

**BEFORE THE HEARINGS COMMITTEE**

**IN THE MATTER** of hearings on submissions  
concerning the Proposed One Plan  
notified by the Manawatu-Wanganui  
Regional Council

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**SUPPLEMENTARY PLANNING STATEMENT OF  
PHILLIP PERCY FOR THE LAND HEARING**

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1. My name is Phillip Harry Percy. I am a planning consultant engaged by Horizons. I have previously summarised my qualifications and experience in s42A reports that I have presented to the Land hearing and therefore I will not repeat those details here.

## **INTRODUCTION**

2. This report provides the response to planning matters raised throughout the course of the hearing of submissions on Chapters 5 Land and the parts of Chapter 12 that relate to land management. Matters addressed in this report include those raised in submissions, in the Chairperson's Minute No. 3 (Land preliminary views) dated 18 August 2008 and in submitter and technical evidence presented at the hearing.
3. The Chairperson's Minute No. 3 was found to be very useful by officers and was valuable to assist with focussing the planning, legal and further technical input for the Land hearing.

## **MEETINGS WITH SUBMITTERS**

4. During the adjournment period of the Land hearing, Horizons staff have taken the opportunity to meet with several submitters to attempt to resolve some of the outstanding matters relevant to the Land chapter. These meetings and discussions have been primarily focussed on the matters raised in the Chairperson's Minute No. 3.
5. The meetings and discussions allowed officers and submitters to reach agreement on preferred approaches on a number of matters.
6. There were some matters where officers and submitters were not able to agree on an approach that was acceptable to both. In this report I will present the officers' preferred position. Submitters who do not agree with this approach are able to present evidence to the Panel in support of their alternative approach.

## **PLANNING REVIEW**

7. At the request of the Panel, officers have undertaken a planning review of the provisions of Chapter 5 and the relevant provisions of Chapter 12. This review is to identify and resolve a range of issues identified by submitters and the Panel in relation to the relationship between the provisions of the two chapters, terminology used and the overall construction of the One Plan.
8. The planning review was undertaken by Ms Andrea Bell, and she has provided some brief evidence to support the reasoning and explanation for some of the changes to provisions that she has proposed in relation to Chapters 5 and 12.

## **INTEGRATING PLANNING REVIEW WITH OTHER INPUT**

9. The planning review provided an opportunity to incorporate some of the initial thoughts presented by the Panel in the Chairperson's Minute # 3 as well as recommendations on submissions, into a combined tracked changes version of Chapters 5 and 12 and the Glossary. In particular, the Panel's indication that a changed rule layout would be

preferred, and the decoupling of the Whole Farm Business Plan method from the rules have been addressed.

10. Officers were conscious that the planning review has resulted in Chapters 5 and 12 looking significantly different to their construction when first notified. The origins of the changes recommended can be summarised as:
  - i. Officer recommendations on submissions.
  - ii. The Chairperson's Minute No. 3.
  - iii. The overall One Plan planning review as requested by the Hearing Panel.
  - iv. Minor changes pursuant to Clause 16(2) of Schedule 1 of the Resource Management Act.
11. The tracked changes version of Chapters 5 and 12 and the relevant terms from the Glossary have been prepared and circulated to submitters with this further evidence. An explanation of the annotation of the changes has been included at the beginning of each chapter to assist readers.
12. To aid with clarity, the tracked changes versions issued in association with this report are based on the originally notified version of the One Plan chapters. Recommended changes from previous officer reports to the Land Hearing Panel that are not shown on the current tracked changes versions should be assumed to be replaced.

## FURTHER EXPERT EVIDENCE

13. During the course of the Land hearing, a range of technical matters were raised which require further input from experts. To assist the Panel in making its decision, the following additional expert evidence is provided by Horizons.

Evidence provided by	Summary of expert's evidence
Allan Kirk – Land Management Officer, Horizons	Land disturbance and vegetation clearance in hill country. Land disturbance and vegetation clearance in sand country. Riparian setbacks. Land disturbance and vegetation clearance outside Erosion Management Areas (formerly HEL).
Dr Jon Roygard – Manager Science, Horizons	Revised maps LiDAR mapping
Greg Bevin – Compliance Officer, Horizons	Large-scale land disturbance
Andrea Bell – Consultant Planner	Overall planning review of the Proposed One Plan.

## MATTERS RAISED IN CHAIRPERSON'S MINUTE NO. 3

14. The Chairperson's Minute No. 3 provides officers and submitters with the Panel's initial thoughts on the direction in which it may wish to proceed in relation to the provisions in Chapters 5 and 12 of the Proposed One Plan (POP). The minute was formulated after the Hearing Panel heard from all submitters who wished to speak at the hearing, and from Horizons' technical experts.

15. Through discussions with submitters and consideration by officers, several of the preferences of the Hearing Panel have been either adopted in whole or have been adopted with some degree of modification. In some cases alternative recommendations to the Panel's initial views have been made, with explanations given for the alternative approach.
16. Due to the significant changes that have arisen out of the overall planning and legal review, the Chairperson's Minute No. 3 and responses to evidence already presented, a complete reconsideration of all of the submission points relevant to the land hearing has not been made. Therefore, the recommendations in the initial planning recommendations as to whether to accept or reject submission points may no longer be accurate but have not been reviewed as part of this process. Given the number of submission points (2,244 submission and further submission points) to be reviewed, it is considered more efficient to provide assistance to the Hearing Panel (if assistance is requested) to amend the responses to submission points once the Hearing Panel has made its substantive decision on the provisions of Chapters 5 and 12.
17. To assist readers, references to the paragraph number from the Chairperson's Minute No. 3 have been made in the following sections of this report. The paragraph number of Minute No. 3 will be **bold shaded**.

## HIGHLY ERODIBLE LAND (HEL) TERMINOLOGY

### PARA 16

18. As was discussed in my initial report for the Land hearing, the phrase 'Highly Erodible Land' is inflammatory and is not considered to be appropriate by a large number of submitters. The Panel's suggestion of replacing it with 'Erosion Management Area' is supported.
19. There is some concern from submitters that the new terminology implies that all land within the mapped Erosion Management Areas (EMAs) is prone to erosion. However, the phrase does not state that all land within these areas is prone to erosion, rather that this is an area where particular consideration needs to be given to managing erosion. The benefit of including the word 'erosion' in the phrase is that it provides an initial indicator to plan users of the purpose of the EMA designation and therefore hopefully a prompt to consider the rules in the plan prior to undertaking activities that may influence erosion.

## THE SUSTAINABLE LAND USE INITIATIVE (SLUI)

### PARA 17

20. The Panel's initial preference is to retain a strong non-regulatory link to the Sustainable Land Use Initiative (SLUI) in the One Plan but to remove use of Whole Farm Business Plans (WFBPs) in the rule framework. This is supported by officers and has been achieved by retaining reference to SLUI in Policy 5-1 but removing reference to WFBPs from the objectives, policies and rules. The revised policy structure (which establishes clear link between Objective 5-1(a) and Policy 5-1) makes it clear that the SLUI programme is a non-regulatory method.
21. Removing the reference to WFBPs from the rules eliminates the savings in regulatory processes that the notified version of the rules would have enabled (because those

people with WFBPs were excepted from the rules that would otherwise require consent for some activities). Under the revised approach, regardless of whether land owners have a WFBP in place, they will still need to apply for resource consent for some activities.

