

Cultivation, earthworks, vegetation clearance and bores

**Recommendations in response to
submissions on the Proposed Regional Plan
for Northland - Section 42A hearing report**

Date: 3/07/2018
Authors: Ben Tait and Michael Day
Version: Final

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Purpose and format of the report

1. This report was prepared in accordance with section 42A of the Resource Management Act 1991 (RMA). It addresses submissions on the rules and policy in the Proposed Regional Plan for Northland (Proposed Plan) for cultivation, earthworks, vegetation clearance and the construction, alteration, maintenance and decommissioning of bores.
2. In most cases, the recommended changes to the provisions are not set out verbatim in this report. The specific changes (including scope for changes) are shown in the document *Proposed Regional Plan for Northland – S42A recommended changes* (attached).
3. If there is no recommendation in this report to amend a provision in the Proposed Plan, then the general presumption is that it should be retained as notified.
4. This report is structured with a focus on the key matters raised in submissions relating to the proposed provisions, which are:
 - The definitions of words and terms in the provisions;
 - Effects of land disturbing activities on water takes for potable supply;
 - Area thresholds for earthworks and vegetation clearance and setback distances
 - The scope of the rules with respect to the council's RMA s30 functions.
5. Submissions that fall outside the key matters are addressed in the "Other matters" section in less detail.
6. The approach of addressing matters raised in submissions (rather than addressing submissions and/or and submission points individually) is consistent with Clause 10 of Schedule 1 to the RMA.
7. I have endeavoured to address every submission on the provisions, but there may be cases where inadvertently I have not. Please note that all references to submissions in this report are in relation to primary submissions only.

Report authors

8. My name is Ben Michael Tait and I have overall responsibility for this report. I am employed as a policy analyst at Northland Regional Council (regional council). Michael

Day was responsible for addressing submissions on rules for land disturbance activities that can exacerbate the effects of natural hazards (Rule 8.4.1 and part of Rule 8.3.1).

9. The following people assisted me with the preparation of this report:
 - Geoff Heaps, Land Management Consents Officer, Northland Regional Council
 - Stuart Savill, Consents Manager, Northland Regional Council
 - Susie Osbaldiston, Groundwater Management Specialist, Northland Regional Council
10. I have read the Code of Conduct for Expert Witnesses contained in the Practice Note issued by the Environment Court December 2014, and have complied with the code when preparing this report and agree to comply with it at the hearings.
11. The recommendations that I make in this report are not binding on the hearing panel, and I understand that the hearing panel may not agree with my recommendations.
12. Additionally, I may change my recommendations in response to evidence presented to the hearing panel. I expect that the hearing panel will ask me to report any changes to my recommendations at the end of the hearing.

About the provisions

13. The relevant provisions in the Proposed Plan for cultivation, earthworks, vegetation clearance and bores that are addressed in this report are listed below.

Definitions

- | | | |
|----------------------------------|--------------------------|--------------------------------|
| • Bore | • Earth | • Plantation forestry activity |
| • Coastal dune restoration | • Earthworks | • Stabilised earth |
| • Coastal hazard management area | • Highly erodible land | • Vegetation Clearance |
| • Cultivation | • Native dune vegetation | |
| | • Plantation forestry | |

Rules

- C.8.2.1 Cultivation – permitted activity
- C.8.2.2 Cultivation – controlled activity
- C.8.3.1 Earthworks – permitted activity
- C.8.3.2 Earthworks – controlled activity
- C.8.3.3 Earthworks – controlled activity
- C.8.4.1 Vegetation clearance within the coastal hazard management area – permitted activity
- C.8.4.2 Vegetation of native woody vegetation – permitted activity
- C.8.4.3 Vegetation clearance – discretionary activity

- C.8.5.1 Temporary bore – permitted activity
- C.8.5.2 Alteration or decommissioning of a bore – permitted activity
- C.8.5.3 Construction or alteration of a bore – controlled activity
- C.8.5.4 Construction, alteration and decommissioning of a bore – discretionary activity

Policies

- D.4.31 Managing the effects of land disturbing activities

Maps

- Highly erodible land

14. The land disturbance rules were drafted mainly to ensure that earthworks, vegetation clearance, cultivation, and the construction, alteration, and decommissioning of bores are done in a way that appropriately avoids or mitigates sediment losses to water.
15. However, some rules are also for managing the risk of contaminants from contaminated land entering water and for mitigating natural hazard risk. This report should be read in conjunction with the RMA Section 42A report on contaminated land.
16. The regional council received submissions containing requests for controls on earthworks for the purposes of managing adverse effects associated with acid sulphate soils. All submissions relating to acid sulphate soils are addressed in the RMA Section 42A report on acid sulphate soils.
17. Heritage New Zealand sought changes to the earthworks rules so that they provide for the protection of historic heritage. Heritage New Zealand's submission is addressed in the RMA Section 42A report on significant natural and historic heritage.

