



Proposed Natural Resources Plan for the Wellington Region

Section 42A Hearing Report For Hearing Commencing 10 July 2017

Report Dated: 12 June 2017

Report on submissions and further submissions

Topic: Soil Conservation

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Table 1: List of abbreviations

List of abbreviations	
Wellington Regional Council	WRC
Wellington City Council	WCC
Porirua City Council	PCC
Kāpiti Coast District Council	KCDC
Hutt City Council	HCC
Upper Hutt City Council	UHCC
Regional Policy Statement for the Wellington Region 2013	RPS

1. Executive summary

1. This report considers submissions and further submissions (submissions) that were received by Wellington Regional Council (Council) in relation to soil conservation provisions in the proposed Natural Resources Plan for the Wellington Region (proposed Plan).
2. The report outlines recommendations in response to the issues that have emerged from submissions.
3. There were 698 submission points related to soil conservation from 138 submitters. Of the 138 submitters, two were in a common format (Farmers Common Format and Land Matters Common Format) with approximately 591 submission points attributed to these two common format submitters.

Key issues and responses

4. **Issue 1** - Issues raised in submission with the soil conservation definitions.
5. **Issue 2** - Issues raised in submission with the soil conservation objectives.
6. **Issue 3** - Issues raised in submission with the soil conservation policies.
7. **Issue 4** - Issues raised in submission with the soil conservation rules.
8. **Issue 5** - Issues raised in submission with plantation forestry harvesting provisions.

Overlapping topics

9. Other section 42A officers' reports with particularly strong overlap with this report are:
 - Land use in riparian margins and stock access to water bodies (relevant to Issue 4) is discussed in Section 42A officer's report: Land use in riparian margins and stock access to surface water bodies and the CMA.
 - Water quality (relevant to Issue 4) is discussed in Section 42A officer's report: Water quality.
 - Stormwater (relevant to Issue 4) is discussed in Section 42A officer's report: Stormwater.

2. Introduction

10. My name is Paul Anthony Denton. I am employed by the Wellington Regional Council as a Senior Policy Advisor. I hold the qualifications of Bachelor of Science from the University of Canterbury and Master of Environmental Studies from the University of Melbourne.
11. I have been employed in planning roles in central government and local government for over 20 years. I have been employed by Wellington Regional Council as a policy advisor since 2000, in regional plan implementation and regional plan development.
12. My background with the preparation of the proposed Plan was from 2010 when I led the development of the air, earthworks, vegetation clearance, plantation forestry, hazardous substances and contaminated land provisions.

3. Code of conduct

13. I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note and that I agree to comply with it.
14. I can confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person.
15. I am authorised to give this evidence on the Council's behalf.

4. Scope of hearing report

16. This report is prepared in accordance with section 42A of the Resource Management Act 1991 (RMA). This report considers submissions that were received by the Council in relation to the provisions relating to soil conservation within the proposed Plan.
17. The parts of the proposed Plan covered by this section 42A report can broadly be described as earthworks, vegetation clearance and forestry.
18. The provisions relating to this topic are described below:

2 Interpretation:

- Earthworks
- Erosion prone land
- Plantation forestry harvesting
- Stabilised
- Vegetation clearance

All definitions listed above are assessed in Issue 1 and Issue 5 below.

Note: There are other definitions in the soil conservation provisions and these are assessed in the following section 42A officers' reports:

- Livestock – Section 42A officer's report: Land use in riparian margins and stock access to surface water bodies and the CMA
- Surface water bodies – Section 42A officer's report: Water quality.

3.2 Objectives:

- Objective O42: Soil health and accelerated soil erosion
- Objective O47: Sediment runoff

4.2 Policies:

- Policy P97: Managing sediment discharges
- Policy P98: Accelerated soil erosion

5.4 Rules:

- Rule R99: Earthworks – permitted activity
- Rule R100: Vegetation clearance on erosion-prone land – permitted activity
- Rule R101: Earthworks and vegetation clearance – discretionary activity
- Rule R102: Plantation forestry harvesting on erosion-prone land – permitted activity
- Rule R103: Plantation forestry harvesting – controlled activity

6 Methods:

- There are no methods for this topic.

12 Schedules:

- Schedule O: Plantation forestry harvest plan.

19. **Section 5** of this report is a statutory and non-statutory framework for the management of soil.

20. **Section 6** of this report outlines the key issues and planning background to soil conservation.

21. **Section 7** of this report is an analysis of the submissions for soil conservation.
22. **Appendix A** sets out the recommended amendments for the provisions to manage soil conservation and provides the section 32AA assessment for these amendments.
23. **Appendix B** contains a list of individual submitters who used a common format.
24. **Appendix C** contains the recommended decisions on submissions.
25. As submitters who indicate they wish to be heard are entitled to speak to their submissions and present evidence at the hearing, the recommendations contained within this report are preliminary, relating only to the written submissions.
26. For the avoidance of doubt it should be emphasised that any conclusions reached or recommendations made in this report are not binding on the Hearing Panel. It should not be assumed that the Hearing Panel will reach the same conclusions or decisions having considered all the evidence to be brought before them by the submitters.
27. This report is intended to be read in conjunction with the following section 42A reports:
 - Section 42A officer's report: Part A: Introduction and procedural matters
 - Section 42A officer's report: Part A: Section 32 and consultation
 - Section 42A officer's report: Part A: Overall policy framework of the proposed Plan
 - Section 42A officer's report: Part B: Overall policy framework of the proposed Plan.
28. Part A reports are common to all topics whereas Part B is specific to each topic and addresses the submissions relevant to that particular aspect of the proposed Plan.
29. Issues addressed in this report are related to matters addressed in other reports including:

- Section 42A officer's report: Land use in riparian margins and stock access to surface water bodies and the CMA
- Section 42A officer's report: Water quality
- Section 42A officer's report: Stormwater.

5. Background – Statutory documents

30. The regulatory requirement for a regional plan is discussed in the Section 42A report: Part A and is not repeated here. Only the most relevant statutory and non-statutory documents for air quality are included in this section.

5.1 Resource Management Act 1991

31. The RMA provides in:

32. *Section 5(2)(b) the safeguarding the life-supporting capacity of air, water, soil, and ecosystems.*

33. *Section 30(1)(c) controls of the use of land for soil conservation purposes.*

5.2 Soil Conservation and Rivers Control Act 1941

34. The Soil Conservation and Rivers Control Act 1941 makes provision for the conservation of soil resources and for the prevention of damage by erosion, and the protection of property from damage by floods.

35. In order to achieve the purpose of this act, catchment boards (now called regional councils) can be set up and are responsible for the activities in their catchment district. The boards have a wide range of powers to achieve the purposes and objects of this act.

5.3 National policy statements and national environmental standards and regional policy statement

36. Under section 67(3) of the RMA a regional plan must give effect to any national policy statement, the New Zealand Coastal Policy Statement and Regional Policy Statement.

37. Rules in plans must not duplicate, or conflict with provisions in national environmental standards.

38. The relevant documents in respect of soil conservation at the national and regional level are briefly summarised below.

5.3.1 National Policy Statement for Freshwater Management 2014

39. The National Policy Statement for Freshwater Management 2014 (NPS-FM) sets national environmental bottom lines for two compulsory values –

ecosystem health and human health for recreation – and minimum acceptable states for other national values relating to fresh water.

40. Council is implementing the NPS-FM principally through the whitua process, based on a catchment-specific collaborative process with the community (GWRC 2017). The provisions in the proposed Plan for earthworks, vegetation clearance and plantation forestry will also help implement aspects of the NPS-FM across the Wellington Region. In particular, the provisions will help safeguard the life-supporting capacity of soils including the quality of fresh water.

5.3.2 New Zealand Coastal Policy Statement 2010

41. The purpose of the New Zealand Coastal Policy Statement 2010 (NZCPS) is to state policies that are intended to achieve the purpose of the RMA in relation to the coastal environment of New Zealand.
42. The NZCPS sets out seven objectives for the management of the coastal environment. These objectives are to safeguard ecosystems, preserve natural character, recognise the role of tangata whenua, maintain and enhance public open space, take into account climate change, enable people and communities to provide for their well-being and meet international obligations.
43. Of most relevance to provisions in the proposed Plan for soil conservation are:
44. NZCPS Objective 1 requires maintaining coastal water quality, and enhancing it where it has deteriorated from what would otherwise be its natural condition, with significant adverse effects on ecology and habitat, because of discharges associated with human activity.¹
45. The NZCPS Policy 22: Sedimentation requires:
- Assessment and monitoring of sedimentation levels and impacts on the coastal environment;
 - That subdivision, use, or development will not result in a significant increase in sedimentation in the coastal marine area, or other coastal water;

¹ NZCPS Objective 1

- Control of the impacts of vegetation removal on sedimentation including the impacts of harvesting plantation forestry;
- Reduction of sediment loadings in runoff and in stormwater systems through controls on land use activities.

46. The NZCPS objectives and policies are discussed in this report where relevant.

5.3.3 National Environmental Standards for Telecommunication Facilities (2016)

47. The Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2016 (NES-TF 2016) replaced the Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2008 (NES-TF 2008) on 1 January 2017.

48. The NES-TF 2016 relates to the installation of masts, antennae and equipment cabinets and the emission of electromagnetic radio-frequency.

49. The NES-TF 2008 only related to provisions within district plans, however, the new NES-TF 2016 now applies to both district and regional plans.

50. For regional plans the NES-TF regulations are complied with if the regulated activity is carried out in accordance with any applicable regional rules relevant to carrying out that activity over a river or lake or in relation to earthworks.

5.3.4 Electricity (Hazards from Trees) Regulations 2003

51. The purpose of these regulations is to protect the security of the supply of electricity, and the safety of the public.

52. In relation to the proposed Plan these regulations have relevance for vegetation clearance (i.e., Rule R100: Vegetation clearance on erosion prone land – permitted activity) by prescribing distances from electrical conductors within which trees must not encroach; and setting rules about who has responsibility for cutting or trimming trees that encroach on electrical conductors.

5.3.5 Draft of the National Environmental Standard for Plantation Forestry (2017).

53. The draft Resource Management (National Environmental Standard for Plantation Forestry²) Regulations 2017 (draft NES-PF) is a comprehensive regulation that will manage all aspects of plantation forestry operations from afforestation and replanting to harvesting and mechanical land preparation.
54. Plantation forestry is defined by the draft NES-PF as any area of forest over 1ha deliberately established for commercial purposes.
55. The draft NES-PF includes permitted activities, controlled activities, restricted discretionary activity and discretionary activities for the management of plantation forestry. Activities associated with plantation forestry are managed between territorial and regional councils.
56. The provisions in the proposed Plan that relate to plantation forestry are for harvesting only, and are as follows:
- Definition of plantation forestry harvesting
 - Rule R102: Plantation forestry harvesting on erosion-prone land – permitted activity
 - Rule R103: Plantation forestry harvesting – controlled activity
 - Schedule O: Plantation forestry harvest plan.

5.3.6 Regional Policy Statement for the Wellington Region

57. The Regional Policy Statement for the Wellington Region 2013 (RPS) identifies accelerated soil erosion as the significant regional management issue for soil conservation.
58. RPS Objective 29 is to ensure that land management practices do not accelerate soil erosion.

² Council received a consultation draft for the Resource Management (National Environmental Standard for Plantation Forestry) Regulations 2017 for comment. The comment period closed on 22 March 2017. The Ministry for Primary Industries is evaluating all comments and further information on the regulation will be issued in due course.

59. RPS Policy 15 and Policy 41 direct regional and district plans to include policies, rules and methods to control earthworks and vegetation to minimise erosion and silt and sediment runoff into water, or onto land that may enter water, so that the aquatic ecosystem is safeguarded. The policies require city and district councils and the regional council to work together to reduce sediment and this could be achieved through a protocol by implementing RPS Method 31.
60. There are two other soil conservation-related non-regulatory policies.
61. RPS Policy 68 requires that soil erosion is minimised by encouraging sustainable land management practices through Method 29 (whole of catchment approach), Method 15 (information about sustainable land management practices), and Method 55 (assist landowners to protect erosion-prone land).
62. RPS Policy 69 requires the regional council to retain a healthy functioning soil ecosystem by promoting and encouraging sustainable agricultural practices that do not cause soil compaction, soil contamination, or loss of minerals or nutrients.

6. Background

6.1 Overview of the issue – soil erosion

63. The main issue for soil conservation in the Wellington Region is accelerated soil erosion from land use practices.

64. Land use management practices such as roading and tracking and earthworks for land development and forestry, and vegetation removal on steep land has the potential to accelerate soil erosion with the resulting soil loss leading to silt and sediment entering surface water bodies and the coastal marine area.

6.1.1 Operative plans – provisions for soil conservation

65. The operative Regional Soil Plan for the Wellington Region 2000 (RSP) and the operative Regional Freshwater Plan for the Wellington Region 1999 (RFP) include specific provisions to address the issue of soil conservation and discharges of sediment to surface water bodies that is of concern to people and communities. A review (GWRC, 2008) of the operative provisions is summarised here below.