22. The originally notified WFBP link to the rules is not essential for the functioning of the One Plan or the SLUI programme, but it did provide a level of efficiency between the two mechanisms.
23. It is likely that landowners will be advised at the time that WFBPs are being prepared that they will require resource consent for some of the activities that the WFBP prescribes for their property. It would be at the landowner's discretion to apply for resource consents as and when they are required, or to make one application for 'global' consents for all of the activities prescribed in the WFBP. The latter approach would likely result in a more efficient process.

#### **PARA 18, PARA 20**

24. With the de-coupling of WFBPs from the One Plan rules, there is no requirement for WFBPs to be specifically referred to in the One Plan. Therefore all references have been removed, as has the definition in the Glossary.

#### **PARA 19**

25. At the Hearing Panel's suggestion, it is proposed to include reference in the One Plan to 'management plans', which would include any management plans that have been prepared for properties or activities and that are relevant to managing accelerated erosion. Officers have given consideration to whether management plans should be limited to specific plans, for example WFBPs and Whanganui Catchment Strategy plans. However, because the initiatives that are the source of the management plans are subject to change, it is considered problematic to try to maintain the One Plan's currency with the specific details of those initiatives.
26. It is therefore recommended that the term 'management plan' is not defined to include a list of specific plans. Where management plans are submitted in support of resource consent applications for activities controlled by the One Plan, the assessment of the relevance and appropriateness of the management plan will generally occur at the time a resource consent application is being assessed. Where the land management plan, either in whole or in part, is considered appropriate for managing the effects of the proposed activity, reference can be made to that in the resource consent.

#### **PARA 21**

27. The proposed changes to Chapter 5 in relation to WFBPs and management plans is as follows:
  - (a) Objective 5-1(a) does not refer to WFBPs or management plans. Instead it is worded in a broader nature to provide the sustainable land management intent and to enable specific implementation of the objective via Policy 5-1 and the non-regulatory methods.
  - (b) The word 'minimised' in Objective 5-1(c) to (e) has been replaced with 'avoided as far as practicable or otherwise remedied or mitigated'. The reason for this change

is to utilise the terminology of the RMA but to make a clear statement that avoidance is the preference in relation to accelerated erosion and only where that is not practicable should the alternatives of remedy or mitigate be applied.

- (c) Policy 5-1(a) no longer refers to WFBPs but reference is made to management plans associated with the SLUI programme. This recognises that the SLUI programme and the management plan tools within it (currently WFBPs but subject to change) is the principal method for implementation.
- (d) Reference to future regulatory impositions of WFBPs has been removed from Chapter 5. Originally notified Policy 5-1(c) has been deleted in its entirety as it provided no direction for action and served little purpose from a policy perspective.

## **DELINEATION AND MAPPING OF HILL COUNTRY LAND THAT FALLS WITHIN AN EROSION MANAGEMENT AREA (EMA), FORMERLY TERMED HEL**

### **PARAS 22 TO 24**

- 28. In response to the Hearing Panel's request to modify the maps which delineate the EMA, Dr Roygard has prepared revised maps. Please refer to Dr Roygard's supplementary evidence for explanations of these maps and discussion of the potential for undertaking more detailed terrain mapping such as LiDAR surveying.
- 29. Consistent with the Panel's preliminary views, a map in Chapter 5 based on Dr Dymond's data is supported. This provides plan users with an indication as to the extent of land that is at higher risk of accelerated erosion. It also provides support to the explanation of the extent and scale of land that is subject to higher erosion risk in the text of the chapter. This map is only for information purposes and is not intended to be used to identify particular sites or areas of land. However, it does include Water Management Zone boundaries and identifies the SLUI priority catchments – again for information purposes only.
- 30. A series of maps is also recommended to be included in Schedule A which will be of a scale that will enable people to identify their property and whether that property is within an EMA. These maps are related to the rules in Chapter 12.
- 31. To summarise the changes from the originally notified Schedule A map, the revised maps exclude all land that is owned or administered by the Department of Conservation and by the New Zealand Defence Force, or which is within QEII National Trust covenants. As Dr Roygard explains in his evidence, it was not possible to exclude Nga Whenua Rahui land as the data set available has not been updated since 2006. The revised maps, as with the originally notified maps, utilise Dymond and Sheppard's (2006) data as a starting point. Any property that contains an area identified by Dymond and Sheppard (2006) is coloured and the entire property is included in an Erosion Management Area. The maps include a statement that explains that not all land within an EMA is subject to higher erosion risk, but that particular sites within an EMA will be subject to rules in the One Plan.
- 32. The maps are intended as a first tier for determining whether the rules in the Plan apply. If land is shown to be within an EMA, plan users are then prompted to consider the rules. The rules include slope angle as a further tier, so any land that is within an EMA *and* has a slope angle exceeding that specified in the rules, is subject to the rule.
- 33. With regard to Department of Conservation land and New Zealand Defence Force land, s4 of the RMA requires that the provisions of s9 do not apply to work or activity of the Crown where the Minister of Defence certifies that it is necessary for reasons of

national security or it is undertaken on land that is held under the Conservation Act 1987 or any act listed in Schedule 1 of that Act (which includes QEII National Trust land). In his evidence Allan Kirk provides a brief explanation about the management of the New Zealand Defence Force land and the adequacy of the current self-management approach.

34. Providing the base information map in Chapter 5 is likely to assist plan users in understanding the context of the objectives and policies in Chapter 5. It provides a 'picture' of the extent of the hill country issue and to some degree reinforces the relevance of accelerated erosion as one of the 'big four' issues. While the map is not essential to the reading of Chapter 5, it does provide useful assistance in gaining a wider understanding of the Plan.