Definitions of words and terms

Background

18. A range of submissions were made on the definitions for and relating to cultivation, earthworks, vegetation clearance and bores. Most of the definitions were included in the plan to constrain the application of the rules to the activities so they do not apply to types of activities that are a low environmental risk. I address the submissions below by activity, which is an approach that I take in this report for most of the other key matters.

Submissions and analysis

Cultivation

19. Horticulture New Zealand is concerned that the definition of cultivation is limited to only preparation of land for planting and replanting of crops, rather than “a range of activities that could potentially be classed as earthworks but which have effects that can be sufficiently managed through HortNZ developed codes of practice and have minimal potential for creation of sediment laden stormwater.”¹ It also wants the term ‘cultivation’ be replaced with ‘land preparation’ and an accompanying definition similar to the one in the Regional Water and Soil Plan.² I agree with Horticulture New Zealand and have made a recommendation below.
20. The definition of cultivation in the Proposed Plan excludes direct drilling because the technique minimises the potential for erosion. Bryan Clements stated that the definition should also exclude strip tilling because it “is similar to direct drilling and is designed to minimise soil disturbance and should be encouraged.”³ I am far from an expert in cultivation techniques but from my limited research it appears to me that strip tilling is conserves soil and minimises erosion. However, I am reluctant to exclude it from the definition without more information on the effectiveness of the technique for conserving soil on land.
21. Rule C.8.2.1 permits cultivation and any associated discharge of stormwater to water subject to standards including that cultivation must not be done within an ephemeral watercourse. The Proposed Plan does not define an ephemeral watercourse. Several people asked for a definition to be included. I consider that a definition for an ephemeral watercourse should be included in plan and, in the interests of consistency with Auckland Council, that it should be the same as the definition in the Auckland Unitary Plan.

Earthworks

22. The earthworks definition attracted many submissions. I briefly address each. First Gas Ltd asked for the definition to be amended to limit earthworks to the time soil is first disturbed on a site until the time the site is stabilised, and that the repair or maintenance of bores and certain pipe laying and maintenance techniques be excluded from the

¹ Horticulture New Zealand. p.6

² Horticulture New Zealand. p.17

³ Bryan Clements. p.2

definition.⁴ I agree that the repair, maintenance (and alteration) of bores should be removed from the earthworks definition as the activities have their own definition and rule framework. I do not think that it is necessary to amend the earthworks definition to confine earthworks to the start of earth disturbance to its stabilisation because the rule already requires this.

23. Spark NZ Ltd also wants the definition of earthworks to be changed to exclude directional drilling, boring and thrusting, albeit up to 250mm diameter, consistent with the earthworks definition in the Auckland Unitary Plan.⁵

24. I understand that directional drilling, boring and thrusting of small diameter holes is a low risk activity with respect to water quality. I agree with Spark NZ Ltd that the earthworks definition should be amended to exclude directional drilling, boring and thrusting of holes up to 250mm in diameter.

25. GBC Winstone asked for quarrying to be defined and for the earthworks definition to be amended to include quarrying.⁶ I agree with GBC Winstone's request and the definition of quarrying in its submission.

26. The Oil Companies stated that the definition of earthworks:⁷

...should include an exclusion for maintenance, repair and replacement of underground infrastructure or utilities, to allow for maintenance or emergency works to be undertaken in any area. For example, if there is a leak in underground infrastructure, then there should be an ability to fix that without the need to obtain consent. The simplest way to address this would be to exclude maintenance, repair and replacement of underground infrastructure or utilities from the definition of earthworks.

27. I understand that Section 330 of the RMA provides for people to do emergency works and to take preventive or remedial action without Sections 9, 12, 13, 14 and 15 of the Act applying. Therefore, I am not convinced there is a need to amend the definition to exclude the maintenance, repair and replacement of underground infrastructure or utilities.

