness for Fish and Game, suggested a minimum 6m setback on flat land (up to 7 degrees) and 10m beyond for slopes between 8 and 20 degrees. For all other slopes above 20 degrees he suggested a riparian setback of at least 20 metres. The risk of sedimentation discharge increases when works are carried out on land steeper than 7 degrees.



[4-30] Associate Professor Death's evidence was that the role of riparian setbacks goes further than the prevention or reduction of sediment discharges. They also serve to maintain the natural character and proper ecological functioning of in-stream ecosystems. He proposed an alternative approach with a formula to calculate an appropriate riparian setback which, in his view, is a more practical solution than the slope angle method for calculating setback as part of the regulatory framework. This formula uses LUC average slope x by .62 added to a base buffer of 10 metres: i.e. $\text{buffer width} = 10 + 0.62 \times \text{slope (m)}$.

[4-31] In opening, Mr Burns for Fish and Game submitted the rules should provide for a variable setback based on slope:

- For pre-existing slopes between 0-7 degrees – 6m for activities on land adjoining lakes and rivers, and 10m for land adjoining wetlands and sites of significance;
- For pre-existing slopes between 7-20 degrees – 10m for all activities;
- For activities in Hill Country Erosion Management Areas (slopes over 20 degrees) – 10m for all activities.

Horticulture New Zealand's position

[4-32] While Horticulture New Zealand accepted the concept of variable setbacks, it wished to be able to undertake *ancillary activities* within that setback. The modified Rule 12-3 that Ms Lynette Wharfe, its planning witness, proposes requires that the restriction on the activities that could occur in the setback apply only to *cultivation* (as defined in the DV-POP) and not to ancillary land disturbance for the purposes of constructing erosion and sediment control methods to minimise run-off to water. The purpose of her modification to the rule is to allow for sediment control measures to be undertaken within any required setback distance.

[4-33] Mr Andrew Barber, an agricultural engineer, gave evidence for Horticulture NZ suggesting that various sediment control measures such as bunding and benched headlands can be extremely effective in minimising sediment loss. Where these measures are in place stormwater does not flow across an imposed setback - making such a setback superfluous to minimise sediment loss. His evidence is that it makes sense to have a riparian setback *or* other more appropriate and effective sediment



control measures such as those listed above - but not both a setback and sediment control measures.

[4-34] In answers to questions, Ms Wharfe was unable to specify any limits/restrictions to the type or scale of the measures that Horticulture New Zealand may want to undertake within 5m of a waterway.

[4-35] Mr Garth Eyles, a sustainable land management witness for Fish and Game, was clear that both the measures being undertaken and the substrate were important considerations when considering the placement of such measures within any riparian setback.

[4-36] Mr Ngapo's evidence was that sediment control often employed a range of measures. He was clear that for sediment control measures to replace a riparian setback, the sediment control plan would need to be assessed as a whole.

[4-37] We accept Mr Jessen's submission that a setback condition in a *permitted* activity rule cannot create an optimum riparian margin. We are mindful of Mr Hindrup's concerns that the definition of a *riparian setback* be simple to remember and to apply. We are satisfied from the evidence that a 5m setback is a realistic approach for land with a lower slope angle, providing a high degree of protection against sedimentation of waterways without placing too heavy a burden on farmers and growers.

[4-38] However, we are concerned about the efficacy of a 5m setback from a waterway in steeper country. Mr Percy favoured a slope angle trigger, although he did recognise this would make it more difficult to identify setbacks on the ground.

[4-39] Mr Jessen submitted that too many people would require the *assistance of technical expertise* (particularly estimating the angle of slope) to calculate the relevant riparian setback. We agree that an approach along the lines proposed by Professor Death would present considerable challenges. However, we find a slope angle of 20 degrees as the trigger for a 10m setback would be acceptable and could be applied by land users. We are aware that slope as a trigger is applied in several



regional plans around the country, including in the neighbouring Waikato Regional Council area, as Mr Hartley pointed out. In any case the Council is already proposing slope as the determinant of whether or not land falls within a HCEMA. The 10m setback also relates well to the evidence the experts gave us on risks of erosion from cultivation and ancillary land disturbance activities in the Hill Country Erosion Management Area.