#### **PARA 27**

35. The Hearing Panel has suggested that the variable slope approach to determining when rules in the Plan come into effect (as was recommend in the Planning s42A Report prepared for the beginning of the hearing) should be replaced with a single slope value (25 degrees) for simplicity. While I agree that a single slope trigger improves the simplicity of applying the plan provisions, it increases the amount of land that will be subject to the rules by including land that would not, based on the evidence presented, necessarily be at a higher risk of erosion that land over the slope threshold that is on more stable parent rock. The result will be that resource consent may be required for activities where none is necessary under the variable slope method previously recommended. This concern was expressed by several submitters in feedback to officers.
36. Despite the misgivings above, the fact that a resource consent is required for some activities on land that does not have a raised erosion risk will not result in a reduced environmental outcome. The disadvantage and cost is with the applicant, who will be required to accept the cost of obtaining resource consent. Where the 'consent in the field' approach is adopted, this cost will likely be negligible compared to the construction costs associated with the work.
37. Adopting the alternative of a variable slope angle based on rock type is problematic only in that determining the parent rock type requires a level of expertise and training. After significant discussions among officers in an attempt to identify a more certain mechanism for determining the different rock types, none has been identified. The determination of rock/soil type involves a number of related factors and requires educated assessment rather than being defined in exact terms.
38. Where farms are mapped as part of a management plan process (WFBP or otherwise), the determination of rock type will have been done. It is only a potential issue for those properties that have not had their land mapped and do not have the technical expertise available to identify the rock type. This 'problem' will reduce over time as the SLUI programme progresses and more properties are mapped.
39. Discussions with Allan Kirk and others suggest that there is no obvious method for determining rock type that is able to be written into the Plan to provide certainty for lay users. Therefore, unless submitters are able to offer an alternative to the single slope approach, that mechanism is considered to provide the most certainty in terms of plan interpretation.

## REGULATION OF ACTIVITIES IN HILL COUNTRY EMAS

### PARAS 28 AND 29

40. At the Panel's suggestion, certain activities within hill country EMA are addressed through a restricted discretionary activity rule (Rule 12-5). Officers agree (either in whole or in part) with the Panel's suggestion that the following matters should be subject to resource consent:
- i. Clearance of woody vegetation that is older than seven years (excluding production and conservation forests). Allan Kirk provides additional evidence to support seven years as the appropriate age for triggering a resource consent. He explains that seven years is when many woody vegetation species develop significant root structures that begin to provide a degree of erosion protection on slopes.
  - ii. Any new tracking activity in so far as it is captured by a general land threshold that applies to all activities.
  - iii. Any other new land disturbance activities that involve greater than 100 m<sup>3</sup> of material or 100 m<sup>2</sup> in area. This relatively small volume/area of land disturbance recognises that activities on land that is at a significant risk of accelerated erosion need to be carefully managed. The low trigger volume recognises that even small amounts of land disturbance can result in significant erosion effects.
  - iv. Clearance of vegetation (including all species except those excluded from the definition of vegetation clearance) within five metres of the beds of rivers, wetlands and lakes. Vegetation along riparian areas plays a number of roles. It provides a degree of erosion protection, provides a sediment trapping role and can assist in discouraging stock from entering river beds. The originally proposed variable riparian width recognised that steeper slope angles adjoining water bodies increase the rate of run-off and erosion risk and therefore sediment transport, and also were more susceptible to undercutting from lateral erosion. Retaining vegetation on these areas was considered to play a role in minimising erosion. However, subsequent discussions with Allan Kirk indicate that a 5 m riparian setback is sufficient to provide the majority of the benefits listed above, namely sediment trapping, stock discouragement and some bank erosion protection, particularly on smaller waterways.
41. After discussions with technical experts, I do not consider that there is a need to control tracking separately from other land disturbance activities. The suggested 100 m length of track within land steeper than 25 degrees has significant potential to be undertaken in a manner that results in accelerated erosion. For example, where a track is created around the toe of a steep slope, a relatively short length of track has the potential to result in a large amount of material becoming subject to erosion.
42. Typically, tracks on farms will be in the region of 2-3 metres wide. If the 100 m<sup>3</sup> volume of land disturbance is applied, and assuming a slope angle of 25 degrees, a very crude calculation shows that approximately 20 metres of track can be constructed before a resource consent is triggered. Bearing in mind that this is an activity that is taking place on land that is identified as being at higher risk of erosion than other land, even a 20 metre length of track has significant potential to cause accelerated erosion if located or constructed poorly.
43. Allan Kirk provides some examples and explanation in his supplementary evidence of the characteristics of tracking and land disturbance activities in high-risk erosion areas.
44. Requiring a resource consent for land disturbance and vegetation clearance activities in areas that are at higher risk of accelerated erosion enables the direct input of expert

land management advice as to the most appropriate placement and construction techniques for that activity. Regardless of the type of activity that is being undertaken, a similarly low threshold should apply where the risk of accelerated erosion is the same.

45. It is also considered necessary to include an area threshold as well as a volume threshold. There may be instances where an activity, such as root raking, could be proposed which may result in disturbance of a large area of land but involve a limited volume or the volume, is difficult to measure, ie. where the soil is not being physically removed and the disturbance has a variable depth. The combination of the two thresholds provides certainty that only small-scale land disturbance activities are able to take place as permitted activities

### **PARA 30**

46. I consider that not limiting the activity to a per area threshold, such as per property, creates difficulty for plan certainty. Where a 'per activity' approach is taken without a spatial element, as in the operative Land and Water Plan, it is difficult to define when the activity begins and ceases. Greg Bevin, a Horizons Compliance Officer, has provided evidence to explain the difficulties with the current Land and Water Plan approach.
47. From a landowner's perspective, it would be possible to argue that a track meeting the permitted activity conditions (assuming there is no 'per property' tie) could be cut as one activity and then a second track, only centimetres away from the first and of the same size, could be cut as a separate activity. The separation of the two track construction activities, even by a small area of land (or a period of time) could be argued to be two separate activities and therefore each construction entity is a permitted activity. Removal of the dividing section of undisturbed soil between the two tracks could be a third activity. This cumulative opportunity with the current Land and Water Plan rule creates significant compliance difficulties and uncertainties for plan users.
48. To resolve this 'loophole' a spatial and time limitation should be included in the permitted activity condition.
49. Limiting the volume/area of disturbance to a property effectively allocates equivalent rights to disturb land to all property owners regardless of the size of their land holding. A per hectare basis becomes problematic where the shape of the hectare is variable – a number of hectare shapes could be connected to enable a long track to be constructed as a permitted activity but which could have significant potential to cause accelerated erosion. A submitter (Patrick Carol) through feedback on the draft provisions suggested a per 200 hectare threshold. This would be beneficial for large landholdings and would be less easily manipulated, however it would not seem to provide any benefit (except for large properties) over a per property area.
50. The objective of the rule is to trigger the involvement of expert consideration of the appropriateness of activities in areas that are at higher risk of erosion. A per property per year limit achieves this result.

### **PARA 30**

51. The inclusion of a permitted activity condition referring to 'woody vegetation' requires a definition to be inserted. The proposed definition is intended to be simple and is based

on a biological description of woody plants. It refers to lignified tissues, which is essentially the hard woody material that is common to woody plants. Herbaceous plants do not form lignified tissue. The definition is only needed for certainty as in most cases plan users will understand the common meaning of woody vegetation.

#### **PARA 32**

52. Cultivation on steep land that is at significant risk of erosion has potential to cause adverse effects. The activity generally occurs over a large area and involves disturbing the soil, thereby making it more vulnerable to erosion caused by water movement. Machinery such as bulldozers and giant discs make it possible to cultivate steep land for regrassing or fodder crops. These activities require careful management to prevent the soil resource being removed from the property, therefore resource consent to undertake such activities on steep land is considered appropriate. Allan Kirk provides additional explanation in his supplementary evidence.
53. To achieve this, cultivation is not otherwise permitted in the Chapter 12 rules. Rule 12-3 therefore applies to cultivation within EMAs, with resource consent being triggered where the conditions of that rule cannot be complied with.