28. In addition, maintenance is not typically undertaken as emergency works and can be planned in advance. It may also require large scale earthworks and potential for adverse

⁴ First Gas Ltd. p.7

⁵ Spark NZ Ltd. p.2

⁶ GBC Winstone Ltd. p.10

⁷ The Oil Companies Ltd. p.46

effects that should be addressed in the terms of the permitted activity rule or the consent process.

29. For the same reason, I do not accept the NZ Pork Industry Board's submission that the earthworks definition should be amended to exclude the burying of material infected by unwanted organisms as declared by Ministry for Primary Industries Chief Technical Officer or an emergency declared by the Minister under the Biosecurity Act 1993 so as to avoid delay in responding to a biosecurity threat.⁸
30. The Ministry for Primary Industries stated that earthworks related to sustainable forest management plans and sustainable forest management permits are regulated under Part 3A of the Forests Act 1949 and therefore they "should be excluded from the RMA regime"⁹. The Ministry submitted that the earthworks definition should exclude earthworks associated with harvesting of indigenous timber in accordance with an annual logging plan approved under the Forests Act 1949. I am not convinced that Part 3A of the Forests Act overrides (impliedly repeals) the RMA. That is, it does not expressly preclude rules and regulations made under the RMA applying to earthworks associated with harvesting indigenous plants under the Forests Act. Thus, I do not agree with the Ministry for Primary Industries.
31. Landcorp Farming Ltd. stated that "any earthworks associated with farm track maintenance [should] be exempt from the definition of earthworks"¹⁰, but did not provide any evidence to justify the amendment.
32. The Royal Forest and Bird Protection Society of New Zealand expressed concerns about the earthworks definition:¹¹

Forest and Bird generally agrees with this definition, however it is concerned with how the Plan intends to address the effects of the matters excluded under 5 to 8 of the definition. In relation to planting trees the plan can address earthworks related to plantation forestry where one of the areas of greater stringency applies. In particular, provisions may be needed to address the effects of forestry earthworks that could affect significant ecological areas (or SNAs as they are termed in the NES PF), the achievement of freshwater objectives or coastal environment. The definition should provide for these earthworks to be addressed. The NES for Plantation forestry allows for more stringent rules to protect

⁸ NZ Pork Industry Board. p.1

⁹ Ministry for Primary Industries. p.3

¹⁰ Landcorp Farming Ltd. p.14

¹¹ The Royal Forest and Bird Protection Society of New Zealand. p.19

Significant Natural Areas. Currently, neither the definition nor the application of it in the permitted activity rules provides for the maintenance of indigenous biodiversity or protection required by s6(c).

33. The Royal Forest and Bird Protection Society goes on to request:¹²

Either amend the rules to provide for maintenance and protection of indigenous biodiversity from earthworks activities, or amend the definition as follows:

“...does not include:

X) any destruction of damage to indigenous vegetation.

34. It is important to note that the council can only include rules in its regional plans for the purposes of protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna in water bodies or in the coastal marine area. This is also true in terms of its function to maintain indigenous biological diversity.¹³

35. Consequently, I disagree with the amendment wanted by Royal Forest and Bird Protection Society of New Zealand.

36. Furthermore, the Royal Forest and Bird Protection Society of New Zealand did not provide any evidence that regional rules that are more stringent than the national regulations for plantation forestry are required.

37. The earthworks definition excludes earthworks associated with plantation forestry, which has the same meaning as in the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017. The plan also defines plantation forestry activity in the same way. I consider that it is not necessary to in the definition expressly exclude earthworks associated with plantation forestry because the regulations override the rules in the plan.

38. Rules C.8.3.1 and C.8.3.2 have conditions relating to earthworks on highly erodible land, which is defined in the plan to include 16 land use capability units in the New Zealand Land Use Resource Inventory. The definition is the same as the definition of erosion prone land in the Regional Water and Soil Plan except for the addition of two new units

¹² Ibid

¹³ Section 1.6 of the Regional Policy Statement for Northland states that the regional council is responsible for the control of the use of land to maintain indigenous biological diversity in water bodies; in, on or under the beds of rivers and lakes; and in the coastal marine area.