66. RSP Rule 1 (Restricted discretionary activity) controls the construction of new roads and tracks on erosion-prone land. The rule controls road length and the height of the upslope batter. There are instances which have questioned the effectiveness of the rule, for example roads and track on steep land that intersect a stream reduces the upslope batter length and height to zero, effectively nullifying Rule 1. However, where the intent of the rule has been met, i.e. forestry operations in the eastern Wairarapa where the rule appears to work adequately. Rule 1 has an exclusion clause for subdivisions on erosion-prone land. This means the rule is bypassed and has led in many cases to discharges of sediment to waterways. Rule 1 was not effective in all the situations and should be amended to include a wider range of roading and tracking activities (GWRC, 2008).

67. RSP Rule 2 is a restricted discretionary activity rule that controls large-scale earthworks on erosion-prone land. Overall, the rule has been effective in preventing further soil erosion on erosion-prone land (GWRC, 2008).

68. RSP Rule 3 and Rule 4 control vegetation disturbance (including harvesting trees associated with plantation forestry, but not controlling any other activities associated with harvesting such as sediment discharges or the disturbance or use of river beds) on erosion-prone land. Rule 3 is a permitted activity – it is difficult to establish how well this rule worked, as there was minimal monitoring of the rule’s effectiveness. The rule included a clause to contact the Regional Soil Conservator for advice. This was used as a proxy for the rule and proved useful for understanding and effectiveness of the rule intent (Dave Cameron, Manager Land Management pers. comms). The use of this clause did prove effective with Rule 3 and was important for the operative Plan, as district plans have no controls over vegetation disturbance on erosion-prone land (GWRC, 2008).
69. RFP Rule 2 controls the discharges of stormwater (which includes sediment-laden water). In 2003, a plan change included a new clause for the discharge of stormwater from bulk earthworks – defined as being over 0.3ha. Overall this rule for stormwater discharges was assessed as not being completely effective in the management of the effects from stormwater discharges in the region (GWRC, 2006).
70. Overall, the review of the operative plans concluded that these operative plans have been largely effective in managing activities relating to soil conservation. Therefore, some of the effective provisions have been carried over to the proposed Plan provisions for earthworks, vegetation clearance and plantation forestry.

6.2 Consultation

71. Consultation on soil conservation was undertaken as part of the overall consultation process for the development of the proposed Plan – see Section 42A officer’s report: Part A: Section 32 and consultation.
72. A number of meetings were held to discuss issues of concern to key stakeholders during preparation of the proposed Plan. These included meetings on the details of the earthworks and vegetation clearance provisions for the rural sector.

73. A further series of meetings were held with representatives of the forestry industry to work through draft plantation forestry provisions and discuss how these provisions would work with other provisions that affect forestry operations, such as activities in the beds of lakes and rivers.

6.3 Overview of the policy framework of the proposed Plan

6.3.1 Overview

74. Due to the integrated nature of the proposed Plan soil conservation provisions are provided for by a suite of connected objectives and policies. For example, while there are specific objectives and policies to protect soils from accelerated erosion and sediment discharges to waterways from land use activities, there other relevant objectives and policies such as those related to ecosystem health and mahinga kai and water quality.

75. This integrated approach of the proposed Plan is discussed in Section 42A officer's report: Part A: Overall policy framework of the proposed Plan.

6.3.2 Accelerated soil erosion and management of sediment discharges

76. A large percentage (approximately 54%) of the Wellington Region is classified as hill country (GWRC, 2012), making soil erosion an important regional issue. Soil erosion resulting in bare earth patches is caused by natural processes but also by land use activities. Some land use activities can accelerate the likelihood of soil erosion if the activity is not well managed. This in turn reduces the productive capacity of the soil and may lead to sediment-laden discharges entering surface water bodies or the coastal marine area (CMA). The proposed Plan aims to manage land use activities that have the potential to accelerate soil erosion in the region.

77. Objective O42, Objective O47, Policy 97, Policy P98 and the earthworks and vegetation clearance rules (Rules R99 and R100) focus on managing the land use to reduce sediment discharges to surface water bodies. These provisions give effect to the RPS Objective 29, Policies 15, 41, 68 and 69 for the management of accelerated soil erosion and discharges of sediment to water bodies. By implementing this policy framework the proposed Plan will improve soil health and productivity by reducing soil erosion from land use practices.



Figure 1: Policy framework to manage accelerated soil erosion and sediment discharges

6.4 Implementation of the proposed Plan

78. The proposed Plan was notified on 31 July 2015 and the provisions have had legal effect since that date. The Hearing Commissioners have requested feedback on experience with implementing the proposed Plan. The following matters may assist the Hearing Panel to deliberate on both the effectiveness of the proposed Plan's provisions and the appropriateness of any recommended amendments.

79. Resource consent officers have provided me feedback on the following provisions:

- Officers have noted the lack of consistency between similar rules that manage discharges of sediment to surface water bodies in the proposed Plan, for example between activities in the beds of lakes and rivers, earthworks, vegetation clearance and Rule R42 regarding minor discharges to water. All of these rules include a different condition on the discharge.
- Officers have noted an issue between vegetation clearance on erosion-prone land and the rules that apply to vegetation clearance in city and district plans. I note that RMA s30(1)(c) regional councils can control the use of land for soil conservation purposes, and RMA s30(1)(d) allows regional councils to control the use of land for maintenance and enhancement of water quality in water bodies and the CMA. The

provisions in the proposed Plan for soil conservation are specific to controlling soil conservation and discharges to surface water bodies and the CMA and are within the regional council jurisdiction. City and district council may have similar provisions for different purposes. I propose that a note is added to the bottom of Rule R100 indicating that other rules may apply for vegetation clearance in city and district plans.

- Officers have noted an apparent discrepancy with the set-back provisions in the land use rules. Set-backs are part of Rules R94 and R95 but not for Rules R97, R99, R100 or R102. According to officers the discrepancy may cause certain activities to occur close to surface water bodies without being affected by Rule R99, whereas other activities such as cultivation (in the same property) would need to abide by a 5m set-back.
- Officers noted a number of interpretation requests related to rule R102 from applicants about how the requirements of the forestry plan in Schedule O are to work and some of the requirements of the forestry plan. These requests were in the early part of the proposed Plan's release and the issue is now resolved through officers working through the rule and assisting applicants.

7. Evaluation of submissions and recommendations

7.1 Overview of the submissions received

81. There were 138 submitters and 696 submission points received on the provisions relevant to soil conservation.

82. There were 591 submissions points received in a common format from two submitters:

- Farmers Common Format
- Land Matters Common Format.

7.1.1 Key issues raised in submissions

83. I have set out my analysis of the soil conservation provisions by issue and then by respective components of the soil conservation topic, under the following headings:

- Issue 1 Issues raised in submission with the soil conservation definitions
 - Issue 1.1 Earthworks
 - Issue 1.2 Erosion prone land
 - Issue 1.3 Vegetation clearance
- Issue 2 Issues raised in submission with the soil conservation objectives
 - Issue 2.1 Objective O42: Soil health and erosion
 - Issue 2.2 Objective O47: Sediment runoff
- Issue 3 Issues raised in submission with the soil conservation policies
 - Issue 3.1 Policy P97: Managing sediment discharges and P98: Accelerated soil erosion
- Issue 4 Issues raised in submission with the soil conservation rules
 - Issue 4.1 Rule R99: Earthworks
 - Issue 4.2 Rule R100: Vegetation clearance on erosion-prone land
 - Issue 4.3 Rule R101: Earthworks and vegetation clearance
- Issue 5 Issues raised in submissions with plantation forestry harvesting provisions

- Issue 5.1 Definition of plantation forestry harvesting
- Issue 5.2 Rule R102: Plantation forestry harvesting on erosion-prone land
- Issue 5.3 Rule R103: Plantation forestry harvesting.

7.2 Pre-hearing meetings

84. There were no pre-hearing meetings held on this topic.

Issue 1. Issues raised in submission with the soil conservation definitions

Issue 1 Background

85. Submissions were received on the following definitions for soil conservation:

- Earthworks
- Erosion-prone land
- Stabilised³
- Vegetation clearance.

Issue 1.1 The definition of earthworks

Issue 1.1 Background

86. Earthworks are defined in the proposed Plan to mean disturbance of the land surface from the time soil is first disturbed on a site until the site is stabilised. Earthworks includes blading, contouring, ripping, moving, removing, placing or replacing soil or earth by excavation, cutting or filling operations or by root raking.

87. Earthworks does not include cultivation of soils for crops or pasture, thrusting, boring, trenching or ploughing associated with: cable or pipe-laying and maintenance; construction repair and maintenance of pipelines, electricity lines, telecommunication structures or lines; repair and maintenance of radio communication structures; repair and maintenance of existing roads and tracks; maintenance of orchards and shelterbelts; construction, repair or maintenance

³ Only two submission points were received on the definition of 'stabilised', see Appendix C.

of fence lines or firebreaks; domestic gardening; and repair, sealing or resealing of a road, footpath or driveway.

Issue 1.1 Submissions and assessment

88. Land Matters Limited (S285/061) and Land Matters Common Format submitters request that the definition of earthworks is amended to exclude the construction of new farm and forestry tracks in accordance with district plan provisions. Farmers Common Format submitters requested the definition is amended to allow construction of farm tracks as permitted as well as maintenance of farm tracks and roads. Federated Farmers of New Zealand (S352/024) requests the definition exclude the construction of farm tracks. Minister of Conservation (FS61/079) and Rangitāne o Wairarapa (FS74/011) oppose changes to the definition of earthworks as this would undermine the proposed Plan's ability to manage effects from this activity.
89. A large number of submissions points are from the common format submitters on this issue. It is my understanding from the submitters' request that the construction of 'new' roads and tracks is added to the list of exemptions in the definition of earthworks. This in turn would mean that the construction of new roads and tracks would not be controlled by Rule R99: Earthworks. In other words, the activity would not require consent under Rule R101 in the proposed Plan.
90. In my experience construction of new roads or tracks on steep land have a high potential risk of soil erosion, which can lead to an increased likelihood of sediment runoff to nearby surface water bodies. New road construction can also result in cast-off slopes, which is loose soil cast downslope, and this material can be deposited either directly into a stream or run off downstream to a nearby surface water body.
91. In the RSP, protecting slope stability has been a major issue, for example, RSP Rule 1 limits the construction of new roads and track to 200m length depending on the upslope batter and the area of the region.⁴ Over this length

⁴ The RSP divides the Wellington Region into two parts depending on slope.

the effects of road or track are deemed more than minor and require a resource consent.

92. It is also worth noting that the proposed Rule R99: Earthworks does not completely remove the option of the construction of new roads and tracks as a permitted activity in the proposed Plan. For example, Rule R99 permits 0.3ha of earthworks subject to conditions. In my estimation this is a reasonable amount of earthworks which could build a certain distance of road or track, i.e. 4m wide road for a distance of 700m in length (2,800m²). This is not an unsubstantial length of road that can be constructed over a 12 month period, per property.
93. Overall, removing the construction of new roads and tracks from the definition of earthworks is a major departure from what has been operative for over 15 years with the RSP. More importantly, if the construction of new roads and tracks were to be added to the list of exemptions in the definition of earthworks there is a high likelihood of increased soil erosion on steep slopes with further discharges of sediment to water bodies. I further consider that Objectives O42 and O47 may not be met if this exemption to the definition were to be made in the proposed Plan. I therefore do not recommend such a change to the definition of earthworks.
94. Wellington Electricity Lines Limited (S126/002) requests the insertion of the word 'structures' into sub-clause (d)(ii) of the earthworks definition. This part of the definition (d)(ii) exempts the construction, repair or maintenance of the electricity lines. An electricity line 'structure' could be anything from a power station to a transformer box on the side of a suburban street. I consider that the word 'structure' is too wide-ranging to be included into the definition of earthworks. I do not propose that 'structure' is included in sub-clause (d)(ii) of the earthworks definition.
95. Transpower New Zealand Limited (S165/048) seeks that the definition of earthworks includes the 'upgrade' of roads and tracks and has reference to the national grid in relation to electricity lines, in sub-clause (d)(ii). The 'upgrade' of roads and tracks can in my experience mean a major change to the road or

track where the effects of the activity can be similar to the construction of a new road or track. This is problematic and uncertain for this definition and Rule R99: Earthworks. I consider that repairs and maintenance are activities that can continue where effects are less than minor, whereas an upgrade would not be in this category and requires conditions to mitigate any effects as required under Rule R101: Earthworks and vegetation clearance – discretionary activity in the proposed Plan.

96. NZ Transport Agency (S146/014) requests an exception in the definition for the placement of rip-rap. The management of rip-rap and other protective materials is subject to other provisions in the proposed Plan, the coastal section (see Sections 5.7.3, 5.7.5 and 5.7.6) and in the beds of lakes and rivers provisions. I do not consider it appropriate that these activities receive an exemption under this definition when there are specific, directive provisions managing the effects of this activity elsewhere in the proposed Plan.
97. Vector Gas Limited (S145/007) requests additional wording in sub-clause (c) for bore construction. I note that Rule R146: Geotechnical bore construction, manages the construction of geotechnical bores subject to conditions. The drilling of any other bore is managed by Rule R147 and Rule R148. As this activity is managed by other provisions in the proposed Plan, I do not recommend that this activity requires exemption from the earthworks definition.

Issue 1.1 Summary of recommendation

98. No change to the definition of earthworks.

Issue 1.2 The definition of erosion-prone land

Issue 1.2 Background

99. The RSP has two definitions for erosion-prone land. Area 1 defines erosion-prone land as all slopes greater than 23° slope. Area 2 defines erosion-prone land as all land above 28°. Area 1 is predominately in the eastern Wairarapa hill country, and Area 2 is the main ridge axis area of the Tararuas and Rimutaka hill country.