#### **PARA 33 AND 34**

54. It is proposed to include two general permitted activity rules in the Chapter 12 rule framework, which provide for all activities other than production forestry, which is addressed through a separate permitted activity rule. The proposed permitted activity rules are:
  - (a) Rule 12-1 provides for those activities that were previously listed as exclusions from the definitions of land disturbance and vegetation clearance.
  - (b) Rule 12-2 provides specifically for production forestry activities.
  - (c) Rule 12-3 provides for all other activities provided, they meet a set of specific conditions.
55. Moving the exclusions from the definitions of vegetation clearance and land disturbance into the new Rule 12-1 is primarily intended to improve the readability of the Plan. Specifying those activities in a permitted activity rule makes it clear to plan users that their status is permitted, rather than having to rely on some knowledge of the RMA to understand that land use activities not covered by a rule (by being excluded from the definitions) are assumed to be permitted via s9 of the RMA.
56. Activities that are not specifically listed in Rule 12-1 must be checked against the other general permitted activity rule, Rule 12-3. Rule 12-3 includes a list of conditions that must be met for the activity to be a permitted activity. Any activity not complying with the conditions of Rule 12-3 requires a restricted discretionary resource consent under Rule 12-5.
57. The originally notified permitted activity rule (Rule 12-1) included a condition requiring 'effective' erosion and sediment control measures to be put in place for large-scale activities. This condition has been incorporated into the new Rule 12-3 and has been modified in recognition of its uncertainty as to what constitutes 'effective'.
58. The revised condition in Rule 12-3 will result in those activities now having to put in place erosion and sediment control measures that are developed in accordance with

Greater Wellington Regional Council's *Erosion and Sediment Control Guidelines for Wellington Region*. These guidelines are currently used in practice by Horizons compliance staff when managing erosion and sediment control activities. The proposed condition includes a requirement for an erosion and sediment control plan to be implemented for the activity. A new definition is proposed which defines an erosion and sediment control plan (ESCP). The definition refers to Greater Wellington Regional Council's guidelines and specifically requires the ESCP to prescribe how the nine principles of erosion and sediment control will be applied on the site. A copy of the nine principles of erosion and sediment control is attached in Appendix 2 of this report. The condition also requires the Regional Council to be notified prior to large-scale land disturbance activities being started, which enables an opportunity for intervention and advice to be provided from the beginning of works rather than in response to problems later.

59. The intention of this requirement is to ensure that each ESCP is comprehensive and reflects the characteristics of the site. The reason for this is that the complexity of effective erosion and sediment control can be significant and for large-scale activities careful planning needs to be undertaken. Compliance Officer Greg Bevin has provided technical evidence which includes some examples of recent activities where erosion and sediment control measures required the scrutiny of an expert assessment prior to works beginning.
60. It is considered that erosion and sediment control measures are best developed on a case by case basis where site characteristics are analysed as part of a considered process. This eliminates the uncertainty around trying to meet an absolute permitted activity standard for erosion and sediment control. A permitted activity standard for discharge quality, such as that proposed in my earlier recommendations "shall not reduce the turbidity in the receiving waters by more than the % change prescribed in Schedule D", is difficult to demonstrate compliance with prior to the activity occurring. The approach of requiring the guidelines to be used implements a best management practice approach rather than an absolute outcome.

#### **PARA 35**

61. On further consideration, it is considered that the conditions in the Chapter 12 rules that related to archaeological sites and discoveries are beyond the Regional Council's prescribed functions stated in s30(1)(c) of the RMA. The management of archaeological sites, including their accidental discovery, is covered under the Historic Places Act 1993 and therefore does not need to be further managed through the RMA.

#### **PARA 36**

62. The rule stream has been amended so that any non-compliance with the permitted and controlled activity rules defaults to a restricted discretionary activity rule. The matters of discretion are reasonably extensive and there may be some argument to support the activity status being full discretionary. However, the benefit of the restricted discretionary status is that it enables public notification of applications to be specifically waived, which enables initiatives such as the 'consents in the field' approach that is anticipated by Horizons. S94C of the Act provides the opportunity for the non-notification clause in the rule to be overridden where the Council considers that there are special circumstances for notification to occur. This provides an opportunity for those rare activities with potentially significant adverse effects beyond the boundary of

the application site to be notified and proceed through a submission and hearing process.

#### **PARA 37**

63. At the Panel's suggestion, an advice note has been included at the beginning of the rules to describe how the rule stream functions. Please see the tracked changes document for this.

## **REGULATION OF PRODUCTION FORESTRY AND SOIL CONSERVATION FORESTRY ACTIVITIES**

#### **PARA 38 TO PARA 41**

64. In response to the forestry industry submitters' request and the Panel's direction, a tiered approach for forestry activities is proposed. The approach enables production forestry activities that meet appropriate industry standards (currently only the Forestry Stewardship Council (FSC)) to occur as a permitted activity (Tier 1).
65. Forestry industry submitters have requested that the Programme for the Endorsement of Forestry Certification (PEFC) and ISO14001 accreditation are included with FSC as appropriate industry standards for permitted activities. It is my understanding from discussions with submitters that PEFC is likely to be an appropriate accreditation system but that it is not yet established in New Zealand. For this reason, it cannot be confirmed whether PEFC accreditation achieves the outcomes required by the One Plan and it is therefore premature to include it as a permitted activity standard.
66. My understanding of ISO 14001 is that it assesses a company's own environmental management system and ensures that that system covers aspects such as a commitment to continual improvement and compliance with applicable legislation and regulations, but the standard does not establish absolute requirements for environmental performance. I have asked Sally Strang of Hancock Forest Management Ltd to clarify how ISO14001 accreditation picks up and applies the requirements of planning documents like the One Plan, ie. if there are no regulatory constraints on forestry (rules) is there any assurance that an ISO14001 accredited system will achieve the objectives and policies of the One Plan. She may be able to provide further advice to the Panel on this.
67. The second tier suggested by the forestry submitters is to develop an 'approved operator' framework where operators who are approved by the Council are listed in the Plan and are able to undertake production forestry activities as a permitted activity. On examination, this approach would appear to require an accreditation framework and standard to be developed to cover a wide range of forestry operator roles, and frequent changes to the list of approved operators might be required. While I agree that the approach has significant merit, I am concerned that the administration requirements for both operators and the Council would be significant.
68. The alternative proposed is to replace the approved operator approach with a controlled activity rule that is pivotal on an environmental management system being prepared and approved which controls the forestry operator's activities. This approach allows each operator's environmental management system to be tailored to the activities they are undertaking and enables consideration of operators on a case by

case basis. Any limitations in the environmental management systems proposed can be addressed through conditions of consent.