Should the condition apply to intermittently flowing streams with active bed widths greater than one metre or greater than two metres?

[4-40] All setback options proposed have sub-clauses that capture rivers that are not permanently flowing; - ie that are ephemeral.

[4-41] The DV POP adopted a 2m active bed width as the threshold for capture by this Rule (Rule 12-4 A). No reason was given by the Panel for selecting this figure. Horticulture New Zealand supports a 2m bed width. The only expert evidence on this matter was provided by Associate Professor Death and Mr Ngapo. Both supported a 1m bed width and Associate Professor Death concluded:

As water runs down hill, management of small and ephemeral streams is critical for management of downstream larger waterways and biodiversity, this protection and management needs to be given to all ephemeral streams greater than 1m and all permanently flowing streams.

[4-42] Mr Christopher Keenan, Manager Natural Resources and Environment for Horticulture New Zealand, also gave evidence that growers had told him: ... *there are some, but very few, instances of water courses with an active bed width greater than 2m.* That would mean that very few, if any, of the region's ephemeral waterways would be captured by this Rule.

[4-43] Ms Wharfe's evidence was that there would be difficulties in defining the active bed of an ephemeral stream. While Horticulture NZ acknowledged that only natural or modified natural watercourses would be caught, there would be practical difficulties with this due to the nature of the drainage and irrigation systems throughout the region. Mr Keenan's evidence was that there are a number of totally



artificial watercourses and it is almost impossible to determine what is totally artificial from what has been modified. We were not convinced of that and we had no expert evidence to substantiate it. Ms Wharfe too conceded that Horticulture NZ may accept the 1m capture threshold if amended wording (concerning modified water courses) is accepted. She advocated further expert conferencing to try to reach agreement on this matter.

[4-44] Ms Wharfe also indicated that there would be significant economic costs to growers if 1m was chosen, but we have no substantive evidence about that.

[4-45] We have already noted there was no evidence to challenge that of Associate Professor Death or Mr Ngapo, who advocated a 1m threshold on environmental grounds. We accept their evidence on this point.

Activity Status of Sediment Mitigation Measures Inside the Setback

[4-46] As a backstop Horticulture NZ supported *restricted discretionary* status for ancillary (to cultivation) land disturbance for the purposes of constructing erosion and sediment control methods to minimise run off to water inside the setbacks from water bodies. This was on the basis that this status would be commensurate with the potential level of effects and provide the Council with the ability to assess the activities and impose appropriate conditions. (This went along with supporting *restricted discretionary* activity status for cultivation activities not complying with the relevant *permitted* activity requirements.)

[4-47] Fish and Game considered *discretionary* activity status a better fit with the objectives and policies to deal with the effects of land disturbance ancillary to cultivation within the setbacks.

[4-48] In view of the evidence, noted above, regarding the potential effects and the variation and scale of possible mitigation measures, and the importance of the substrate when considering whether and where such measures are to be appropriately placed, we conclude that it is essential that the activity category can adequately deal with these matters. However, we leave open the question whether at least certain activities within a setback could be adequately dealt with as a *restricted*



discretionary resource consent or whether full *discretionary activity* consideration is required, including the need to notify affected bodies such as Fish and Game for example. A change in status of course depends not only on the approach and content of the rule but also whether it would better achieve the objectives and policies of the Plan and Part 2 of the Act. This is a matter we ask the Council to consider in the course of redrafting the provisions, with such consultation as is appropriate.