100. The RSP uses the definition of erosion-prone land in Rule 2 – large earthworks on erosion-prone land and Rule 3 – vegetation removal on erosion-prone land.
101. The proposed Plan defines ‘erosion prone’ as land with slopes greater than 20°. The explanation for the change in slope for erosion-prone land is detailed in the Section 32 report: Soil conservation and is summarised below.
102. Erosion-prone land is referred to in Rule R100: Vegetation clearance on erosion-prone land and in Rule R102: Plantation forestry harvesting on erosion-prone land for vegetation removal on erosion-prone land.

Issue 1.2 Submissions and assessment

103. There are approximately 200 submission points on the definition of erosion-prone land from the Farmers Common Format submissions and Land Matters Common Format submissions. These submitters request that the definition increase the slope figure and exclude stable substrate.
104. Land Matters Limited (S285/065), Federated Farmers of New Zealand (S352/026) and Forest Owner Marketing Services Limited (S435/002) have requested either a reversion to the slope figures in the RSP or that a new system is used that recognises harder rock substrate. Forest Owner Marketing Services Limited seek that the draft NES-PF GIS-based slope map system is used in the proposed Plan.
105. Erosion-prone slope figures were re-examined during the proposed Plan development process due to the lack of effectiveness in implementing the operative RSP with respect to Areas 1 and 2 and the lack of compliance with Rule 1 (GWRC, 2008). A major issue was having two slope figures for the region, which caused confusion. There is a compounding issue with deciding upon slopes within Area 1 or 2, as slopes vary enormously. According to resource consent officers there was a need to re-examine the underpinnings to the operative RSP slope figures and investigate whether a new simpler system of slope assessment could be worked out.
106. In the RSP, slopes are based on rock type – where generally the western side of the region has more greywacke rock and so it is more stable hence a higher

slope figure of 28°. The eastern side of the region, dominated by the eastern Wairarapa hill country, is soft sedimentary rock that is easily erodible and has a lower slope figure of 23°. Analysis for rock type was derived from the New Zealand Land Resource Inventory (NZLRI), which is the main source document that underpins slope theory for the operative RSP and the proposed Plan.

107. These two figures are in my opinion, steep. Any slope of 23° is deemed steep where there is a high potential for soil erosion. A slope over 28° is steeper and highly vulnerable to soil erosion.
108. An examination of the resource consents issued for the operative RSP shows that the majority of consents are in the eastern hill country where the slope trigger is 23° because of the soft rock geology. The activities managed by the RSP in this part of the region are dominated by forestry and roading and tracking associated with forestry.
109. The investigations of slope⁵ indicated that the current two slope system was confusing for applicants and that most of the consents issued were in the eastern Wairarapa hill country for forestry.
110. A further examination of the NZLRI on slopes however shows that along with rock type there are other factors involved and there is a clear distinction between strongly rolling land which is between 16-20° slope and land over 20° which is classified as moderately steep. With this in mind it becomes clear that the issue of slope could be resolved by adopting one figure and ensuring that this figure captured the eastern Wairarapa hill country where erosion-prone land is widespread and the management of the effects of soil disturbance is a priority.
111. Hence, it was decided to adopt 20° as the slope figure as this slope was the distinction between rolling land and moderately steep land. Land over 20° is

⁵ Investigations were undertaken as part of the plan effectiveness review of the RSP (GWRC, 2008)

deemed erosion prone and all land under 20° is non-erosion prone as defined by the proposed Plan.

112. It is worth noting that government agencies such as the Ministry for the Environment have described erosion-prone land as land over 20° in slope. Also, the draft NES-PF has a system for recognising erosion-prone land and this is based on a combination of GIS and NZLRI. This more sophisticated system would provide greater clarity to land managers attempting to resolve slope differences on their land before an activity takes place. Adoption of this GIS-based system would improve the effectiveness of Rule R100.
113. In the meantime, I recommend that erosion-prone land is defined as 20° for the reasons discussed above and what is contained in the Section 32 report: Soil conservation.
114. I consider that adopting one slope figure for the management of vegetation clearance is the most effective and efficient option for this activity.

Issue 1.2 Summary of recommendation

115. No change to the definition of erosion-prone land

Issue 1.3 The definition of vegetation clearance

Issue 1.3 Background

116. Vegetation clearance is defined in the proposed Plan as the clearance of woody vegetation (exotic or native) by mechanical or chemical means, including felling, spraying of vegetation by hand or aerial means, hand clearance and the burning of vegetation.
117. Removal of vegetation on erosion prone land has the potential to cause soil erosion and may result in the sedimentation of water bodies.
118. I note that RMA s30(1)(c) allows regional councils to control the use of land for soil conservation purposes, and RMA s30(1)(d) allows regional councils to control the use of land for maintenance and enhancement of water quality in water bodies and the CMA. The provisions in the proposed Plan for vegetation clearance are specific to these RMA clauses; authorising the regional council to control land uses (in this case vegetation clearance) for soil conservation

purposes, and any discharges to surface water bodies and the CMA that may result from this activity.

119. The definition of vegetation clearance is related to the activity of vegetation clearance in Rule R100: Vegetation clearance on erosion-prone land – permitted activity, and if the conditions of Rule R100 are not met, Rule R101: Earthworks and vegetation clearance – discretionary activity. The purpose of this rule is to protect soils from accelerated soil erosion by restricting the removal of large areas (up to 2ha) of contiguous vegetation. Vegetation clearance on non-erosion prone land is not controlled by Rule R100. The main reason for vegetation clearance on erosion-prone land is to convert vegetated land to pasture.

Issue 1.3 Submissions and assessment

120. The proposed definition of vegetation clearance from the proposed Plan is below:

Vegetation clearance	The clearance or destruction of woody vegetation (exotic or native) by mechanical or chemical means, including felling vegetation, spraying of vegetation by hand or aerial means, hand clearance, and the burning of vegetation.
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121. Federated Farmers (S352/052) and the Farmers Common Format submitters seek to exclude hand clearance, hand or aerial spraying and roller crushing. The definition above includes hand clearance and the felling of vegetation by aerial means. Roller crushing has not been included in the definition of vegetation clearance as this is a destructive method to remove vegetation and a cause of soil erosion, especially on erosion-prone land.
122. Land Matters (S285/064) and Land Matters Common Format submitters request that the definition only refer to the removal of roots or stumps. The removal of vegetation opens up the ground to erosion by exposing the soil to the elements of wind and rain. I consider that the removal of vegetation on erosion-prone land is the issue at hand for the proposed Plan and is addressed by Objective O41 and Policies P97 and P98. Restricting the definition to the removal of stumps would limit the effectiveness of the definition and the

management of erosion-prone land by the proposed Plan. This request is not recommended.

123. Anders and Emily Crofoot (S304/012) request that the definition exclude gorse, manuka and kanuka. It is my understanding that gorse, manuka and kanuka are pioneer plant species that cover bare areas of ground quickly and form a protective cover that prevents further soil erosion from high winds or heavy rainfall. Removing these vegetative species would in essence limit the effectiveness of the soil conservation provisions to reduce accelerated soil erosion. In my view, excluding these species from the definition would further increase the chances of soil erosion on erosion-prone land and undermine the options to implement Objective O41. I do not recommend the exclusion of these species from the definition of vegetation clearance.

124. Wellington Electricity Lines Limited (S126/010) seeks to exempt trimming and maintenance activities associated with electricity supply networks. As discussed above the definition of vegetation clearance is linked to Rule R100 which permits removal of contiguous vegetation on erosion-prone land up to 2ha per 12 month period. On ‘non-erosion-prone land’ there are no restrictions in the proposed Plan. There are city or district plan restrictions on the removal of vegetation. Overall, I consider that vegetation removal associated with the Electricity (Hazards from Trees) Regulations 2003 would require exemption in the definition of vegetation clearance. I recommend that the definition of vegetation clearance include an exemption for any vegetation removal associated with the Electricity Regulations 2003. This recommendation is made below.

Issue 1.3 Summary of recommendation

125. I recommend the definition of vegetation clearance is changed to exempt vegetation clearance, trimming of vegetation or tree removal associated with the Electricity (Hazards from Trees) Regulations 2003.

Vegetation clearance	The clearance or destruction of woody vegetation (exotic or native) by mechanical or chemical means, including felling vegetation, spraying of vegetation by hand or aerial means, hand clearance, and the burning of vegetation. <u>Vegetation clearance does not include any vegetation clearance, tree removal, or trimming of vegetation associated with the Electricity (Hazards from Trees) Regulations 2003.</u>
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Issue 2. Issues raised in submission with the soil conservation objectives

Issue 2 Background

126. There are two primary objectives for soil conservation:
- Objective O42: Soil health and accelerated soil erosion
 - Objective O47: Sediment runoff.
127. Objective O42 gives effect to RPS (Objectives 29 and 30, and Policies 15 and 69). The objective supports the life-supporting capacity of soils where soils remain healthy and productive and accelerated soil erosion is reduced.
128. Objective O47 gives effect to RPS (Objectives 29 and 30 and Policy 15). This objective aims to reduce sediment-laden runoff from soil disturbance activities such as earthworks and vegetation clearance.

Issue 2.1 Objective O42: Soil health and accelerated soil erosion

Issue 2.1 Submissions and assessment

129. Horticulture New Zealand (S307/024 and 025) considers that Objective O42 should be split into two objectives as they represent two different policy streams, where reducing accelerated erosion is not to be confused with supporting the life capacity of soils. Other submitters such as the Fertiliser Association of New Zealand (S302/021) and Ravensdown Limited (S310/015) also seek a better understanding from this objective.
130. Objective O42 has two aims, firstly, to ensure that soils in the region remain healthy and retain their productivity. Secondly, it aims to reduce the incidences of accelerated soil erosion in the region, as over 50% of region is hill country that is potentially erosion prone (GWRC, 2012).
131. Soil health is a branch of soil science that investigates the characteristics of soils including the physical, biological and chemical attributes of soil. The Council monitors and reports on soil health as part of its role under section 35 of the RMA (GWRC, 2012).

132. On the question of the productive nature of soils, productivity is reduced by soil erosion and by land use practices that decrease the soil health characteristics, such as over-compaction and over-tillage. The question for the proposed Plan is – should soil productivity be a component of soil conservation that needs to be recognised and managed?
133. The productive nature of soils is reduced by soil erosion and by land use practices that decrease the soil health characteristics, such as over-compaction and over-tillage.
134. RPS, Objective 30 states that “*Soils maintain those desirable physical, chemical and biological characteristics that enable them to retain their ecosystem function and range of uses*”. The reference to the range of uses means in effect that soils are able to be used including for productive uses. I consider that Objective O42 is not outside the meaning of the RPS objective in this regard. However, a productive use is only one particular use and there are other applicable uses. I propose that alternative wording is more appropriate for this objective, which is, “soils are healthy, retain a range of uses”. This means that for the proposed Plan, soils are healthy for a range of uses, and one of these uses is productive capacity. Other uses for soils are activities such as forestry, which is not dependant on having high levels of soil health. However, the soils have to maintain a basic level of soil health for forestry. Therefore, I agree, with submitters’ the first part of this objective is not appropriate for the proposed Plan, productive capacity is out of scope for an objective and will not achieve the purposes of the RMA. I recommend alternative wording for Objective O42 below

Issue 2.1 Summary of recommendation

135. Objective O42 is changed to as follows:
- Soils are healthy, ~~and productive,~~ retain a range of uses; and accelerated soil erosion is reduced.
136. Assessment of this recommended change pursuant to section 32AA of the RMA is attached in Appendix A.

Issue 2.2 Objective O47: Sediment runoff⁶

137. Land Matters Limited (S285/084) and Land Matters Common Format submitters request that Objective O47 is reduced ‘over time’. NZ Transport Agency (S146/066) and Powerco (S29/010) ask that the objective read ‘to the extent practicable’. I do not support the use of general qualifiers in objectives. To be effective, an objective should set out what is to be achieved in resolution of the issue, providing a clear target or end point that policies seek to achieve. Adding general qualifiers such as ‘over time’ or ‘to the extent practicable’ weakens the objective, leaving it open to conjecture and dispute and making it impossible to monitor effectiveness. I therefore do not consider that these qualifiers are meaningful additions to Objective O47 and recommend that they are not included.
138. Fish & Game (S308/033, 036) seeks that Objectives O44, O46 and O47 are amended or a new objective, that policies and rules are added to manage the impacts of water takes, land use and ancillary discharge activities on fresh water. The submitter states the proposed objective suite is contrary to the purpose and principles of the RMA and fails to give effect to the NPS-FM and NZCPS. The proposed Plan has a set of objectives to manage land uses, water quality and water takes with the related policies and rules to implement these objectives. The assessment for the policy approach in the proposed Plan that gives effect to relevant legislation is in Section 42A officer’s report: Part A: Overall policy framework of the proposed Plan and Section 42A officer’s report: Part B: Overall policy framework of the proposed Plan. Other section 42A reports also provide an assessment of the effects of activities such as water takes and other effects on fresh water in Section 42A officer’s report: Land use in riparian margins and stock access to water, Section 42A officer’s report: Water quality, and Section 42A officer’s report: Water allocation. I do not

⁶ Council functions under s30(1)(c) and (d) of the RMA is to control the use of land for soil conservation purposes and water quality to water bodies and the CMA. An issue with accelerated soil erosion (that may arise from poor management practices) is the discharge of sediment to surface water bodies. Objective O47 is linked to Objective O42, where soil erosion is reduced and sediment laden run-off entering surface water bodies is also reduced.

consider that the submitter's concerns require changes to Objectives O44, O46 and O47.