69. Operators with PEFC, ISO14001 and other accreditations will have developed environmental management systems through those processes and it appears, through discussion with the forestry submitters, that the controlled activity rule approach whereby those environmental management systems are assessed and approved by the Council, is an appropriate process.
70. For people not wishing to prepare or operate under an environmental management system (for example one-off activities), a restricted discretionary consent can be applied for (tier 3).
71. Discussions with Sally Strang, who has been coordinating comments from the forestry industry submitters, indicate that this approach is acceptable.
72. The proposed rewording of the rules does not permit production forestry on coastal foredunes. This activity was not permitted by Rule LM 2 in the Land and Water Plan as activities in these areas are controlled by Rule LM1 (coastal foredunes). As the coastal foredunes are highly vulnerable to the effects of vegetation clearance and land disturbance, production forestry is not appropriate as a permitted activity in these areas. Allan Kirk provides supplementary evidence to support this.
73. Conservation forestry activities have similar potential effects to production forestry activities where harvesting is necessary, but their primary role is for soil conservation rather than timber or wood product production. Revised Rule 12-1 specifically identifies 'the planting and management of trees, including forestry, for soil conservation purposes' as a permitted activity without conditions, recognising the initiatives to promote more sustainable land uses for erosion-prone land. Where conservation plantings intended for harvest are planted, harvesting of the trees that are not for production forestry would be subject to Rule 12-3. This is to enable the management of access tracks and harvesting activities in what is often erosion-prone land. In most cases, access for and management of harvesting will have been considered as part of management plans, ie. WFBPs recommending the plantings. Planting and management of trees that are not intended to be harvested, such as poplars, would be permitted without restriction.

## **DEFINITION OF A COASTAL EMA AND REGULATION OF LAND USE ACTIVITIES WITHIN IT**

### **PARA 42 TO PARA 44**

74. Allan Kirk has provided supplementary evidence describing some activities that have and may take place on coastal land that have a high potential to cause accelerated wind erosion. While these activities do not tend to occur on a regular basis, they have a high potential to cause significant accelerated erosion.
75. The land within the Coastal EMA that is the subject of concern are soils with high sand content. These soils, once exposed to wind as a result of vegetation disturbance or topsoil removal, are very vulnerable to erosion. Managing all land disturbance and vegetation clearance activities on these vulnerable soils is considered to be important in reducing the likelihood of accelerated erosion occurring.

76. Land disturbance and vegetation clearance activities that take place on soils within the Coastal EMA that are not primarily sand are less likely to cause accelerated erosion and should therefore be able to occur as permitted activities. Examples of these activities would be the majority of existing market gardening areas where the activity is located on less sandy soils due to their better fertility. To a large extent, market gardening and cropping activities are likely to naturally occur on more fertile areas and these activities do not pose a significant wind erosion risk.
77. The challenge for the One Plan is to enable activities on lower risk soils while ensuring that activities on high risk soils are regulated to enable careful management consideration. Earlier recommendations by officers suggested a method where the soil characteristics became a trigger for further scrutiny. The Hearing Panel and some submitters appeared to be concerned that the description of sandy soils was imprecise and therefore may be difficult to apply and enforce. Two alternative methods are therefore considered:
- i. Make the description of sandy soils more precise.
  - ii. List specific high-risk activities other than cultivation and harvesting, eg. land disturbance and vegetation clearance. This is problematic as there may be activities that are appropriate/inappropriate in these areas that are not included/excluded.
78. The preferred approach is to make the description of sandy soils more certain. It is proposed to adopt the approach that is used in Environment Waikato's Regional Plan, which refers simply to 'where loose sands are at or within 10 centimetres of the ground surface'. Consultation with Horizons Land Management Officers confirms that this 'secondary trigger' used in conjunction with the Coastal EMA maps would include those areas of the coastal sand country that are most vulnerable to accelerated erosion from land disturbance and vegetation clearance activities. This has been incorporated into the revised rules in Chapter 12 via Rule 12-3(c).
79. The range of controls available for managing activities on sand country is relatively limited. Remedying or mitigating sand that is being eroded by wind is difficult and avoidance of disturbance is generally preferred. Where disturbance of land that is vulnerable to wind erosion is allowed, management controls can include rapid replanting, application of a topsoil layer or other surface protection medium, or temporary measures such as the application of water to the sand surface. Appropriate management measures will need to be considered on a site by site basis and will depend on the eventual land use of the site, ie. whether it will be covered by structures or remain exposed.
80. The proposed Coastal EMA area shown on the revised maps is the same as the area included in Schedule A as originally notified. This area is proposed to be used in combination with the soil identification trigger in Rule 12-2(c) which only captures sandy soils within the mapped area. The intention of this approach is to not capture land uses that occur on less vulnerable land within the coastal area.

## **VEGETATION CLEARANCE AND LAND DISTURBANCE OUTSIDE AN EMA (OUTSIDE FORMER HEL)**

### **PARA 45**

81. Rule 12-1, as originally proposed, did capture all land use activities outside of EMAs. I believe this was intentional. The intent of the rule appeared to be to enable all

activities, other than those captured through other rules, without restriction, but to capture large-scale land disturbance activities throughout the Region where there is significant potential for sediment discharge into water bodies and to provide a general protection for archaeological discoveries.

#### **PARA 46**

82. The revised Rule 12-3 enables vegetation clearance in all areas outside EMAs except in sensitive habitats, coastal foredunes and within five metres of waterbodies. Vegetation clearance activities outside these areas are considered to pose little risk of erosion and discharges of sediment to waterbodies.
83. Sediment discharge into waterways from cultivation activities is occurring in the Region, as will be described briefly by Mr Kirk in his evidence. Cultivation activities also occur closer than 5 m to waterways in many instances. The proximity of cultivation to waterways is generally a function of the riparian slope, soil conditions and method of cultivation. Where the land contour is relatively even and the soil type is not unduly difficult to cultivate, ie. not rocky or excessively wet, there are many examples of cultivation that occur less than a metre from the banks of waterways.
84. I consider that a requirement for all cropping activities on non-EMA land to prepare erosion and sediment control plans would be overly onerous. However, a minimum setback standard is needed to minimise direct effects of cultivation on waterways, as highlighted in Allan Kirk's evidence. Method 5-3 (Sustainable Land Use Initiative – Soil Health) also provides a non-regulatory method for supporting improvement in practices in relation to high-class soils that are most commonly cultivated.