Findings on Setbacks

[4-49] The setbacks from wetlands, the beds of lakes and permanently flowing rivers, and intermittently flowing rivers (or streams) of greater than 1m width should be:

- 5m on land under 20 degrees in slope, and
- 10m for:
 - A wetland as identified in Schedule E.
 - Sites valued for trout spawning as identified in Schedule AB.
 - Sites of Significance - Aquatic as identified in Schedule AB (only for small-scale land disturbance, large-scale land disturbance, cultivation and ancillary land disturbance for the purposes of constructing erosion and sediment control methods to minimise run off to water, vegetation disturbance and land disturbance in a HCEMA, and not for vegetation clearance outside a HCEMA).
 - Land over 20 degrees in slope.

None of these rules for vegetation disturbance and vegetation clearance override those that deal with rare, threatened and at-risk habitats.

Should cultivation and ancillary activities in a HCEMA require consent?

[4-50] *Cultivation* is defined in the DV POP as:

Cultivation means preparing land for growing pasture or a crop and the planting, tending and harvesting of that pasture or crop but excludes:

- (a) direct drilling of seed.
- (b) no – tillage practices.
- (c) recontouring land.
- (d) forestry.



- (e) the clearance of woody vegetation and new tracking in a Hill Country Erosion Management Area.

[4-51] The threshold conditions or requirements of Rule 12-3 of the DV POP (among others) require that cultivation and ancillary land disturbance for the purposes of constructing erosion and sediment control methods to minimise run off to water is not undertaken in a coastal foredune area. We have already dealt with the riparian setbacks that would apply to cultivation.

[4-52] The POP defines a *Hill Country Erosion Management Area* to mean:
any area of land with a pre-existing slope of 20 degrees or greater on which *vegetation clearance, land disturbance, forestry or cultivation* is being or is to be undertaken.

(Earlier we noted the DV-POP had a slope of 28 degrees but the Council took a different position on this subsequently and returned to the NV-POP slope of 20 degrees.)

[4-53] Fish and Game considered a *restricted discretionary* resource consent should also be required for all cultivation (and ancillary land disturbance) in the HCEMA. Horticulture NZ was not opposed to this, but the Council was.

[4-54] Mr Hindrup's position was that, notwithstanding the added risks of erosion and sediment loss in cultivating slopes, because cultivation is not widely employed on hill country the risks posed are not great enough to warrant *restricted discretionary* activity status.

[4-55] Mr Kirk explained that cultivation is mainly carried out on flatter land, but with advances in technology and cheaper chemical and application costs, it is becoming more common on steeper land. He discussed the risks of cultivation (eg impacts on water quality as a result of sedimentation and accelerated erosion) on steeper land, particularly if managed poorly. Risks increase with greater slope and closer proximity to waterways.



[4-56] Fish and Game argued that, irrespective of how much cultivation on steeper land occurs, if it is likely to give rise to adverse effects it should be regulated. Counsel submitted that a resource consent is required for all other activities on HCEMAs which may cause adverse effects, and cultivation should be controlled in those areas as well. We note though that Fish and Game is not concerned with minimum tillage/direct drilling and zero tilling in these areas.

[4-57] Mr Kirk's evidence was that not only is the steeper land vulnerable between the time it is sprayed (and the dying pasture is grazed – often by cattle) and the time the over-sown pasture or crop becomes established, it is also vulnerable when put under an intensive grazing regime to harvest the over-sown pasture or crop.

[4-58] Mr Eyles' evidence was that cultivation (by tractor) was becoming more common on slopes of between 20 degrees and 30 degrees. Traditional cultivation adds to the time that cultivated, vegetation-free soil is exposed to rain and subject to the risk of run-off/erosion.

[4-59] We find the evidence of both Mr Kirk and Mr Eyles on the risks of cultivation on steeper land persuasive. For this reason we do not agree with Mr Hindrup that control of cultivation on slopes greater than 20 degrees is unnecessary - particularly in the light of his concessions that ... *there was little downside to such a rule* ... and that ... *there was no clear cut choice in my mind... as to whether such a rule should apply.*

[4-60] For all of those reasons we agree with Fish and Game on this point and find that cultivation on slopes greater than 20 degrees should be a *restricted discretionary* activity. (This does not extend to cultivation and ancillary activities within the riparian setbacks which are dealt with separately in this decision.)