Issue 2.2 Summary of recommendation

139. No change to Objective O47.

Issue 3. Issues raised in submission with soil conservation policies

Issue 3 Background

140. The policies that implement the objectives for soil conservation are:

- Policy P97: Managing sediment discharges
- Policy P98: Accelerated soil erosion.

141. Policy P97 concerns the management of sediment from activities by using a source control approach. This means that during an activity, such as earthworks, appropriate methods are employed on site to limit or reduce the amount of sediment that may run off site. There are well-known and documented methods to manage sediment on site including bunding, cut-off drains, sediments and other measures to reduce runoff during rainfall events. This policy applies to land uses where there is a high likelihood of sediment discharged to a waterway from runoff.

142. Policy P98 requires the use of good management practices to minimise the risk of accelerated soil erosion, control silt and sediment runoff and provide stabilisation of disturbed sites. Good management practices have reached a level of detail and understanding in the industries concerned where sediment issues can be effectively dealt with and the effects on the environment mitigated.⁷

143. Policy P98 requires that 'stabilisation' for earthworks is part of good management practice. This means protecting the soil surface from the effects of

⁷ Council in partnership with industry and key stakeholders including city and district councils developed the Erosion and Sediment Control Guidelines for the Wellington Region (2003). These guidelines provide advice and information on the best management techniques for the control or erosion and sediment management from earthworks sites.

heavy rainfall that can cause scouring and erosion, and dust. Stabilisation can be made effective with over-sowing of grass or other erosion suppression products.

Issue 3.1 Policy P97 and Policy P98

Issue 3.1 Submissions and assessment

144. Federated Farmers of New Zealand (S352/172) seeks changes to Policy P97 to refer to subdivisions and major infrastructure developments. Policy P97 is for all land uses where the soil is disturbed that may lead to a discharge of sediment. This includes all major earthworks associated with subdivisions and earthworks in all other areas. The policy is not only for the management of subdivisions but contains direction for all land uses that disturb the soil. The policy includes reference to the source control approach. This approach is used for low impact design but has a role in other land disturbance situations. A source control approach means reducing the effects of sediment where the work is occurring with containment at the site rather than sediment controls elsewhere away from the site.
145. Vector Gas Limited (S145/047) requests that the word ‘minimise’ be replaced with ‘avoid, remedy or mitigate’. The word minimise is used throughout the policies in the proposed Plan. A full assessment for the use of minimise is contained in Section 42A officer’s report: Part B: Overall policy framework for the proposed Plan. I note here that minimise is used in soil conservation policies as minimising the effects of land uses is the most appropriate policy approach. It is my understanding that the discharge of sediment is difficult to avoid, if at all, in many earthworks situations for example. The policy approach is to minimise the discharge to the lowest possible amount as defined in Policy P4. I consider this is an appropriate policy approach for these land use activities.
146. Porirua City Council (S163/074) seeks more specificity for the term good management practice. This term is defined in the proposed Plan and means constant improvement in design and technology to reduce effects from discharges. This term is used in the earthworks and construction industries.

Submissions and assessment of the term are in Section 42A officer's report: Water quality.

147. There is general acceptance of Policy P98, however, NZ Transport Agency (S146/123) seeks additional wording to support good management practice. I consider that additional wording is not necessary for this policy. The term is a general phrase defined in the proposed Plan. Submissions and assessment of the term are in Section 42A officer's report: Water quality. I do not consider that any additional wording is required.

Issue 3.1 Summary of recommendations

148. No changes to Policy P97 or Policy P98.

Issue 4. Issues raised in submission with soil conservation rules

149. There are two permitted activity rules for the management of soil erosion, Rule R99: Earthworks and Rule R100: Vegetation clearance on erosion-prone land. If the conditions of Rule R99 or Rule R100 cannot be met then rule R101 applies which is a discretionary activity.

Issue 4.1 Rule R99: Earthworks – permitted activity

Issue 4.1 Background

150. Earthworks are a common component of use and development of land. Earthworks also have effects including increasing the potential for soil erosion and land instability and increasing the likelihood of discharges of sediment to water bodies. The provisions of the proposed Plan seek to manage the effects of earthworks.
151. Rule R99 is a permitted activity rule that controls earthworks on an area basis through conditions for soil and debris placement, soil instability and discharges to surface water bodies.

Issue 4.1 Submissions and assessment

152. Beef and Lamb New Zealand (S311/023) seeks that the word 'stormwater' is replaced with 'sediment-laden surface runoff' and 'contiguous' is replaced by

‘up to a total area for Rule R99’. Rangitāne o Wairarapa (FS74/242) supports the use of ‘total area’.

153. I consider that Beef and Lamb is correct in stating that the word ‘stormwater’ is not appropriate in the context of a land use activity where there may be runoff from the activity. Stormwater as defined in the proposed Plan to include “*runoff that has been intercepted, channelled, diverted, intensified or accelerated by human modification of a land surface...*”. In the context of an earthworks activity, runoff may not always be intercepted or channelled as suggested by the definition of stormwater. I propose that the word ‘stormwater’ is replaced with ‘sediment-laden runoff’. This phrase is more appropriate as it refers to the ‘discharge of sediment’, as sediment is a more likely discharge from an earthworks area and that the discharge of sediment occurs from ‘runoff’ of the activity, rather being channelled or diverted.
154. The phrase ‘sediment-laden runoff’ is referred to in Objective O47 where the amount of sediment-laden runoff is to be reduced. I consider that the words ‘sediment-laden runoff’ is more appropriate and this change is recommended below for Rule R99: Earthworks.
155. In reference to the word ‘contiguous’, Beef and Lamb considers that a single contiguous area of disturbance prevents normal track construction or maintenance, or other minor earthworks such as the establishment of stock handling yards, that are part of the normal and less than minor disturbance on farms, particularly hill and steep hill country farms, from being considered as a permitted activity.
156. The intent of the conditions in Rule R99 is to ensure the effects of earthworks from large contiguous areas of land do not cause adverse effects on the environment. Rule R99 permits the use of land and the discharge of ‘sediment-laden runoff’ for a contiguous area of land up to 3000m². The word ‘contiguous’ is used to mean land areas ‘connected’ or ‘in contact’, as this is

the dictionary meaning⁸ of ‘contiguous’. The intent of Rule R99 is not to require a consent (through Rule R101) if the areas of land are not contiguous. For example, a small area of earthworks (say 100m²) is permitted under Rule R99 as it is not part of a larger contiguous area. This is appropriate, as the effects of earthworks on such a small area (in this example) are less than minor. The conditions in Rule R99 are intended to protect soils from erosion, and discharges of sediment to water bodies when large contiguous areas are earthworked. It should be noted that city and district plans also contain earthwork provisions. The provisions in city and district plans are usually for smaller areas (building platforms and blocks up to 400m²), whereas the proposed Plan, Rule R99 is for large contiguous areas. I consider the word contiguous is appropriate in Rule R99 for large earthworks.

157. Land Matters Limited (S285/073) and Land Matters Common Format submitters request an amendment to Rule R99 to either increase the minimum area of earthworks permitted per property based on a percentage area of the total property (so that larger properties can undertake more earthworks) and/or so that the rule is applied to catchments affected. I do not agree with the submitter that the area of earthworks should be based on a percentage of a property area. In my opinion, if this were the case large properties would be able to undertake extensive earthworks over and above the rule threshold and the effects on soil stability and discharges to water may well be significant. The rule is not overly restrictive, as large areas are permitted to be earthworked (up to 3,000m²) subject to conditions. I consider that having an area basis for this rule is effective, as an area can be calculated reasonable easily in the field or from maps and applied accordingly. I do not consider that a percentage arrangement would meet the soil conservation objectives – Objectives O42 and O47 of the proposed Plan.

158. The Federated Farmers Common Format submitters have requested that Rule R99 and the definition of earthworks allow the construction of farm tracks as

⁸ From the Concise Oxford Dictionary (9th ed.) 1995, contiguous means ‘touching; along a line; in contact; connected’

permitted as well as maintenance. This submission point is discussed in Issue 1.1 above. The definition of earthworks includes the construction of new roads and tracks as the effects of new road and track construction have the potential to be more than minor on the environment. The repair and maintenance of existing roads and tracks is an exemption in the definition of earthworks. However, Rule R99 does not prevent the construction of new roads or tracks (up to a total area of 3000m²) provided the conditions of Rule R99 are met.

159. Fish & Game (S308/100) seeks amendments to Rule R99 so that permitted activities are only applied where clear measurable and enforceable standards are able to be set which ensure that section 70 of the RMA is met, and that significant adverse effects will not occur. This submission is supported in part by the Minister of Conservation (FS61/043) and supported by Rangitāne o Wairarapa (FS74/135).
160. Rule R99 includes reference to s70 of the RMA in the sub-clauses of Rule R99 (d)(i)-(v). Rule R99 (d) is not allowing s70 of the RMA conditions to be exceeded, rather the conditions of Rule R99 (d) have to be met, otherwise a resource consent is required through Rule R101. I consider that Rule R99 (d) is appropriate, it is clear and measurable, and able to be met by plan users and that significant adverse effects will not occur.
161. Fish & Game (S308/033) states that the proposed Plan is contrary to Part 2 of the RMA and fails to recognise and provide for the significant natural resource management issues of soil erosion and the sustainable management of land and water resources. The submitter requests a new objective that ensures that hill country land uses, intensive farming, horticulture, cropping and plantation forestry are regulated to require good management practice and output-based standards which avoid discharges of sediment to freshwater habitats. It further requests that these land use activities include provisions which establish appropriate riparian set-back distances. This submission is supported by Rangitāne o Wairarapa (FS74/114), and opposed by Ravensdown Limited (FS46/010) Federated Farmers of New Zealand (FS54/063, 064), and Horticulture New Zealand (FS71/054). The request for a new objective is assessed in Issue 2.2 above. Fish and Game also seeks that these land use

activities include provisions which establish appropriate riparian set-back distances.

162. On the question of set-backs, I note in section 6.4 above (Implementation of the proposed Plan) that officers have noted an apparent discrepancy in the land use rules with set-back provisions. Officers have suggested that there should be set-back provisions on all land use rules for consistency across the activities managed. Otherwise situations may develop where certain activities would need to meet this condition, however, there could be other nearby land use activities that would not.
163. I note in the proposed Plan Rule 94: Cultivation and tilling of the land – permitted activity, a 5m set-back applies for this activity from a surface water body. In the Section 42A officer’s report: Land use in riparian margins and stock access to surface water bodies and the CMA, Rule 94: Cultivation and tilling of the land – permitted activity, the s42A report prepared by Barry Loe⁹ has recommended this set-back apply to land over 3⁰ slope and a 2m set-back apply for this activity when the slope is less than 3⁰ slope.
164. The draft NES-PF contains set-backs for the following plantation forestry permitted activity activities: afforestation, earthworks, quarrying, harvesting, mechanical land preparation, and replanting.
165. Also, set-backs are in place for earthworks in city and district plans¹⁰. These (in most plans, although there are differences) are 5m from a water body.
166. Set-backs are a mitigation device to protect water bodies from the effects of the activity. In the case of earthworks, this activity has the potential to disturb the banks of a surface water body causing bank erosion and a discharge of sediment to the water body or the CMA, if earthworks occur in this location.

⁹ Section 42A officer’s report: Land use in riparian margins and stock access to surface water bodies and the CMA

¹⁰ For example, the Wellington City District Plan has a set-back for cut and fill earthworks of 20m in rural areas, 10m from the Porirua Stream business areas, and 5m in all other areas (see Rule 31.1.2).

167. I consider that set-backs are an effective and efficient mitigation measure to reduce the effects of bank erosion and sedimentation of water bodies. They are a buffer mechanism to protect against these effects and are readily understandable and applicable in the field.
168. Given the effectiveness (GWRC, 2015) of set-backs I propose that a set-back is introduced into Rule R99 for earthworks. This proposal would in my view provide another level of protection for the environment against streambank erosion and discharge of sediment-laden runoff, if there was a sufficient buffer distance in place. I consider that the current proposed Rule R99 with no set-back in place means that earthworks could (where a city or district plan earthworks set-back was not operating) contribute to bank erosion and potential discharges to surface water bodies. I recommend that a 5m set-back is included into Rule R99 to protect streams from bank erosion and reduce the likelihood of sediment discharges to surface water bodies, and this recommendation is made below.