#### **PARA 47 AND PARA 48**

85. With regard to large-scale land disturbance activities, the territorial authorities in the Region include a range of controls in their district plans. Most district plans include some level of regulation of land disturbance activities, although the triggers for the scale of these activities vary. Please see Appendix 1 of this report for a summary of the provisions from the main district plans in the Region, excluding Stratford, Taupo and Waitomo district plans.
86. None of the district plans specifically provide for management of the effects of large-scale land disturbance on water quality or aquatic ecosystem values. There is some indirect scope in some plans, by way of controls on sedimentation to manage flooding effects, but the effects threshold for sedimentation causing flooding is likely to be higher than for water quality management. Examination of the provisions of Plan Change 42 to the Palmerston North City District Plan suggests that the primary intent of the new earthworks rules is to manage the effects of earthworks within the function of the City Council. While there will be some default benefit to water quality and aquatic ecosystems through managing sediment discharges for district purposes, this is not the primary intent. This approach has been confirmed during discussions with PNCC policy staff involved in drafting Plan Change 42. I was advised that it was intentional that the 1000 m<sup>3</sup> threshold for earthworks in Plan Change 42 was the same as the threshold for large-scale land disturbance in the Proposed One Plan (POP) so that the various effects of those activities could be managed by the respective councils.

87. The district plans appear to have recognised that the function of managing discharges, water quality and aquatic ecosystem values falls to the Regional Council and have therefore not sought to address the effects of land use on those matters.
88. While there will be some overlap with regard to obtaining both TA and Regional resource consents for large-scale land disturbance activities, the differing purposes for managing the effects of those activities require such an overlap.
89. It is proposed to include a condition in Rule 12-3 that requires large-scale land disturbance activities to develop and implement an erosion and sediment control plan. Please refer to paragraph 58 of this report for an explanation of that provision. Only when this condition is not met will resource consents be required (in some cases) from the Regional Council and the relevant territorial authority.

## **GENERAL RULE CASCADE**

### **PARA 50**

90. The rule cascade in the revised Chapter 12 is summarised at the beginning of the rule section in Chapter 12 (please refer to the tracked changes document).
91. This rule cascade is considered to be simpler than that originally proposed and makes it clear on reading the permitted activity rules which activities are referred to. The previous rule framework relied on exclusions from rules to be identified, which were then deemed to be permitted activities. The revised rule framework should make reading of the rules easier for plan users.
92. Where compliance with the permitted activity conditions in Rules 12-2 and 12-3 is not achieved, forestry activities are dealt with under a controlled activity rule (Rule 12-4) and all other activities are dealt with under a restricted discretionary activity rule (Rule 12-5). Officers see little need, provided the matters of discretion are suitably wide, to separate various vegetation clearance and land disturbance activities into separate discretionary activity rules, as the mechanisms and matters of discretion for managing these activities are generally the same. Forestry activities have been provided with a separate rule to manage non-compliance with the permitted activity conditions to recognise the tiered management mechanism proposed.

### **PARA 51**

93. The rearrangement of the rules in Chapter 12 has resulted in some of the rules being amalgamated. Rules 12-3, 12-4, 12-5 and 12-6 of the originally proposed rule framework have been deleted through this revision process.
94. The policies in Chapter 5 and Chapter 12 have been amended to reflect the revised rule framework.

## **OTHER MATTERS**

95. The 'other matters' outlined in the Chairperson's Minute No. 3 are addressed in a table format below. In many cases the matters have been resolved through the overall review and rearrangement of Chapters 5 and 12.

Minute No. 3 reference	Comment
i. Whether 5.1.1 and 5.1.2 should refer to the management of non-EMA land if it is to be regulated (for example if large-scale earthworks are regulated);	The existing reference to these activities in 5.1.2 is considered sufficient to describe the situation.
ii. If the One Plan were to enable vegetation removal and soil disturbance for matters such as infrastructure maintenance, cultivation, and the clearance of regenerating scrub, whether that would need to be reflected in 5.1.2;	Some explanation may be of assistance but is not essential to describing accelerated erosion.
iii. If the Manawatu dune fields are to be referred to, as in the tracked changes in 5.1.2, whether their location needs to be identified in the One Plan. The Panel also seeks a further explanation of why these dune fields are a matter of national and regional importance;	Reconsideration of the submission (Minister of Conservation) suggests that the matter is best addressed via the biodiversity and landscape chapters of the Plan as the submitter refers to the biodiversity, landscape and natural character values of the Manawatu dune fields. Additional reference in Chapter 5 would result in unnecessary repetition.
iv. It is unclear in Issue 5-1(a) why there is reference to “(forestry or scrub)” and “(including filling)”;	These are not required. Land disturbance and vegetation clearance are defined and include these activities. Deleted.
v. It is unclear why Issue 5-1(c) is a Significant Resource Management Issue as it is not reflected in any specific policies or rules that follow. It may be desirable to amend this provision to refer to the role of district plans such as PNCC’s Plan Change 42;	This primarily refers to large-scale earthworks such as those in the industrial areas on the edge of Palmerston North. Management of these activities is provided for in the policies and rules. Policies have been amended to provide more certainty to how territorial authorities should implement Objective 5-1 (Policy 5-2) and this supports councils managing vegetation clearance and land disturbance activities within the extent of their functions under the RMA, such as Palmerston North City Council is doing via Plan Change 42.  I do not consider that the One Plan should direct territorial authorities (TAs) to regulate those activities to manage discharges for water quality and aquatic ecosystem values purposes because they are largely regional council functions, and the knowledge and expertise to deal with them currently resides with the Regional Council.
vi. It is unclear why Objective 5-1(e) refers to property and significant habitat areas and Objective 5-1(d) does not. Perhaps these terms (one or both) should be included in Objective 5-1(d);	Management of significant habitats is most appropriately managed through the Biodiversity chapter. Reference to habitat areas has been deleted from both 5-1(e) and 5-1(d).
vii. It would be useful to decide if hill country is one or two words and to use the terminology consistently;	Amended to be two words in Chapters 5 and 12.
viii. Whether Policies 5-1 and 5-2 should be broadened from the single focus on WFBPs given the earlier discussion of this matter. Reference to “an owner or occupier” would be preferable to “owners/occupiers” in Policy 5-2;	Reference to WFBPs has been removed. ‘Owner/occupier’ has been changed to ‘owners or occupiers’
ix. With the officer’s recommended change in presumption for Policy 5-3(a), whether it is necessary to retain Policy 5-3(b);	Resolved through amendment and rearrangement of policies.