[4-61] We also conclude that there needs to be a consequential change to the definition of a *Hill Country Erosion Management Area* to include ancillary (to cultivation) land disturbance for the purposes of constructing erosion and sediment control methods to minimise run off to water. We observe that that is probably a



consequence of the DV POP treating cultivation differently from land disturbance – a change from the NV POP.

What should certain performance conditions for the permitted activity cultivation rule require?

[4-62] One issue was the approach to the permitted activity condition/standard/term: For vegetable crops listed within the Commodity Levies (Vegetables and Fruit) Order 2007 a paddock assessment must be undertaken in accordance with the Code of Practice for Commercial Vegetable Growing in the Horizons Region (Horticulture New Zealand) Version 2010/2.

This was agreed by all parties. The Council sought to add:

... and bunding, silt traps, interception drains, to minimise sediment runoff to water must be installed prior to and maintained during cultivation.

[4-63] Horticulture NZ sought to qualify this with the addition of words along the line of ... *appropriate methods including...bunding...* . We find the addition proposed by Horticulture NZ would result in an unacceptable level of uncertainty for a *permitted* activity rule.

[4-64] A paddock assessment by itself of course would provide no assurance that the actions required to minimise sediment runoff proposed by the Council, and supported in evidence, would occur. However, the second part of condition (d) as proposed by the Council appears to largely repeat condition:

(b) Bunding, silt traps, interception drains or other alternative methods to minimise sediment run-off to *water* must be installed prior to and maintained during cultivation.

We conclude that as condition (b) also applies to cultivation for vegetable crops, the second part of condition (d) as proposed by the Council is unnecessary.

Should the visual quality standard apply?

[4-65] A further issue was whether to have a requirement to comply with the Schedule D Visual Quality Standards/Numerics (which we consider to be conditions



setting limits or quantitative thresholds for *permitted activity* status in this context) set out in the MWRC V POP.³

[4-66] Mr Hindrup's evidence was that the Code of Practice for Commercial Vegetable Growing in the Horizons Region (Horticulture NZ) version 2010/2 (COP) (referred to at para [4-62] [4-71] and [4-78]) provides useful – indeed essential - information on management practices for ensuring erosion is minimised on cultivated land. He considered that the inclusion of the document as a performance condition would give effect to Policy 5-5 POP which says:

The Regional Council must ... recognise appropriately developed and administered codes of practice, standards, guidelines or environmental management plans targeted at achieving sustainable land use, and incorporate them within the regulatory framework where applicable.

[4-67] However, the Council acknowledged the limitations of the COP – noting the conference of the technical experts⁴ who agreed that this method alone will not provide sufficient certainty that water quality outcomes intended by s70 RMA and Schedule D visual clarity limits will consistently be achieved.

[4-68] Mr Hindrup's evidence is that the Schedule D performance conditions (requiring compliance with the Schedule D visual clarity threshold limit appropriate to a *permitted* activity), in conjunction with the COP, provide the most efficient and effective means of preventing or minimising the adverse environmental effects of any discharge.

[4-69] Federated Farmers and Horticulture New Zealand do not support the use of the Schedule D Standards and regard the COP as sufficient. They regard the use of Schedule D as a condition to be impractical and unenforceable.

[4-70] Ms Wharfe's evidence is that understanding and enforcing such a condition is problematic. Associate Professor Death disagreed with Ms Wharfe and stated that:

Any ancillary discharge of sediment into water must not, after reasonable mixing, cause the receiving water body to breach the water quality numerics for visual clarity set out in schedule D for that water body
Record of Technical Conference in March 2012.



A 20 percent change of visual clarity standard in Schedule D is scientifically accepted clear and enforceable ... and is commonly used even by school children.