Issue 4.1 Summary of recommendations

169. I recommend that in Rule R99 ‘stormwater’ is replaced with ‘sediment-laden runoff’ and a new clause is inserted (e) earthworks shall not occur within 5m of a surface water body, as follows:

Rule R99: Earthworks– permitted activity

The use of land, and the discharge of sediment-laden runoff ~~stormwater~~ into water or onto or into land where it may enter water from earthworks of a contiguous area up to 3,000m² per **property** per 12 month period is a permitted activity, provided the following conditions are met:

- (a) soil or debris from **earthworks** is not placed where it can enter a surface water body or the coastal marine area, and
- (b) **earthworks** will not create or contribute to instability or subsidence of a slope or another land surface at or beyond the boundary of the property where the **earthworks** occurs, and
- (c) work areas are **stabilised** within six months after the completion of the earthworks.
- (d) any **earthworks** shall not, after the **zone of reasonable mixing**, result in any of the following effects in receiving waters:

- (i) the production of conspicuous oil or grease films, scums of foams, or floatable or suspended materials, or
- (ii) any conspicuous change in colour or visual clarity, or
- (iii) any emission of objectionable odour, or
- (iv) the rendering of fresh water unsuitable for consumption by animals, or
- (v) any significant adverse effect on aquatic life, and

(e) earthworks shall not occur within 5m of a surface water body.

170. Assessment of this recommended change pursuant to section 32AA of the RMA is attached in Appendix A.

Issue 4.2 Rule R100: Vegetation clearance on erosion-prone land – permitted activity

Issue 4.2 Background

171. Soil erosion is a significant resource management issue in the Wellington Region (RPS, 2013). This issue is more prevalent in the eastern Wairarapa hill country where the land has underlying soft sedimentary rock that easily erodes.
172. Removing the protective vegetative cover of woody vegetation including gorse is the first step in the erosion cycle that can lead to soil loss and sedimentation discharges to surface water bodies. Both of these effects are managed by the proposed Plan.
173. The proposed Plan protects the soil resource through Rule R99 (see Issue 4.1 above) and Rule R100.
174. Rule R100 vegetation clearance, restricts the removal of woody vegetation on erosion-prone land of a contiguous area up to 2ha per property, per year.

Issue 4.2 Submissions and assessment

175. Beef and Lamb New Zealand (S311/024) questions the use of the words ‘contiguous area’ and further suggests that 5ha is a more appropriate area, stabilised over four years. Rangitāne o Wairarapa (FS74/243) opposes the Beef

and Lamb New Zealand submission on the grounds that 5ha is a large area. The submitter also states that it is unclear if the word 'stormwater' includes the runoff that would naturally occur following average rainfall, - given that there is legal recognition of the point water flows down-hill, it would seem that runoff is a natural process and is not a 'discharge' which implies a deliberate collection and release of water from an activity.

176. I consider that Beef and Lamb is correct in stating that the word 'stormwater' is not appropriate in the context of a land use activity where there may be runoff from the activity. I have assessed the use of the word stormwater for Rule R99 Earthworks above in Issue 4.1. I propose that the word 'stormwater' is replaced with 'sediment-laden runoff'. This phrase is more appropriate as it refers to the 'discharge of sediment' and that the discharge of sediment occurs from 'runoff' of the activity. The phrase 'sediment-laden runoff' is referred to in Objective O47 where the amount of sediment-laden runoff is to be reduced. I consider that the words 'sediment-laden runoff' is more appropriate and this change is recommended below.
177. In reference to the word 'contiguous', Beef and Lamb considers that contiguous is misleading and could lead to uncertainty about what exactly is a contiguous area for the purposes of vegetation removal. I do not consider that contiguous is misleading. The word contiguous means (from the Concise Oxford Dictionary¹¹) 'touching; along a line; in contact; connected'. This word is within the intent of Rule R100 which is to protect large connected or contiguous areas (2ha and over) of vegetation cover on erosion prone land. The rule is not designed to mean that smaller areas of vegetation removal are added-up to a total area of 2ha. Smaller areas of vegetation may be removed if the land manager requires and this is entirely appropriate as removal of smaller areas has only minor effects on soils and any potential discharge. Therefore, contiguous is an important word for the management of vegetation clearance on erosion prone land through Rule R100.

¹¹ Concise Oxford Dictionary (9th ed.) 1995

178. The submitter, Beef and Lamb considers in reference to the area of vegetation clearance that replacing 2ha with 5ha of vegetation cleared and stabilised over four years is acceptable. I agree with the further submitter that this submission point would significantly increase the risk for soil erosion and potential discharges to water bodies especially considering the large area (5ha) and over a long stabilisation time (4 years). I consider that vegetation removal under 2ha is a sufficiently large area on erosion-prone land and is at a scale where the effects can be appropriately managed along with the other conditions of Rule R100. It should be noted that there is no re-vegetation clause in Rule R100 as land managers do not always replace woody re-vegetation with another form of woody vegetation as for the most part the land is converted to pasture.
179. Wellington Electricity Lines Limited (S126/026) requests an exemption from Rule R100 for activities associated with the Electricity (Hazards from Trees) Regulations 2003. This regulation allows the removal of trees for access to electricity lines. I have recommended an exemption for the Electricity (Hazards from Trees) Regulation 2003 in my assessment of the definition of vegetation clearance in Issue 1.3 above. I consider that reference to the Electricity (Hazards from Trees) Regulations 2003 is placed in the note at the bottom of Rule R100 indicating to plan users that the Electricity (Hazards from Trees) Regulations 2003 applies. I do not consider that Rule R100 is required to specifically include a new clause for this exemption. The recommended change is made below.
180. NZ Transport Agency (S146/160) seeks that 'the use of land' referenced in the first part of the rule be deleted. The New Zealand Defence Force (FS64/020) supports this submission. The submitter contends that the rule is about discharges yet it has a land use component with the use of the words, 'the use of land'. In my view the rule concerns both the use of land and the associated discharge from the use of land (RMA section 9 and section 15). The use of land component is in the area of land referenced for vegetation removal (2ha) and the discharge component relates to the standard of discharge into receiving waters. I do not consider this is an issue for the proposed rule and a similar rule structure occurs for Rule R99: Earthworks.

181. Fish & Game (S308/107) seeks amendments so that permitted activities are only applied where clear measurable and enforceable standards are able to be set which ensure that section 70 of the RMA is met, and that significant adverse effects will not occur. The Minister of Conservation (FS61/044) supports in part this submission.
182. Rule R100 includes reference to s70 of the RMA in the sub-clauses of (b). Rule R100 (b) is not allowing s70 of the RMA conditions to be exceeded, rather the conditions of Rule R100 (b) have to be met otherwise a resource consent is required through Rule R101. I consider that Rule R100 (b) is appropriate, it is clear and measurable, and able to be met by plan users and that significant adverse effects will not occur.
183. Hutt City Council (S84/031) requests that a note be added to the bottom of Rule R100 indicating that other provisions in city and district plan may apply for vegetation clearance. I consider this request useful and effective for the management of vegetation clearance in the region and the insertion of this note into the bottom of Rule R100 is recommended below.
184. New Zealand Defence Force (S81/031) requests that there should be a rule for vegetation clearance on non-erosion prone land as R100 only refers to erosion prone land. I consider that the proposed Plan does not require a vegetation clearance rule for non-erosion prone land. Section 30(1)(c) and (d) of the RMA allows regional councils to control land uses for soil conservation and water quality purposes. Rule R100 is specific to erosion prone land as this is where vegetation clearance has the potential for adverse effects on soils and water quality¹². As mentioned above in para 180 vegetation clearance is also controlled by city and district plans. The proposed Plan is not required to have a provision for vegetation clearance on non-erosion prone land.

¹² See Section 32 Report: Soil conservation, page 14.

Issue 4.2 Summary of recommendations

185. I recommend that Rule R100 replace ‘stormwater’ with ‘sediment-laden runoff’ and insert a note about vegetation clearance controlled in district plans, as follows:

Rule R100: Vegetation clearance on erosion-prone land – permitted activity

The use of land, and the discharge of sediment-laden runoff ~~stormwater~~ into water or onto or into land where it may enter water from **vegetation clearance** of a contiguous area up to 2ha per **property** per 12 month period on **erosion-prone land** is a permitted activity, provided the following conditions are met:

- (a) any soil or debris from the **vegetation clearance** is not placed where it can enter a surface water body or the coastal marine area, and
- (b) any soil disturbances associated with the **vegetation clearance** shall not after the **zone of reasonable mixing**, result in any of the following effects in receiving waters:
 - (i) the production of conspicuous oil or grease films, scums of foams, or floatable or suspended materials, or
 - (ii) any conspicuous change in colour or visual clarity, or
 - (iii) any emission of objectionable odour, or
 - (iv) the rendering of fresh water unsuitable for consumption by animals, or
 - (v) any significant adverse effect on aquatic life.

Vegetation clearance is also controlled by provisions in district plans and bylaws, and the Electricity (Hazards from Trees) Regulation 2003.

186. Assessment of this recommended change pursuant to section 32AA of the RMA is attached in Appendix A.

Issue 4.3 Rule R101: Discretionary activity

Submissions and assessment

187. Land Matters Limited (S285/074) common format submitters seek to amend the activity status of Rule R101 so that activities that fail to comply with Rule R99 or Rule R100 are a restricted discretionary activity.

188. The Federated Farmers common format submitters seek a similar relief for Rule R101 and would like to change the rule to a controlled or restricted discretionary activity rule with clear conditions.
189. Porirua City Council (S163/111) seeks that the rule is integrated with Territorial Authority management of earthworks and development and the rule becomes either controlled or restricted discretionary.
190. The proposed Plan has discretionary activities as the default rule if the conditions of a permitted activity cannot be met. This is the default position in the RMA of a discretionary activity for activities where there is no rule in a regional plan. The proposed Plan has restricted discretionary activity rules where the effects of the activity are certain, such as in Rule R144: Transferring water permits.
191. In regards to Rule R99 and R100 if the conditions cannot met, then Rule R101 applies is appropriate as not all of the effects of these activities is certain. Therefore, I consider that Rule R101 is appropriate for the management of earthworks and vegetation clearance if the conditions of Rule R99 and R100 cannot be met.
192. There are consequential changes to Rule R101 from recommendations made to Rule R99 and R100, for the discharge of sediment-laden runoff that is replacing the stormwater in Issue 4.1 and Issue 4.2 above. These changes are made below.

Issue 4.3 Summary of recommendations

193. I recommend that ‘sediment-laden runoff is inserted into Rule R101 as a consequential change for changes made to Rule R99 and Rule 100 above in Issue 4.1 and Issue 4.2.

Rule R101: Earthworks and vegetation clearance – discretionary activity



The use of land, and the discharge of sediment-laden runoff ~~stormwater~~ into water or onto or into land where it may enter water from **earthworks** or **vegetation clearance** that is not permitted by Rule R99 or Rule R100 is a discretionary activity.

Issue 5. Plantation forestry

Issue 5 Background

194. Plantation forestry is a major land use in the eastern Wairarapa hill country.¹³ Forests are managed on a large scale usually over 1,000ha and up to 50,000ha. The dominant tree species is *pinus radiata*. There are other small forests from several hectares to hundreds of hectares. These are managed by individual land owners or wood lot owners.
195. The activities associated with plantation forestry include: land preparation, afforestation and replanting, pruning and thinning, harvesting, earthworks, river crossings and stream bed disturbance (i.e. hauling trees across/through river and stream beds), quarrying, management of slash, mechanical land preparation, noise and dust.
196. The proposed Plan has provisions to manage the effects of some plantation forestry activities but not all activities listed above. For example, land uses such as afforestation and replanting are not managed by the proposed Plan, whereas other activities such as harvesting, roading and tracking, general earthworks and associated works in the beds of rivers and lakes are managed by the proposed Plan. For some of the activities not managed by the proposed Plan, they are managed by provisions in city and district plans. For example, city and district plans manage noise, dust, quarrying, and set-backs for replanting from roadsides and rivers and streams.
197. The primary provision to manage harvesting of plantation forestry is Rule R102: Plantation forestry harvesting on erosion-prone land and Rule R103 if the conditions of Rule R102 are not met. This rule manages harvesting activities through the submission of a harvest plan. Other activities which have effects on the environment are conditions in Rule R99 (Earthworks), and activities in the beds of lakes and rivers (see Section 5.5 of the proposed Plan).

¹³ There is approximately 66,200ha of plantation forestry in the Wellington Region, from the Proposed National Environmental Standard for Plantation Forestry: Discussion Document, Ministry for the Environment, 2010, page 112.

198. As noted above in the background sections of this report central government is preparing a national environmental standard for plantation forestry. Council has been part of the consultation on this draft regulation since 2010. Council was provided with an in-confidence draft regulation in March 2017 and invited to make final comments of the draft before it is made into regulation. I consider that a draft NES-PF regulation¹⁴ is imminent, and the provisions for plantation forestry harvesting in the proposed Plan will be replaced by the NES-PF.¹⁵ With this information, I consider that the primary provisions for plantation forestry should align very closely with the provisions in the draft NES-PF to avoid confusion or duplication.

199. There were approximately 30 submission points on plantation forestry harvesting. I have grouped these submission into the following sub-topics:

- Issue 5.1 Changes to the definition of plantation forestry harvesting
- Issue 5.2 Plantation forestry harvesting rules

Issue 5.1 Changes to the definition of plantation forestry harvesting

Issue 5.1 Background

200. Wellington Regional Council (S133/003) submits that the definition for ‘plantation forestry’ deals with the industry and not the activity of ‘harvesting’. This difference could lead to uncertainty for plan users. Forest Owner Marketing Services Limited (S435/001) requests the definition should align with the draft NES-PF.