Minute No. 3 reference	Comment
x. Whether Policy 5-3 should refer to vegetation clearance “or” (rather than “and”) land disturbance. It is unclear whether reference in Policy 5-3(a) to “including excavation, filling, tracking and soil cultivation” is appropriate;	Resolved through amendment and rearrangement of policies.
xi. Policy 5-3(a)(iv) could usefully refer to forestry for soil conservation purposes as that is a key component of SLUI WFBPs and perhaps 5-3(a)(iv) and (v) could be merged. It would be useful to consider if the current terminology of “commercial purposes”, “production forestry species” and “commercial forestry operation” is appropriate;	Reference to allowing forestry for soil conservation purposes has been included in new Policy 5-2. Reference to components of production forestry has been removed.
xii. It is unclear what Policy 5-3(a)(vi) entails and it would seem to require defining criteria;	Resolved through revision of policies.
xiii. Whether Policy 5-3(a)(vii) should apply to infrastructure generally and not just infrastructure of regional and national importance;	Policy 5-2 refers to infrastructure generally rather than infrastructure of regional or national importance. Reference to infrastructure generally encompasses infrastructure of regional and national importance and any consenting required for these activities will take into account the objectives and policies relevant to this infrastructure in Chapter 3 – Infrastructure, Energy and Waste.
xiv. Whether Policies 5-3(a)(iii), (vii) and (viii) could be merged;	Resolved through revision of policies.
xv. It is unclear why Policy 5-4 does not refer to vegetation clearance;	It was intended to address large-scale earthworks activities where the land disturbance activity is the primary concern rather than vegetation clearance. Now addressed through Policy 5-2 which refers back to Objective 5-1 (b), (c) and (d).
xvi. Whether Policy 5-5(b) should refer to specific parts of codes of practice, for example, those parts that actually impose environmental constraints or environmental management criteria;	This is not considered appropriate as it is too detailed for the purposes of an RPS. The reference to the codes of practice etc being ‘targeted at achieving sustainable land use’ provides sufficient direction as to the relevance of these tools to the One Plan.
xvii. Whether Anticipated Environmental Results should use wording other than the word “damage”;	This has been resolved by replacing ‘damage to’ with ‘adverse effects on’. The revised wording is more relevant to water quality and incorporates damage to property and infrastructure.
xviii. Whether Policy 12-1(b) should indicate when an environmental management plan should be imposed;	Environmental management plans are effective mechanisms for managing effects that are variable over a site or which need to change as the development progresses. Often it is difficult to control these components of a development through individual conditions on the consent and so requiring a management plan as a condition of consent may be more efficient. Therefore, reference to environmental management plans is made in Policy 12-2(c) which relates to consent decision-making for vegetation clearance and land disturbance.
xix. Policy 12-1(d) may be redundant if Policy 5-3 is amended to facilitate the establishment or	Resolved through revision of policies.

Minute No. 3 reference	Comment
maintenance of infrastructure. However, there is a query whether the terms “establishing” and “maintaining” are adequate in Policy 5-3 and whether the terminology is used consistently;	
xx. It is unclear in what situation Policy 12-1(e) would apply;	Resolved through revision of policies. Policy 12-1(e) has been deleted.
xxi. It would be useful to identify terms that are defined in the RMA. In that context, it needs to be decided whether “best practicable option” in Policy 12-1(g) should be identified in that respect or not;	The ‘best practicable option’ referred to in Policy 12-2(d) is intended to have the same meaning as defined in the Act. This, as with other definitions from the Act, will be addressed by Andrea Bell as part of the overall planning review process.
xxii. It is unclear why the term “avoid, remedy or mitigate” is not used in Policy 12-1(h) when it is used in Policy 12-2;	Resolved through revision of policies. Policies 12-2 and 12-1 have been combined into the new Policy 12-2.
xxiii. It would be more helpful to future decision-makers to refine the extensive list of objectives and policies in recommended Policy 12-1(i) to focus on a short and discrete list of provisions that directly drive the matters of control in notified Rule 12-2 for example;	New Policy 12-2(a) provides a directive to give effect to the RPS and makes specific reference to Objective 5-1 and Policies 5-2 and 5-3. Links alongside each of the rules in Chapter 12 guide decision-makers to the objectives and policies that are relevant for decision-making in relation to that particular rule. Decision-makers will then logically only refer to those objectives and policies in the RPS that are relevant to the matters of discretion/control listed in the rules.
xxiv. If Policy 5-3(a)(vii) is amended to facilitate the establishment or maintenance of infrastructure (and note the earlier comments about terminology) it is unclear if Policy 12-3 would be required. The Panel notes that the heading to Policy 12-3 is no longer reflective of the officer’s recommended content of that policy. If Policy 12-3 is retained, it would be useful to reconsider the terminology “and natural hazard management” as it may be interpreted to be linked only to provision of infrastructure;	Resolved through revision of policies. Policy 12-3 has been deleted. Now addressed through Policy 12-2. Natural hazard management and the provision of infrastructure are separate activities and Policy 12-2(b) now makes this clear.
xxv. Whether Policy 12-4 should refer to vegetation clearance “or” (instead of “and”) land disturbance and also “by or on behalf of” a single consent holder (to be consistent with that terminology used in a different context in Rule 12-5(f));	Resolved through revision of policies. Policy 12-3 has been deleted and the matters addressed through Policy 12-2(f).
xxvi. If the Chapter 12 rules are to refer to artificial watercourses (which is a term used in the definition of river in the RMA) then that should be narrowed to a specific subset of artificial watercourses that Council is concerned about – e.g. farm drains as opposed to say duck ponds, stock water dams, ponds in urban parks and reserves etc. Is the terminology “wetted perimeter of the water body” used in Rule 12-5(c) appropriate?;	This has been resolved by the deletion of Rule 12-5. The 5m riparian setback that previously applied to ‘artificial watercourses’ now applies to all ‘rivers’. The RMA definition of ‘river’, which applies to the use of the term in the rule, excludes artificial watercourses so therefore no setback applies to those features.
xxvii. In rules, whether use of “the affected area”, such as in Rules 12-2(b) and (c), 12-3, and 12-4(a) and (b), is potentially ambiguous and should be avoided;	Resolved through amalgamation and re-wording of the rules.

<b>Minute No. 3 reference</b>	<b>Comment</b>
xxviii. Whether use of the terms “water bodies”, “artificial water bodies” and “waterways” is clear and consistent;	‘Waterway’ is now consistently used throughout Chapters 5 and 12 and the Glossary terms relevant to these chapters.
xxix. Whether “fill” should be inserted into the definition of land disturbance;	‘Filling’ has been inserted into the definition of land disturbance.
xxx. If “cultivation” is to be defined, a better definition is needed and the link between the definitions of cultivation, land disturbance and vegetation clearance should be clarified;	A definition of ‘cultivation’ is considered necessary to provide certainty. The current definition is not considered adequate, therefore the following is proposed: “The disturbance of soil in preparation for the planting of seeds or plants. It includes ploughing, discing, hoeing, mouldboarding, ripping, turning and lifting. It excludes production forestry activities, harrowing, direct drilling of seed and no-tillage practice.
xxxi. Whether use of the coastal marine area (CMA) in the definition “coastal foredune” is problematic where the CMA boundary crosses a river; and	Resolved through amending the definition of ‘coastal foredune’. The definition now limits the coastal foredune to dry land, thereby excluding points where the CMA crosses rivers.
xxxii. It would be useful to consider whether the different exclusions in the definitions of land disturbance and vegetation clearance are appropriate.	Resolved by providing the same exclusions for both definitions.

## **DISCUSSIONS AND FEEDBACK FROM SUBMITTER**

96. During the process of reviewing the provisions of Chapter 5 and Chapter 12 in accordance with the Chairperson’s Minute No. 3, feedback was sought from submitters on draft provisions. Despite the limited time available, very good discussions were held with a number of submitters (groups and individuals) and written feedback was received from approximately ten submitters. This feedback was very helpful in developing the revised provisions and every effort has been made to incorporate or address issues or concerns.