Nor did he accept Ms Wharfe's evidence that it may be difficult to attribute blame to a particular property when a discharge occurred. He stated: *I can't really imagine any practical situation where that would happen ...*

[4-71] We agree with Mr. Hindrup when he says that:

It may be, over time, reliance on the COP and other minimisation methods may indeed adequately address the effects of sedimentation in waterways caused by cultivation, however given the technical experts' concerns in relation to the COP I consider that this performance standard is a necessary, enforceable and measurable boundary of effects for the permitted activity rule.

[4-72] For all those reasons we find that the combination of both threshold conditions for a *permitted* activity fulfills the Council's responsibilities and provides greater assurance that the requirements of s70 RMA would be met. Where either *permitted* activity threshold cannot be met, there is always the opportunity to apply for a resource consent.

Default Activity Status

[4-73] Fish and Game were concerned about a late change to the default activity status for activities which did not meet the conditions, standards or terms of the other rules in Chapter 12. The default status had been *discretionary* and it appeared that Mr Hindrup proposed it be changed to *restricted discretionary*. When questioned on this, he considered the matters over which discretion would be restricted could be clearly specified and that there would be no public notification for activities falling under Rule 12-4. He said that during his time at the Regional Council there had been no public notification required as the landowners tended to agree with the way the Council was managing or working with them.

[4-74] Fish and Game questioned whether, apart from the Horticulture NZ appeal which is confined to cultivation and ancillary activities, there is the scope to seek that change.



[4-75] Stepping back from these specific rules and considering the rule framework holistically, we compare the *discretionary* activity default status here with that for activities covered in Part 5 of this decision and nitrogen leaching. It could raise bundling issues, although this is not the main reason for raising it. It may be that a default *restricted discretionary* activity rule could deal with the issues. Such a rule of course would need to specify the matters discretion is to be exercised over and more limited in its nature than a *discretionary* activity, otherwise there would be no justification for the change.

[4-76] We put this matter back to the Council to further consider and report on, after considering our comments on the general approach in the rule framework to *controlled* and *restricted discretionary* activities.

General Approach in the Rule Framework

[4-77] We had a number of questions about the effectiveness of the rules that relate to the way in which the matters over which control is reserved (for *controlled* activity status) and the discretions (for *restricted discretionary* activity status) which we put to planning witnesses. The planning witnesses, Mr Hindrup for the Council, Mr Percy for Fish and Game, and Ms Wharfe for Horticulture NZ, agreed that there was room for improvement.

[4-78] For large-scale land disturbance a *controlled* activity must be undertaken in accordance with an *Erosion and Sediment Control Plan* (Rule 12-1). There is a long list of matters over which control is reserved (or *restricted* to use the language in the Rule). The main concern (as Mr Hindrup confirmed) is the adverse effects of the activity and associated sediment run-off on soil conservation, surface water quality and aquatic ecology. We still have a number of questions, the tenor of which we put to several of the planning witnesses:

- The condition/standard/term requires the activity be undertaken in accordance with an *Erosion and Sediment Control Plan*. Control is then restricted to the provision of an erosion and sediment control plan. Presumably it is intended that the decision-maker has discretion to seek changes to the provisions or contents of an erosion and sediment control plan to ensure the activity adequately deals with the adverse effects.

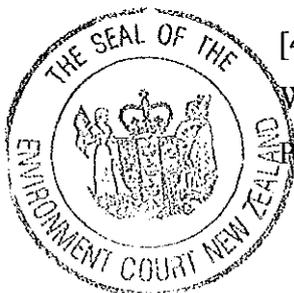


- The principles and erosion and sediment control measures set out in particular provisions of the Erosion and Sediment Control Guidelines for the Wellington Region (September 2002); and for cultivation and ancillary activities the measures in the Code of Practice for Commercial Vegetable Growing in Horizon Region (Horticulture New Zealand Version 2010/2) may *inform* the decision on whether those effects are adequately dealt with. It would be preferable to present them in that way (as a subset of the consideration of whether the adverse effects of concern are adequately dealt with).
- The condition restricts activities on land in or within riparian setbacks, but then there is control/discretion restricted to the provision of setbacks from water bodies. Is this intended to allow consideration of setback distances greater than those required as a threshold condition? If so it should make that clear. If it is intended to deal with the treatment or management of setbacks required by the condition, there could be questions about whether it cuts across and undermines the threshold condition requiring the activity not occur on land within the setback.
- There is a need to consider further the *Achievement of the water quality numerics set out in Schedule D*. What is intended here, given the performance condition requiring:
 - Any ancillary discharge of sediment into water must not, after reasonable mixing, cause the receiving water body to breach the water quality limits (amended from numerics reflecting its threshold nature) for visual clarity set out in Schedule D for that water body?