(6e17 and 6e19). I consider that the term 'highly erodible land' should be changed to 'erosion prone land' to avoid confusion.

Coastal hazard management area

39. Several submitters made submissions on the definition of coastal hazard management area. This applies to earthworks rules in section C.8.3 and vegetation clearance rules in section C.8.4.
40. Royal Forest and Bird Protection Society NZ want the definition to include all sand dunes within the coastal environment. CEP Services Matauwhi Limited want the width of the area to be increased to reflect actual and potential hazards, with a minimum setback of 20 metres. Auckland Council noted that the extent of the area is not based on a risk assessment and requested to amend the definition to a more relevant term such as dune protection area or coastal riparian management area.
41. The Royal Forest and Bird Protection Society also submitted that the definition of 'native dune vegetation' should be amended as the definition as worded is uncertain and difficult to assess¹⁴. I agree that as worded, the definition is uncertain because it refers to both foredune areas and mid-dune areas and refers to 'both zones'. I therefore recommend amending the definition to make it clear that it only applies to native dune vegetation on foredune areas.
42. I agree with the submission from Auckland council that "the inclusion of 'hazard' in the definition gives a misleading impression that it defines the area of 'hazard'"¹⁵. The applicable rules relate to earthworks, vegetation clearance and coastal dune restoration. While the key purpose for the controls on activities within the zone is to protect dunes – they provide protection against coastal hazards – I agree that this area does not define the actual area potentially susceptible to coastal hazard risk and therefore is misleading.
43. Consequently, I recommend that the definition is renamed the 'coastal riparian and foredune management area'. I consider that this will better reflect the management intent within this area, which includes the protection of foredunes.

¹⁴ Royal Forest and Bird Protection Society p.21-22

¹⁵ Auckland Council, p.5

44. I do not support the relief sought by Royal Forest and Bird and CEP Services Matauwhi Limited as neither of the two submitters have demonstrated why their relief sought is more appropriate than the existing definition.

Vegetation clearance

45. Several submissions were also made on the definition of vegetation clearance. CEP Services Matauwhi Ltd, Northland Fish and Game, Royal Forest and Bird Protection Society want the definition expanded to include all indigenous and exotic vegetation.¹⁶
46. The definition was drafted to only apply to native woody vegetation because vegetation clearance associated with plantation forestry is covered by national regulations. I understand that there are no other vegetation clearance activities that are of a scale of significance to affect water quality. That is, activities that clear vegetation and expose large areas of soil that can be mobilised during rainfall events. However, I believe that it would be appropriate to continue to control the clearance of indigenous vegetation in riparian areas because such vegetation provides an important role in aquatic ecosystem health (shading, food source for invertebrates and fish, attenuating contaminants, etc).
47. The Royal Forest and Bird Protection Society stated that the current definition “does not cover clearance of exotic vegetation that is providing a stabilisation of erosion-control function (eg willow, exotic dune species).”¹⁷ Again, I argue that the clearance of such vegetation is not of a scale or significance to warrant regulation. Felling willows and poplars is time consuming and would only be done if the trees pose a threat to structures (fences or houses) or are causing localised flooding.
48. The Royal Forest and Bird Protection Society also considers that some of the exclusions in the definition should be modified as they are “simplistic” with respect to the exclusion of vegetation clearance associated with a plantation forestry activity. I consider that all references to the National Environmental Standards for Plantation Forestry should be removed from the plan because they are unnecessary.

¹⁶ CEP Services Matauwhi Ltd, p.A5., Northland Fish and Game. p.11., Royal Forest and Bird Protection Society. p.23

¹⁷ Royal Forest and Bird Protection Society of New Zealand. p.23

49. The Society also stated:¹⁸

Exclusion 4) vegetation along fences and around dams and ponds and exclusion 5) vegetation around public utility networks should specifically refer to “existing” not new structures, and a limit on distance of exempted clearance is needed. The exclusion for clearance “around” public utilities is uncertain (what does “around” mean – 1 m? 5m? more?)

Exclusion 6) “vegetation that impedes or is likely to impede flood flows” is confusing and potentially inconsistent with provisions which seek to retain and protect riparian vegetation. This could result in loss of significant indigenous vegetation and habitat for significant species.