Phillip Percy  
2 November 2008

## APPENDIX 1 – DISTRICT PLAN LAND DISTURBANCE CONTROLS

The following table briefly summarises how the District Plans of the territorial authorities in the Horizons Region address land disturbance activities.

District	Land disturbance generally	Requires erosion and sediment control if permitted or controlled activity	Assessment criteria/matter of discretion include discharges and effects on water bodies.	Comment
<b>Horowhenua</b>	Controlled activity if related to subdivision. Permitted activity in all other circumstances (see comments). Discretionary activity if on scheduled outstanding landscapes or outstanding natural features.	No	Yes	Reading the District Plan at face value suggests all earthworks are discretionary activities (not specifically listed as permitted and therefore picked up by discretionary catch-all rule), however discussion with HDC planning staff indicates Council interprets Plan as earthworks and vegetation clearance is permitted unless specifically listed otherwise.
<b>Manawatu</b>	Permitted activity if associated with a listed permitted activity or consented activity. Mineral extraction < 1000 m <sup>3</sup> /yr is permitted. Gravel/sand extraction from river beach > 1000 m <sup>3</sup> /yr is permitted.	No	Some limited scope but not specifically listed as matters of control/discretion.	Plan identifies areas where resource consent from Horizons may be required.
<b>Palmerston North City (Plan Change 42)</b>	Permitted if < 1000 m <sup>3</sup> in any 12 month period or if alters ground level by < 1.5 m. Restricted discretionary if exceeded.	No	Enable assessment of effects on flooding and sedimentation but no consideration of effects on water quality or aquatic ecosystem values.	Controls on earthworks intended to address following effects: Landscape and visual impact § Effects on adjoining properties including amenity values § Impact on flood plains and flood flows § Increase in hazard risk and effects on land stability § Effects of erosion and

				<p>sedimentation § Effects on overland flow paths</p> <p>So, no particular focus on effects on water quality (only managed to some degree by default through the erosion and sedimentation matter).</p>
<b>Tararua (Proposed Plan)</b>	Permitted activity up to 200 m <sup>3</sup> for all activities except that farm tracks, forestry landings and forestry tracks have no limit on volume.	Only if material is brought onto the site. None if moving material within site.	Matters of discretion very broad so may have scope to consider water effects – but not specifically identified.	
<b>Rangitikei</b>	Assume permitted activity as an 'ancillary activity'. However catch-all discretionary rule would seem to include earthworks not otherwise specified.	No	Effects on natural character, ecological, landscape, spiritual values.	Full discretionary gives scope for managing effects
<b>Wanganui</b>	Earthworks in certain zones require consent (eg. Hill Protection Area). No controls other than waterway setbacks in other zones.	No	No	
<b>Ruapehu</b>	No controls except in specific areas/zones (such as indigenous vegetation areas).	No	No	

## **APPENDIX 2 – EROSION AND SEDIMENT CONTROL GUIDELINES FOR WELLINGTON REGION, 2002**

The following is Section 3 of the *Erosion and Sediment Control Guidelines for the Wellington Region, 2002* as referred to in the recommended Rule 12-3. For a full copy of the Guideline, please contact Horizons.

### 3. The Principles of Erosion and Sediment Control

*This section summarises the key principles to follow when preparing an Erosion and Sediment Control Plan (ESCP)*

#### 3.1 Minimise Disturbance

Match land development to land sensitivity. Some parts of a site should never be worked and others may need careful working. Watch out for and avoid areas that are wet (streams, wetlands, springs), have steep or fragile soils or are conservation sites or landscape features. Take into consideration the minimum earthworks strategy (low impact design) – ideally, only clear areas are suitable for structures or access.

*Clearly show* all the “limits of disturbance” bounding protected areas on the ESCP. On site, clearly show limits of disturbance using fences, signs and flags.

#### 3.2 Stage Construction

Carrying out bulk earthworks over the entire site maximises the time and area that soil is exposed and prone to erosion. Construction staging, where the site has earthworks undertaken in small units over time with progressive revegetation limits erosion. Temporary stockpiles, access and utility service installation all need to be considered. Construction staging differs from sequencing - this sets out the order of construction to contractors.

*Detail* both construction staging and sequencing in the ESCP.

#### 3.3 Protect Steep Slopes

Steep slopes should be avoided where practicable. If clearing is absolutely necessary, runoff from above the site can be diverted away from exposed slopes to minimise erosion. If steep slopes are worked and need stabilisation, traditional vegetative covers like top-soiling and seeding may not be sufficient - special protection is often required.

*Highlight* steep areas on the ESCP showing limits of disturbance and any works and areas for special protection.

#### 3.4 Protect Waterbodies

All waterbodies and proposed drainage patterns need to be mapped before works commence.

*Map* all waterbodies and show limits of disturbance and protection measures; show all practices to be used to protect new drainage channels; and indicate crossings or disturbances and associated construction methods in the ESCP.

#### 3.5 Stabilise Exposed Areas Rapidly

The primary objective is to fully stabilise disturbed soils with vegetation after each stage and at specific milestones within stages. Methods are site specific and can range from conventional sowing to mulching. Mulching is an effective instant protection.

Clearly define time limits for grass or mulch covers, outline grass rates and species and define conditions for temporary cover in the case of severe erosion or poor germination, in the ESCP.

### **3.6 Install Perimeter Controls**

Perimeter controls above the site keep cleanwater runoff out of the worked area - a critical factor for effective erosion control. Perimeter controls can also retain or direct sediment-laden runoff within the site. Common perimeter controls are diversion drains, silt fences and earth bunds.

*Detail* the type and extent of perimeter controls in the ESCP along with design parameters.

### **3.7 Employ Detention Devices**

Even with the best erosion and sediment control practices, earthworks will still discharge sediment-laden runoff during storms. Along with erosion control measures, sediment retention structures are required to capture runoff to enable sediment to settle out. The fine grained nature of Wellington's soils means sediment retention ponds are not totally effective. Make sure all control measures used are appropriate for the project.

*Include* sediment retention structure design specifications; detailed inspection and maintenance schedules of structures; and conversion plans for permanent structures, in the ESCP.

### **3.8 Make Sure the Plan Evolves**

An effective ESCP is modified as the project progresses. Factors such as weather, changes to grade and altered drainage can all mean changes to planned erosion and sediment control practices.

*Update* the ESCP to suit site adjustments and at key project milestones. Make sure the ESCP is regularly referred to and available on site.

### **3.9 Inspect**

An intense storm may leave erosion and sediment controls in need of repair, reinforcement or cleaning out. Assessment of controls and making repairs without delay reduces further soil loss and environmental damage. Assessment and adjustment is an important erosion and sediment control practice - make sure it features prominently in the ESCP.

*Assign* responsibility for inspection, monitoring and maintenance of erosion and sediment control in the ESCP.