[4-79] For vegetation clearance, land disturbance and cultivation and ancillary land disturbance for the purposes of constructing erosion and sediment control methods to minimise run off to water (to be added) in a HCEMA, the *restricted discretionary activity* (Rule 12-4) raises a number of similar questions.

Overlap with Decision Part 5 – Surface Water Quality decision

[4-80] There are some matters that overlap with Part 5 of the decision – Surface Water Quality - and will require amendment in the light of the decisions made in that Part. We ask that the Council prepare the necessary changes to the terminology to



bring the objectives, policies and rules into line with our decision, conferring with other parties as required. That particularly relates to replacing the word *numerics* with a word that reflects it being a limit, threshold, condition, standard, or requirement for an activity to qualify for a particular resource consent category.

Summary of Conclusions – Part 4

- A. We do not accept the Horticulture NZ and Federated Farmers proposal to amend Objective 5-1 – para [4-5]
- B. We accept the Council’s proposed amendment of Policy 5-2A – para [4-7]
- C. We accept the Council’s proposed amendment of the Anticipated Environmental Results in 5-6 – para [4-10] and [4-11]
- D. We prefer the expression *high risk of causing discharges of sediment to water* in the Explanation and Principal Reasons in 5-7 – para [4-12]
- E. Cultivation in HCEMAs should be included in Policy 12-1A – para [4-15]
- F. We do not accept the version of Policy 12-1(fc) offered by Horticulture NZ – para [4-17]
- G. Rule 12-1A should be amended to provide for small scale land disturbance – para [4-23]
- H. A riparian margin of 5m is appropriate for low slope angle land – para [4-37]
- I. A slope angle of 20° should trigger the requirement of a 10m riparian setback – para [4-39]
- J. A 1m active bed width should trigger the riparian setback requirements – para [4-45]
- K. Findings on riparian setbacks are all summarised at para [4-49]
- L. Ancillary land disturbance (to cultivation) for the purposes of constructing erosion and sediment control methods to minimise run off to water in setbacks requires a resource consent (category to be further considered) - see paras [4-46] to [4-48]
- M. Cultivation and ancillary land disturbance in a HCEMA requires a *restricted discretionary* resource consent - paras [4-50] to [4-61]
- N. No amendment is needed to the permitted activity condition referring to vegetable crops listed within the Commodity Levies (Vegetables and Fruit) Order 2007 - paras [4-62] to [4-64]



O. The Schedule D visual quality condition or standard is to be a threshold requirement for cultivation and ancillary activities. - paras [4-65] to [4-72]

[4-81] We refer the following matters back to the Council in accordance with the general request contained in Part 1, para [1-23]:

A. Is there a need for any consequential amendments to the policies in the POP to correctly cross-reference Rules- see para [4-18]

B. Could ancillary activities (to cultivation) in a riparian setback be dealt with by a *restricted discretionary* activity rather than a *discretionary* activity? – para [4-48]

C. What consequential changes need to be made to the definition of a *Hill Country Erosion Management Area* to include ancillary land disturbance activities? - para [4-61]

D. What should the default activity status be – *restricted discretionary* or *discretionary* activity? – para [4-76]

E. How should the rules for *controlled* and *restricted discretionary* activity status be improved? – para [4-78] and [4-79]

F. What changes need to be made to the rules and other provisions in line with Part 5 of the decision? – para [4-80]

G. Are there any other consequential changes that need to be made to the POP?