50. I disagree with the Royal Forest and Bird Protection Society. The definition excludes, among other things, vegetation along fences and around dams and ponds and around utility networks. There is no need to amend the definition so that it is specific to “‘existing’ and not new structures”. That is, the definition does not apply to new structures. I also consider that the clearance of native vegetation along fences and around network utilities is unlikely to be of a scale that will cause water quality issues.
51. First Gas Ltd. suggested that the term “public network utility” is replaced with “network utility”. I agree; the change is consistent with the definition in the RMA.
52. I also disagree with the Royal Forest and Bird Protection Society that the clearance of vegetation that impedes or is likely to impede flood flows could result in a loss of significant indigenous vegetation and habitat for significant species. There is no evidence to suggest that this is indeed the case. Second, the council does not have the function of maintaining indigenous biodiversity on land. It is the function of district councils.¹⁹
53. The Society want the term indigenous vegetation to be defined in the plan because it “will assist in clarifying clearance provisions under the plan.”²⁰ I agree with the Society and consider that “indigenous vegetation” should replace the term “native woody vegetation or native dune vegetation” in the definition of vegetation clearance. This is because some forms of indigenous vegetation (for example, flaxes for example) provide a valuable function in maintaining and enhancing water quality.

¹⁸ Royal Forest and Bird Protection Society of New Zealand. p.24

¹⁹ RPS, section 1.6.

²⁰ Royal Forest and Bird Protection Society of New Zealand. p.21

54. Federated Farmers of New Zealand and GBC Winstone submitted that the term ‘native woody vegetation’ should be defined in the plan because, as pointed out above, it is used in the definition of ‘vegetation clearance’.²¹ This is not necessary if it is replaced with “indigenous vegetation”.
55. Horticulture New Zealand considers that the term “native woody vegetation” should be replaced with “indigenous woody vegetation” for clarity,²² and that the exclusions are expanded to include scattered trees, shrubs or regenerating bush amongst pasture of horticultural crops and vegetation that is infected by an unwanted organism as declared by the Ministry of Primary Industries or an emergency under the Biosecurity Act.
56. I recommend later in this report that the rules for vegetation clearance should only apply to clearance of indigenous vegetation within ten metres of the bed of a river or lake or a natural wetland. I consider that it is not necessary to amend the definition of vegetation clearance to exclude scattered trees, shrubs and regenerating bush amongst pasture. I understand that it is also not necessary to exclude vegetation that is infected by an unwanted organism because section 7A of Biosecurity Act 1993 provides for such circumstances.
57. The Ministry for Primary Industries wants the vegetation clearance definition amended to exclude vegetation that is managed under Part 3A of the Forests Act 1949. I disagree for the reason I gave above on its submission on the earthworks definition.

Recommendation

58. I recommend that the following amendments are made to the Proposed Plan:
- Replace the term ‘cultivation’ with ‘land preparation’ and the associated definition sought by Horticulture New Zealand;
 - Change the earthworks definition by referring to quarrying, deleting the reference to plantation forestry, and excluding earthworks associated with the repair, alteration or maintenance of bores and directional drilling, boring or thrusting up to 250 millimetres in diameter. I consider that placement of cleanfill should be excluded from the definition, which will be a consequential change because of the deletion of Rule C.6.7.1.

²¹

²² Horticulture New Zealand. p.25., GBC Winstone. p.11

- Amend the definition of ‘coastal hazard management area’ to ‘coastal riparian and foredune management area’ to better reflect the key outcomes for this area.
- Amend the definition of ‘native dune vegetation’ by removing reference to mid-dune areas, thereby making it clearer that it only applies to foredune areas.
- Change the vegetation clearance definition making it specific to indigenous vegetation clearance, deleting references to plantation forestry and vegetation that impedes or is likely to impede flood flows, and changing the term ‘public utility networks’ to ‘network utilities’.

Evaluation of recommended changes

59. Section 32AA of the RMA requires an evaluation of any changes that have been made to, or a proposed for, the plan since the first RMA section 32 evaluation was completed. I consider that the recommended amendments will reduce potential regulatory costs but not at the expense of the environment. That is, I consider that they are of minor effect. In summary, I believe that the changes are the most appropriate way to achieve the high-level objectives in the section 32 evaluation report for the Proposed Plan and the recommended new objectives for the plan.

Effects of land disturbing activities on water takes for potable supply

Background

60. Far North District Council, Kaipara District Council, Northland District Health Board and Northland Fish and Game expressed concerns that land disturbance activities have adverse effects on sources of drinking water.