201. I agree with submitters that the definition is not correct as it stands, confusing the activity of harvesting and what is plantation forestry. I recommend a new definition included for the activity of harvesting, and an amendment to the definition of plantation forestry. The definition of plantation forestry includes the size of a block of forest that is managed by Rule R102 (plantation forestry

¹⁴ Council has been involved with the latest drafts of the NES-PF regulation. There are still issues outstanding (as of early June 2017). It is anticipated that the NES-PF will be gazetted before the end of July 2017, but made operative early 2018.

¹⁵ Section 44A of the RMA.

harvesting) and a list of exceptions of types of forests that are not defined as plantation forestry forests. For example, shelter belts and orchards are not part of the plantation forestry definition. This will assist plans users with size of the forest and the type of forest that is managed by Rule R102. It is important to separate out the activity of harvesting from the definition of plantation forestry. Including the definition of harvesting within the definition of plantation forestry may lead to uncertainty about the activity and the land use. These recommended changes are closely aligned with the definition of plantation forestry and harvesting in the draft NES-PF.

202. These changes are assessed below in Appendix A.

Issue 5.1 Summary of recommendations

203. I recommend that a new definition is included for the activity of harvesting, and the definition of plantation forestry harvesting is amended to define plantation forestry. Both terms are used in Rule R102 (plantation forestry harvesting – permitted activity) and Rule 103 (plantation forestry harvesting – controlled activity).

<p><u>Harvesting</u></p>	<p><u>(a) means felling trees, extracting trees, thinning of tree stems and extraction for sale or use (production thinning), processing trees into logs, or loading logs onto trucks for delivery to processing plants; but</u> <u>(b) does not include –</u> <u>(i) milling activities or processing of timber; or</u> <u>(ii) vegetation clearance.</u></p>
<p>Plantation forestry harvesting</p>	<p>An area of forest, whether of exotic or indigenous species, which is intended to be, or has been, established with the intent to harvest the trees for commercial purposes. Plantation forestry does not include any area of trees: (a) less than 2ha in extent, and (b) planted for primarily amenity purposes, for example landscape enhancement or animal shelter, (including farm shelter belts, whether or not greater than 2ha in extent) where the primary purpose of the trees is not commercial harvesting, and (c) planted primarily for erosion control, including riparian margin strips, where the primary purpose of the trees is not commercial harvesting, and (d) planted for scientific or research purpose, including established arboretums, and (e) intended to remain in perpetuity, for instance trees planted for purposes of permanent carbon accumulation, or trees contained in a QEII or similar covenant.</p>

<u>Plantation forestry</u>	<p><u>means a forest (native or exotic) deliberately established for commercial purposes, being -</u></p> <p><u>(a) at least 1 hectare of forest cover of forest species that has been planted and has or will be harvested or replanted; and</u></p> <p><u>(b) includes all associated forestry infrastructure; but</u></p> <p><u>(c) does not include –</u></p> <p><u>(i) a shelter belt of forest species, where the crown cover has, or is likely to have, an average width of less than 30m; or</u></p> <p><u>(ii) forest species in urban areas; or</u></p> <p><u>(iii) nurseries and seed orchards; or</u></p> <p><u>(iv) trees grown for fruit and nut crops; or</u></p> <p><u>(v) long-term ecological restoration planting of forest species; or</u></p> <p><u>(vi) willows and poplars space planted for soil conservation purposes.</u></p>
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204. Assessment of this recommended change pursuant to section 32AA of the RMA is attached in Appendix A

Issue 5.2 Plantation forestry harvesting rules

Issue 5.2 Background

205. There are two rules that specifically manage plantation forestry harvesting in the proposed Plan.
206. Rule R102 Plantation forestry harvesting on erosion-prone land is a permitted activity which manages the activity of harvesting through the submission of a harvest plan.
207. Rule R103 Plantation forestry harvesting on erosion prone is a controlled activity, if the conditions of Rule R102 are not met.
208. Other provisions in the proposed Plan manage activities not specifically managed by Rule R102, for example, river crossings are managed by the provisions in Section 5.5.4 Activities in the beds of lakes and rivers.

Issue 5.2 Submissions and assessment

209. Forest Owner Marketing Services (S435/008), Porirua City Council (S163/112 and 113), Juken New Zealand Limited (S77/002), Southern North Island Wood Council (S100/004), PF Olsen (S131/007), Forest Enterprises Growth Limited

- (S275/007) and Egon Guttke (S14/032), all seek clarification over harvesting on erosion-prone land in Rule R102 and the controlled activity in Rule R103.
210. Submitters have noted an apparent issue with plantation forestry harvesting on non-erosion-prone land. I do not consider that there is an issue with Rule R102 applying to only erosion-prone land. This rule controls plantation forestry harvesting on erosion prone land, as this is considered to be where the effects of this activity have the potential for adverse effects on the environment. The RMA s30(1)(c) and (d) allows regional councils to control the use of land for soil conservation purposes and water quality. The assessment for this activity in Section 32 Report: Soil Conservation, page 15, states that the effects of this activity – harvesting on erosion prone land has the potential for adverse effects. Hence the proposed Plan provides for this activity to protect the soil resource and control discharges to surface water bodies. This does not mean that the proposed Plan is required to control plantation forestry harvesting on non-erosion prone land.
211. Beef and Lamb New Zealand (S311/025, 027) requested for all rules – Rule R99 (earthworks) and Rule R100 (vegetation clearance on erosion-prone land) and Rules R102 and R103 (plantation forestry) that the definition and intent of the use of the word ‘stormwater’ is uncertain for these land use activities and the submitters suggest that ‘sediment-laden runoff’ better describes the discharge from these activities. This submission point is fully assessed in Issue 4.1 and 4.2 above. I agree with the submitter the use of the word ‘stormwater’ applies to situations where rainfall is channelled or modified in some way. This is not always the situation in the activity of plantation forestry harvesting and a more appropriate term is ‘sediment-laden runoff’. I recommend that the word ‘stormwater’ is replaced with ‘sediment-laden runoff’ in the first sentence of Rule R102.
212. Beef and Lamb New Zealand (S311/025), Forest Owner Marketing Services (S435/008), Porirua City Council (S163/112 and 113), Juken New Zealand Limited (S77/002), Southern North Island Wood Council (S100/005), PF Olsen (S131/008 and 0099), and Forest Enterprises Growth Limited (S275/008 and 009) all question clauses (b), (c) and (d) of Rule R102.

213. On clause (b), better wording could be used to clearly state the intent of the clause. Presently the clause is ambiguous with the use of the words ‘not placed’. I agree with submitters, the intent is not clear in the clause that soil or debris is placed where it ‘cannot’ enter a surface water body. I propose to adopt suggested wording from Beef and Lamb New Zealand and draft wording in the draft NES-PF for the management of soil or debris close to water bodies, and this proposed new wording is below.
214. Submitters have noted an apparent inconsistency between Rule R102(c) – slash management and the permitted activity rules in Section 5.5.4 – Activities in the beds of lakes and rivers. It is not clear in the proposed Plan what rule takes precedence, as clause (c) allows the removal of slash from a water body when it is not permitted by rules in Section 5.5.4 of the proposed Plan.
215. I proposed to adopt the wording from the draft NES-PF which is clear about how vegetation is removed from a water body to avoid future confusion, and ensure consistency between the proposed Plan and the new proposed regulation. I recommend these changes below.
216. Submitters have submitted that the word ‘effectively’ in clause (d) of Rule R102, is not defined, and it is unclear what effectively might actually mean for the purposes of replanting. I agree with submitters, it is not certain what is intended by the use of the word in the clause, and I propose that clause (d) is replaced with the new wording taking into account wording from the draft NES-PF for the management of soils after harvesting. The draft NES-PF uses the term ‘stabilised’ which is a more effective term for the management of soils after trees have been removed. The word ‘stabilised’ is not defined by the draft NES-PF but is defined by the proposed Plan. I consider that the definition of stabilised is appropriate for the purpose of this clause, which is to stabilise or contain soil on site so that sediment-laden runoff cannot enter a surface water body. The proposed wording is below.
217. Wellington Regional Council (S133/013) notes that the reference to ‘earthworks’ in clause (e) of Rule R102 is about harvesting activities and not specifically earthworks. The activity of earthworks is managed by Rule R99:

Earthworks and Rule R101 in the proposed Plan. I agree with the submitter that clause (e) is intended to manage sediment-laden runoff from the activity of harvesting and not specifically earthworks. I propose that the clause (e) is consistent with the first part of Rule R102 for the discharge of sediment-laden runoff, and this change is recommended below.

218. Rule R103 is a controlled activity rule that manages the effects of plantation forestry harvesting on erosion-prone land when the conditions of Rule R102 are not met.
219. Porirua City Council (S163/113) requests that the rule arrangements are not correct between Rule R102 and R103. The submitter contends that plantation forestry harvesting on non-erosion prone land requires a consent under Rule R103 as there is no specific permitted activity rule for plantation forestry harvesting on non-erosion prone land. As discussed above the regional council under s30(1)(c) and (d) can control land uses and discharges to protect soil conservation and water quality. The proposed Plan has assessed through the Section 32 Report: Soil Conservation (pages 14 and 15) that erosion prone has the greatest risk of soil erosion and discharges of sediment laden runoff from the harvesting activity. The risk to soils and the resulting discharge to surface water bodies are lower on non-erosion prone land, and hence there is no provision on this land zone in the proposed Plan. I propose to insert the words 'erosion prone land' into Rule R103 to make it certain to plan users if the conditions of Rule R102 are not met for harvesting on erosion prone land.
220. Kapiti Coast District Council (S117/064) and Waa Rata Estate (S152/078) request that a note is added to Rule R103 indicating that plantation forestry is controlled by district plans. I agree with submitters, a note would increase the effectiveness of this provision by including a note about provisions for the same activity in city and district plans. This addition is included below.
221. There is another consequential change to Rule R103 from recommended changes to Rule R102 and this concerns the replacement of stormwater with sediment-laden runoff. These changes are made below.

Issue 5.2 Summary of recommendations

222. I recommend for Rule R102, that ‘stormwater’ is replaced with ‘sediment-laden runoff’ in the first sentence of the rule, and clauses (b), (c), (d) and (e) are replaced with new causes to improve effectiveness and efficiency of these clauses.
223. I recommend that consequential changes are made to Rule R103 based on the changes recommended in Rule R102. These are recommended below.

Rule R102: Plantation forestry harvesting on erosion-prone land – permitted activity 

The use of land, and the discharge of ~~sediment-laden runoff~~ **stormwater** into water or onto or into land where it may enter water from **plantation forestry harvesting** on **erosion-prone land** is a permitted activity, provided the following conditions are met:

- (a) a harvest plan shall be prepared in accordance with Schedule O (forestry plan) and submitted to the Wellington Regional Council 20 working days prior to the **plantation forestry harvesting**, and
- ~~(b) disturbed vegetation or soil is not placed where it can dam or divert a **surface water body**, and~~
- (b) when **harvesting** occurs across a **surface water body**, all disturbed vegetation, soil or debris must be deposited or placed in a position where it cannot enter a **surface water body**, or the coastal marine area, to avoid –
 - (i) diversion, damming, or erosion of any **surface water body** or coastal water, and
 - (ii) degradation of any aquatic habitat or riparian zone, and
 - (iii) damage to downstream infrastructure or property, and
- ~~(c) slash is removed from a **surface water body** where it is blocking river flow or is diverting river flow and causing bank erosion, and~~
- (c) slash must be placed onto stable ground, and slash levels managed so slash does not accumulate to quantities that could cause collapse of slash piles on the edge of landing sites, and
- ~~(d) work areas are effectively revegetated within 18 months after the final completion of the **plantation forestry harvesting**.~~
- (d) all disturbed soil must be **stabilised** or contained where it cannot allow the movement of sediment-laden runoff into any **surface water body** or the coastal marine area resulting in –

- (i) the diversion or damming of any **surface water body**; or
 - (ii) degradation of the aquatic habitat, riparian zone, **surface water body**, or coastal water; or
 - (iii) damage to downstream infrastructure or properties, and
- (e) any sediment-laden runoff ~~earthworks~~ associated with **plantation forestry harvesting** shall not, after the **zone of reasonable mixing**, result in any of the following effects in receiving waters:
- (i) the production of conspicuous oil or grease films, scums of foams, or floatable or suspended materials, and
 - (ii) any conspicuous change in colour or visual clarity, and
 - (iii) any emission of objectionable odour, and
 - (iv) the rendering of fresh water unsuitable for consumption by animals, and
 - (v) any significant adverse effect on aquatic life.

Rule R103: Plantation forestry harvesting – controlled activity

The use of land, and the discharge of sediment-laden runoff ~~stormwater~~ into water or onto or into land that may enter water from **plantation forestry harvesting on erosion prone land** that is not permitted by Rule R102 is a controlled activity.

Matters of control

1. A harvest plan in accordance with Schedule O (forestry plan)
2. Methods for erosion and sediment control
3. Methods to manage and contain slash
4. Methods for stabilisation after harvesting
5. Design and location of river crossings and culverts
6. Methods for minimising bed disturbance
7. Impacts of sediment on receiving **surface water bodies** and any downstream receiving environment.

Note

Plantation forestry is also controlled by provisions in district plans.

224. Assessment of this recommended change pursuant to section 32AA of the RMA is attached in Appendix A.

Conclusions

225. I have assessed the submissions and recommended changes to the provisions as proposed.
226. I consider that the proposed Plan provisions (objectives, policies, rules and schedule in this topic) as notified or recommended for amendment are appropriate and suitable for their intended purpose, which are to manage soil conservation in the region.
227. The proposed Plan provisions meet the section 32 statutory tests of the objectives being the most appropriate way of achieving the purpose of the RMA, and the policies, rules, and schedule are the most effective and efficient way of achieving the objectives.

References

- Greater Wellington Regional Council 2006. Regional Freshwater Plan Evaluation. Wellington Regional Council GW-RP-06-62 (see [www.gw.govt.nz/document library/](http://www.gw.govt.nz/document-library/))
- Greater Wellington Regional Council 2008. Plan effectiveness monitoring report: Regional Soil Plan (see www.gw.govt.nz/document library/)
- Greater Wellington Regional Council. 2015. Section 32 report: Soil conservation for the Proposed Natural Resources Plan for the Wellington Region. Greater Wellington Regional Council, Publication No. GW/EP-G-15/51, Wellington.
- Greater Wellington Regional Council. 2017. Programme of time-limited stages for implementation of the National Policy Statement for Freshwater Management 2014 (NPS-FM). Wellington Regional Council.
- Ministry for the Environment. 2010. Proposed National Environmental Standard for Plantation Forestry: Discussion Document. Wellington: Ministry for the Environment.
- Sorensen P. 2012. Soil quality and stability in the Wellington region. Greater Wellington Regional Council report GW/EMI-T-12/138 Wellington Regional Council 2000. Regional Soil Plan for the Wellington region. WRC/RP-G-00/5

Appendix A: Requested amendments and section 32AA assessment

Note: The requested amendments from the revised chapter are set out below. Additions to the notified text are in underline and deletions are ~~strike through~~ text. The section 32AA assessment follows alongside for each of the provisions.

Amendment number/Submission point number	Chapter	Provision	Requested amendment	Evaluation of amendment (section 32AA assessment)
A1 (S126/026)	2	Vegetation clearance	<p>Vegetation clearance: The clearance or destruction of woody vegetation (exotic or native) by mechanical or chemical means, including felling vegetation, spraying of vegetation by hand or aerial means, hand clearance, and the burning of vegetation. <u>Vegetation clearance does not include any vegetation clearance, tree removal, or trimming of vegetation associated with the Electricity (Hazards from Trees) Regulations 2003.</u></p>	<p><u>Effectiveness and efficiency</u> This amendment is to provide certainty for vegetation clearance, tree removal or trimming of vegetation associated with the Electricity (Hazards from Trees) Regulations 2003.</p> <p><u>Costs: (numerical and potential costs)</u> No specific costs have been assessed for the insertion of this exemption to the definition of vegetation clearance. There are unlikely to be increased costs to industry or the community from this insertion for vegetation clearance.</p> <p><u>Benefits: (environmental, cultural, economic and social)</u> There is potentially an increased benefit by providing certainty to plan users for this activity.</p> <p><u>Risk of acting or not acting</u> There is a low risk of not acting.</p> <p><u>Decision about most appropriate option</u> This is an important matter that requires recognition by the proposed Plan and provides useful clarification for plan users. There was potential confusion about how the provisions were intended to operate and this proposed change will ensure greater effectiveness of the provisions.</p> <p>In my opinion the proposed amendment is the most appropriate</p>

Amendment number/Submission point number	Chapter	Provision	Requested amendment	Evaluation of amendment (section 32AA assessment)
				way to achieve the purpose of the RMA and the objectives of the proposed Plan, will have cultural, social, environmental and economic benefits, and will not reduce opportunities for economic growth or have a negative effect on employment.
A2 (S307/024)	3	Objective O42	Objective O42 Soils are healthy, and productive, <u>retain a range of uses;</u> and accelerated soil erosion is reduced.	<p><u>Effectiveness and efficiency</u> This amendment is give effect to RPS Objective 30, which is to ensure soils in the region retain a range of uses. The previous wording of productivity of soils is only one component of the range of uses. This amendment is more effective for the management of soil conservation in the region.</p> <p><u>Costs: (numerical and potential costs)</u> No specific costs have been assessed for the insertion of this definition. There are unlikely to be increased costs to industry or the community from this insertion into Objective O42.</p> <p><u>Benefits: (environmental, cultural, economic and social)</u> There is potentially an increased environmental benefit by giving effect to high order documents (RPS, Objective 30) and improving the effectiveness of this provision.</p> <p><u>Risk of acting or not acting</u> There is a low risk of not acting.</p> <p><u>Decision about most appropriate option</u> This is an important matter that requires recognition by the proposed Plan and provides useful clarification for plan users. There was potential confusion about how the provisions where intended to operate and this proposed change will ensure greater effectiveness of the provisions.</p>

Amendment number/Submission point number	Chapter	Provision	Requested amendment	Evaluation of amendment (section 32AA assessment)
				<p>In my opinion the proposed amendment is the most appropriate way to achieve the purpose of the RMA and the objectives of the proposed Plan, will have cultural, social, environmental and economic benefits, and will not reduce opportunities for economic growth or have a negative effect on employment.</p>
<p>A3 (S311/023, S308/033)</p>	<p>5.4.4</p>	<p>Rule R99</p>	<p>Rule R99: Earthworks– permitted activity The use of land, and the discharge of <u>sediment-laden runoff</u> stormwater into water or onto or into land where it may enter water from earthworks of a contiguous area up to 3,000m² per property per 12 month period is a permitted activity, provided the following conditions are met:</p> <p>(a) soil or debris from earthworks is not placed where it can enter a surface water body or the coastal marine area, and</p> <p>(b) earthworks will not create or contribute to instability or subsidence of a slope or another land surface at or beyond the boundary of the property where the earthworks occurs, and</p> <p>(c) work areas are stabilised within six months after the completion of the earthworks.</p> <p>(d) any earthworks shall not, after the zone of reasonable mixing, result in any of the following effects in receiving waters:</p> <p>(i) the production of conspicuous oil or grease films, scums of foams, or floatable or suspended materials, or</p>	<p><u>Effectiveness and efficiency</u> This amendment is to replace the word stormwater with sediment-laden runoff, and insert a new clause for set-back from earthworks. The insertion of sediment-laden runoff is a more effective term for the potential discharge that may occur from this activity. The new clause refers to sediment-laden which is likely to occur from earthworks from runoff. The replaced word stormwater is not appropriate for this activity and would lead to ineffectiveness of the rule.</p> <p>The insertion of a new clause (e) for a set-back of 5m from a surface water body for earthwork is appropriate and effective, as it will provide a buffer or margin where stream banks can be protected and further reduce any potential discharge of sediment-laden runoff to a surface water body.</p> <p><u>Costs: (numerical and potential costs)</u> No specific costs have been assessed for the insertion of this new words referring to sediment-laden runoff and new clause (e). There are unlikely to be increased costs to industry or the community from this insertion of these amendments in Rule R99.</p> <p><u>Benefits: (environmental, cultural, economic and social)</u> There is potentially an increased environmental benefit by ensuring</p>

Amendment number/Submission point number	Chapter	Provision	Requested amendment	Evaluation of amendment (section 32AA assessment)
			<p>(ii) any conspicuous change in colour or visual clarity, or</p> <p>(iii) any emission of objectionable odour, or</p> <p>(iv) the rendering of fresh water unsuitable for consumption by animals, or</p> <p>(v) any significant adverse effect on aquatic life, <u>and</u></p> <p><u>(e) earthworks shall not occur within 5m of a surface water body.</u></p>	<p>the discharge component of the rule is more effective and the protection of stream banks and reduction of potential discharges to surface water bodies from this activity.</p> <p><u>Risk of acting or not acting</u></p> <p>There is a moderate risk of not acting.</p> <p><u>Decision about most appropriate option</u></p> <p>This is an important matter that requires recognition by the proposed Plan and provides useful clarification for plan users. There was potential confusion about how the provisions were intended to operate and this proposed change will ensure greater effectiveness of the provisions.</p> <p>In my opinion the proposed amendment is the most appropriate way to achieve the purpose of the RMA and the objectives of the proposed Plan, will have cultural, social, environmental and economic benefits, and will not reduce opportunities for economic growth or have a negative effect on employment.</p>
A4 (S311/024, S84/031)	5.4.4	R100	<p>Rule R100: Vegetation clearance on erosion-prone land – permitted activity</p> <p>The use of land, and the discharge of sediment-laden runoff stormwater <u>sediment-laden runoff</u> into water or onto or into land where it may enter water from vegetation clearance of a contiguous area up to 2ha per property per 12 month period on erosion-prone land is a permitted activity, provided the following conditions are met:</p> <p>(a) any soil or debris from the vegetation clearance is not placed where it can enter a surface</p>	<p><u>Effectiveness and efficiency</u></p> <p>This amendment is to replace the word stormwater with sediment-laden runoff, and insert a note explain to plan users that city and district plans and the Electricity (Hazards from Trees) Regulations 2003 may apply. The insertion of sediment-laden runoff is a more effective term for the potential discharge that may occur from this activity. The new clause refers to sediment-laden runoff which is likely to occur from the vegetation clearance activity. The replaced word stormwater is not appropriate for this activity and would lead to ineffectiveness of the rule.</p> <p>The insertion of a new note is appropriate and effective, as is will</p>

Amendment number/Submission point number	Chapter	Provision	Requested amendment	Evaluation of amendment (section 32AA assessment)
			<p>water body or the coastal marine area, and</p> <p>(b) any soil disturbances associated with the vegetation clearance shall not after the zone of reasonable mixing, result in any of the following effects in receiving waters:</p> <p>(i) the production of conspicuous oil or grease films, scums of foams, or floatable or suspended materials, or</p> <p>(ii) any conspicuous change in colour or visual clarity, or</p> <p>(iii) any emission of objectionable odour, or</p> <p>(iv) the rendering of fresh water unsuitable for consumption by animals, or</p> <p>(v) any significant adverse effect on aquatic life.</p> <p><i>Note:</i></p> <p><u>Vegetation clearance is also controlled by provisions in district plans and bylaws, and the Electricity (Hazards from Trees) Regulations 2003.</u></p>	<p>provide further certainty to plan users for other provisions that may exist in city and district plans.</p> <p><u>Costs: (numerical and potential costs)</u></p> <p>No specific costs have been assessed for the insertion of these new words for sediment-laden runoff and the addition of the note. There are unlikely to be increased costs to industry or the community from this insertion of these amendments.</p> <p><u>Benefits: (environmental, cultural, economic and social)</u></p> <p>There is potentially an increased environmental benefit by ensuring the discharge component of the rule is more effective and the plan users are better informed.</p> <p><u>Risk of acting or not acting</u></p> <p>There is a moderate risk of not acting.</p> <p><u>Decision about most appropriate option</u></p> <p>This is an important matter that requires recognition by the proposed Plan and provides useful clarification for plan users. There was potential confusion about how the provisions were intended to operate and this proposed change will ensure greater effectiveness of the provisions.</p> <p>In my opinion the proposed amendment is the most appropriate way to achieve the purpose of the RMA and the objectives of the proposed Plan, will have cultural, social, environmental and economic benefits, and will not reduce opportunities for economic growth or have a negative effect on employment.</p>

Amendment number/Submission point number	Chapter	Provision	Requested amendment	Evaluation of amendment (section 32AA assessment)
A5 (consequential change)	5.4.4	R101	<p>Rule R101: Earthworks and vegetation clearance – discretionary activity</p> <p>The use of land, and the discharge of <u>sediment-laden runoff</u> stormwater into water or onto or into land where it may enter water from earthworks or vegetation clearance that is not permitted by Rule R99 or Rule R100 is a discretionary activity.</p>	<p><u>Effectiveness and efficiency</u></p> <p>This is a consequential change for recommendations made to Rule R99 and R100. The change replaces the word stormwater with sediment-laden runoff.</p> <p><u>Costs: (numerical and potential costs)</u></p> <p>No specific costs have been assessed for the insertion of this definition. There are unlikely to be increased costs to the industry or the community from the insertion of these words into Rule R101 of the proposed Plan.</p> <p><u>Benefits: (environmental, cultural, economic and social)</u></p> <p>There is potentially an increased environmental benefit by improving the effectiveness of the provisions for earthworks and vegetation clearance.</p> <p><u>Risk of acting or not acting</u></p> <p>There is a moderate risk of not acting.</p> <p><u>Decision about most appropriate option</u></p> <p>This is an important matter that requires recognition by the proposed Plan and provides useful clarification for plan users. There was potential confusion about how the provisions were intended to operate and this proposed change will ensure greater effectiveness of the provisions.</p> <p>In my opinion the proposed amendment is the most appropriate way to achieve the purpose of the RMA and the objectives of the proposed Plan, will have cultural, social, environmental and economic benefits, and will not reduce opportunities for economic</p>

Amendment number/Submission point number	Chapter	Provision	Requested amendment	Evaluation of amendment (section 32AA assessment)
				growth or have a negative effect on employment.
A6 (S133/003)	2	Definition of Harvesting and definition of Plantation forestry harvesting	<p><u>Harvesting</u> <u>a) means felling trees, extracting trees, thinning of tree stems and extraction for sale or use (production thinning), processing trees into logs, or loading logs onto trucks for delivery to processing plants; but</u> <u>(b) does not include –</u> <u>(i) milling activities or processing of timber; or</u> <u>(ii) vegetation clearance.</u></p> <p><u>Plantation forestry harvesting</u> <u>An area of forest, whether of exotic or indigenous species, which is intended to be, or has been, established with the intent to harvest the trees for commercial purposes.</u> <u>Plantation forestry does not include any area of trees:</u> <u>(a) less than 2ha in extent, and</u> <u>(b) planted for primarily amenity purposes, for example landscape enhancement or animal shelter, (including farm shelter belts, whether or not greater than 2ha in extent) where the primary purpose of the trees is not commercial harvesting, and</u> <u>(c) planted primarily for erosion control, including riparian margin strips, where the primary purpose of the trees is not commercial harvesting, and</u></p>	<p><u>Effectiveness and efficiency</u> This amendment is to divide the definition of plantation forestry harvesting into two new definitions, one for harvesting and plantation forestry. There will improve the effectiveness of these definitions as there was uncertainty between the industry of plantation forestry and the activity of harvesting. This change will make the provisions that are related to these definitions more effective and efficient.</p> <p><u>Costs: (numerical and potential costs)</u> No specific costs have been assessed for the insertion of this definition. There are unlikely to be increased costs to the industry or the community from the insertion of these definitions into the proposed Plan.</p> <p><u>Benefits: (environmental, cultural, economic and social)</u> There is potentially an increased environmental benefit by improving the effectiveness of the provisions for plantation forestry and harvesting.</p> <p><u>Risk of acting or not acting</u> There is a moderate risk of not acting.</p> <p><u>Decision about most appropriate option</u> This is an important matter that requires recognition by the proposed Plan and provides useful clarification for plan users. There was potential confusion about how the provisions were intended to operate and this proposed change will ensure greater effectiveness of the provisions.</p>

Amendment number/Submission point number	Chapter	Provision	Requested amendment	Evaluation of amendment (section 32AA assessment)
			<p>(d) planted for scientific or research purpose, including established arboretums, and</p> <p>(e) intended to remain in perpetuity, for instance trees planted for purposes of permanent carbon accumulation, or trees contained in a QEII or similar covenant.</p> <p>Plantation forestry: <u>means a forest (native or exotic) deliberately established for commercial purposes, being -</u></p> <p><u>(a) at least 1 hectare of forest cover of forest species that has been planted and has or will be harvested or replanted; and</u></p> <p><u>(b) includes all associated forestry infrastructure; but</u></p> <p><u>(c) does not include –</u></p> <p><u>(i) a shelter belt of forest species, where the crown cover has, or is likely to have, an average width of less than 30m; or</u></p> <p><u>(ii) forest species in urban areas; or</u></p> <p><u>(iii) nurseries and seed orchards; or</u></p> <p><u>(iv) trees grown for fruit and nut crops; or</u></p> <p><u>(v) long-term ecological restoration planting of forest species; or</u></p> <p><u>(vi) willows and poplars space planted for soil conservation purposes.</u></p>	<p>In my opinion the proposed amendment is the most appropriate way to achieve the purpose of the RMA and the objectives of the proposed Plan, will have cultural, social, environmental and economic benefits, and will not reduce opportunities for economic growth or have a negative effect on employment.</p>

Amendment number/Submission point number	Chapter	Provision	Requested amendment	Evaluation of amendment (section 32AA assessment)
<p>A7 (S435/008, S163/112, S77/002, S100/004, S131/007, S275/007, S14/032)</p>	<p>5.4.5</p>	<p>Rule R102</p>	<p>Rule R102: Plantation forestry harvesting on erosion-prone land – permitted activity</p> <p>The use of land, and the discharge of <u>sediment-laden runoff</u> stormwater into water or onto or into land where it may enter water from <u>plantation forestry harvesting on erosion-prone land</u> is a permitted activity, provided the following conditions are met:</p> <p>(a) a harvest plan shall be prepared in accordance with Schedule O (forestry plan) and submitted to the Wellington Regional Council 20 working days prior to the <u>plantation forestry harvesting</u>, and</p> <p>(b) disturbed vegetation or soil is not placed where it can dam or divert a surface water body, and</p> <p><u>(b) when harvesting occurs across a surface water body, all disturbed vegetation, soil or debris must be deposited or placed in a position where it cannot enter a surface water body, or the coastal marine area, to avoid –</u></p> <p><u>(i) diversion, damming, or erosion of any surface water body or coastal water, and</u></p> <p><u>(ii) degradation of any aquatic habitat or riparian zone, and</u></p> <p><u>(iii) damage to downstream infrastructure or property, and</u></p> <p>(c) slash is removed from a surface water body where it is blocking river flow or is diverting river</p>	<p><u>Effectiveness and efficiency</u></p> <p>This amendment is to replace the word stormwater with sediment-laden runoff, and insert new clause (b) for the placing of debris away from surface water bodies, new clause (c) for the management of slash during harvesting, new clause (d) ensuring that the soil debris during harvesting and after is stabilised so that it cannot enter a surface water body, and a change to clause (e) referring to the discharge of sediment-laden runoff rather than earthworks.</p> <p>The insertion of sediment-laden runoff is a more effective term for the potential discharge that may occur from this activity. The new clause refers to sediment-laden which is likely to occur from earthworks from runoff. The replaced word stormwater is not appropriate for this activity and would lead to ineffectiveness of the rule.</p> <p>The insertion of a new clause (b) is more specific and effective to the activity of harvesting across a surface water body which has the potential to cause confusion to plan users with other provisions in the proposed Plan in the beds of lakes and rivers.</p> <p>The insertion of a new clause (c) for more effective as it provide certainty about how slash is to be managed around surface water bodies, and the new clause prevent downstream flood affecting neighbouring properties, and the damming of a surface water body.</p>

Amendment number/Submission point number	Chapter	Provision	Requested amendment	Evaluation of amendment (section 32AA assessment)
			<p>flow and causing bank erosion, and</p> <p><u>(c) slash must be placed onto stable ground, and slash levels managed so slash does not accumulate to quantities that could cause collapse of slash piles on the edge of landing sites, and</u></p> <p>(d) work areas are effectively revegetated within 18 months after the final completion of the plantation forestry harvesting.</p> <p><u>(d) all disturbed soil must be stabilised or contained where it cannot allow the movement of sediment-laden runoff into any surface water body or the coastal marine area resulting in –</u></p> <p><u>(i) the diversion or damming of any surface water body; or</u></p> <p><u>(ii) degradation of the aquatic habitat, riparian zone, surface water body, or coastal water; or</u></p> <p><u>(iii) damage to downstream infrastructure or properties, and</u></p> <p>(e) any <u>sediment-laden runoff earthworks</u> associated with plantation forestry harvesting shall not, after the zone of reasonable mixing, result in any of the following effects in receiving waters:</p> <p>(i) the production of conspicuous oil or grease films, scums of foams, or floatable or suspended materials, and</p> <p>(ii) any conspicuous change in colour or visual</p>	<p>New clause (d) replaces another ineffective clause that required replanting after 18 months. The new clause provides for the soil to be stable after harvesting to prevent soil losses and discharges to surface water bodies. This new clause is more appropriate to the activity and effective for plan users in understanding the requirements of this activity.</p> <p>Clause (e) has a new insertion of the word sediment-laden runoff which is more effective for this activity and the discharge that may occur.</p> <p><u>Costs: (numerical and potential costs)</u></p> <p>No specific costs have been assessed for the insertion of these new clauses and words. There are unlikely to be increased costs to industry or the community from this insertion of these amendments in Rule R102.</p> <p><u>Benefits: (environmental, cultural, economic and social)</u></p> <p>There is potentially an increased environmental benefit by ensuring the new clauses are more effective for the management of activities in harvesting and making the discharge component of the rule more effective.</p> <p><u>Risk of acting or not acting</u></p> <p>There is a moderate risk of not acting.</p> <p><u>Decision about most appropriate option</u></p> <p>This is an important matter that requires recognition by the proposed Plan and provides useful clarification for plan users. There was potential confusion about how the provisions where</p>

Amendment number/Submission point number	Chapter	Provision	Requested amendment	Evaluation of amendment (section 32AA assessment)
			clarity, and (iii) any emission of objectionable odour, and (iv) the rendering of fresh water unsuitable for consumption by animals, and (v) any significant adverse effect on aquatic life.	intended to operate and this proposed change will ensure greater effectiveness of the provisions. In my opinion the proposed amendment is the most appropriate way to achieve the purpose of the RMA and the objectives of the proposed Plan, will have cultural, social, environmental and economic benefits, and will not reduce opportunities for economic growth or have a negative effect on employment.
A8 (S163/113, S152/078)	5.4.5	Rule R103	Rule R103: Plantation forestry harvesting – controlled activity  The use of land, and the discharge of sediment-laden runoff stormwater <u>sediment-laden runoff</u> into water or onto or into land that may enter water from <u>plantation forestry harvesting on erosion prone land</u> that is not permitted by Rule R102 is a controlled activity. <i>Matters of control</i> 1. A harvest plan in accordance with Schedule O (forestry plan) 2. Methods for erosion and sediment control 3. Methods to manage and contain slash 4. Methods for stabilisation after harvesting 5. Design and location of river crossings and culverts 6. Methods for minimising bed disturbance 7. Impacts of sediment on receiving surface water bodies and any downstream receiving environment.	<u>Effectiveness and efficiency</u> These amendments are to improve the effectiveness of Rule R103 and related to changes made to Rule R102. Changes include replace stormwater with sediment-laden runoff as sediment-laden runoff is more appropriate for the discharge from this activity. Add the word erosion prone land into the rule to increase certainty for plan users that Rule R103 is only concerned with harvesting activities on erosion prone land if the conditions of Rule R102 cannot be met. And include a note about provisions in district plans, this will increase the rule effectiveness. <u>Costs: (numerical and potential costs)</u> No specific costs have been assessed for the insertion of this definition. There are likely to be increased costs to the industry or the community his change. <u>Benefits: (environmental, cultural, economic and social)</u> There is potentially an increased environmental benefit by improving the effectiveness of the provisions for harvesting. <u>Risk of acting or not acting</u> There is a moderate risk of not acting.

Amendment number/Submission point number	Chapter	Provision	Requested amendment	Evaluation of amendment (section 32AA assessment)
			<p><i>Note</i> <u>Plantation forestry is also controlled by provisions in district plans.</u></p>	<p><u>Decision about most appropriate option</u></p> <p>This is an important matter that requires recognition by the proposed Plan and provides useful clarification for plan users. There was potential confusion about how the plantation rules were intended to operate and this proposed change will ensure greater effectiveness of the provision.</p> <p>In my opinion the proposed amendment is the most appropriate way to achieve the purpose of the RMA and the objectives of the proposed Plan, will have cultural, social, environmental and economic benefits, and will not reduce opportunities for economic growth or have a negative effect on employment.</p>

Appendix B: Common template submissions

List of Farmers Common Format submitters

Submitter number	Name
S365	A.J. Barton
S298	A.T. McKay
S334	Alan Westbury
S345	Alex Kyle
S292	Andrew Patrick
S336	Andrew Thomson
S343	Andy Phillips
S396	Bernie George
S393	Blair Roberts
S337	Bob Tosswill
S347	Brian Bosch
S320	Charlie Matthews
S289	Charlotte and Toby McDonald
S339	Chris and Steven Price
S170	Chris Engel
S379	Clayton Hartnell
S303	Craig and Janet Morrison
S38	D.P. Wood
S350	Dan Riddiford
S395	Daniel George
S341	David Hume
S377	Donald McCreary
S323	D.W. and P.C. McKay
S321	Edward Handyside
S342	Gary James and Anne Marie Daysh
S363	Gavin Bruce
S371	George Ritchie
S388	Gerard Vollebregt
S381	Glen Rowe
S375	Graeme Hugh Tulloch
S391	Guy Didsbury
S390	Hayden Thurston

S332	Hiwi Trust
S404	J.Q. and P.M. Donald
S376	James Falloon
S373	Jamie Falloon
S280	Jan and Jock Richmond
S389	Jeremy Bennill
S281	Jim, Pascoe and Henry Reynolds
S401	Joe Hintz
S314	John Carred
S74	Kairoa Farms Limited
S360	Kyle Wells
S372	Leo Vollebregt
S378	Lewis Herrick
S293	Margaret Niven
S348	Max Lutz
S355	Michael Hewison
S113	Michael John Slater
S374	Michael Taylor
S385	Michael Wood
S356	Mike Butterick
S397	Mike McCreary
S400	Mike Moran
S394	Owen Butcher
S331	Pip Tocker
S387	Pip Wilkinson
S322	Rex McKay
S384	Richard Osborne
S368	Richard Tosswill
S369	Richard Wilkie
S290	Robert Kyle
S354	Sam Orsborn
S361	Sandra Shivas
S399	Sandy Bidwell
S386	Shane and Geoff Wilkinson
S392	Stewart Weatherstone
S171	Stuart Woodman

S317	Susannah and Mark Guscott
S312	Taratahi Agricultural Training Centre
S324	Tim Williams
S151	Warren Bryant
S380	Willy and Sally Bosch

List of Land Matters Common Format submitters

Submitter number	Name
S294	Bell Camp Trust
S295	Carter Families
S299	Julian and Ruth Blackett
S297	Kennott Family Trust
S285	Land Matters Limited
S370	Mahaki Holdings Limited
S348	Max Lutz
S351	Tim Mansell and family
S349	USNZ
S346	Waikanae Christian Holiday Park (El Rancho)

Appendix C: Recommended decisions on submissions