Submissions and analysis

61. Kaipara District Council wants “more stringent standards for cultivation occurring within a reasonable distance of a potable water take” to, presumably, minimise the adverse effects on water treatment plants.²³ Similarly, Far North District Council requested more stringent

²³ Kaipara District Council. p.18

standards for cultivation activities, including associated with plantation forestry, that occur within one kilometre of a potable water take because:²⁴

There have been instances when FNDC has had to pay for additional water treatment costs as a result of forestry activities that discharged sediment in a potable water catchment. Activities on private properties should not create externalities to be borne by ratepayers.

62. The Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017 applies to eight core plantation forestry activities²⁵ that have potential environmental effects associated with plantation forestry. It requires, among other things, a forestry earthworks management plan for all earthworks that involve more than 500 m² of soil disturbance in any 3-month period²⁶ and a harvest plan for harvesting on all erosion susceptibility classification zones²⁷ to identify any registered drinking water supply, including drinking water sources for more than 25 people within 1 km downstream of the activity. It also contains standards on mechanical land management.
63. Clause 6 allows councils to include a rule in a plan that may be more stringent than the regulations if the rule manages any activities conducted within 1 km upstream of the abstraction point of a drinking water supply for more than 25 people where the take is from a water body.
64. I have not seen any evidence that there is a need for rules in the Proposed Plan for land disturbing activities associated with plantation forestry that occur within one kilometre of abstraction points for drinking-water supplies.
65. Northland Fish and Game stated in its submission that the matters of control in Rule C.8.2.2 should be amended “to better align with the policies of the Proposed Plan”²⁸, including by inserting additional matters control, for example “the potential effects of cultivation on surface and groundwater quality and sources of drinking water”. I address the other sought matters of control elsewhere in this report.

²⁴ Far North District Council. p.17

²⁵ Afforestation (planting new forest); pruning and thinning to waste (selective felling of trees where the felled trees remain on site); earthworks; river crossings; forestry quarrying (extraction of rock, sand, or gravel within a plantation forest or for operation of a forest on adjacent land); harvesting; mechanical land preparation; replanting.

²⁶ Regulation 27

²⁷ Regulation 66

²⁸ Northland Fish and Game. p.48

66. Northland District Health Board expressed concerns about “the cumulative effect of earthworks on sources of human drinking water through the direct effects of sediment or dust generation leading to a situation where existing treatment is no longer adequate.”²⁹ It also stated that vegetation clearance can “adversely affect sources of water for human consumption.”³⁰
67. The Health Board wants rules C.8.3.1, C.8.4.1 and C.8.4.2 amended with conditions that earthworks and vegetation clearance must not render “source water [unsuitable] for human consumption as per the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007”³¹.
68. Regulation 10 of the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007 states that a regional council must not include a rule in regional plan to permit an activity under section 9, 13, 14 or 15 of the RMA upstream of an abstraction point that would have certain effects. Regulation 10 applies to an activity that has the potential to affect a registered drinking-water supply that provides 501 or more people with drinking water for not less than 60 days each calendar year. The regulation is shown below for completeness:

10 Limitations on permitted activity rules for activities upstream of abstraction points

- (1) *A regional council must not include a rule or amend a rule in its regional plan to allow a permitted activity, under section 9, 13, 14, or 15 of the Act, upstream of an abstraction point where the drinking water concerned meets the health quality criteria unless satisfied that the activity is not likely to—*
- (a) *introduce or increase the concentration of any determinands in the drinking water so that, after existing treatment, it no longer meets the health quality criteria; or*
- (b) *introduce or increase the concentration of any aesthetic determinands in the drinking water so that, after existing treatment, it contains aesthetic determinands at values exceeding the guideline values.*
- (2) *A regional council must not include a rule or amend a rule in its regional plan to allow a permitted activity, under section 9, 13, 14, or 15 of the Act, upstream of an abstraction point where the drinking water concerned is not tested in accordance with the compliance monitoring procedures in the Drinking-water Standard unless satisfied that the activity is not likely to—*

²⁹ Northland District Health Board. p.22

³⁰ Northland District Health Board. p.23

³¹ Northland District Health Board. p.22 – 24

- (a) *increase the concentration of any determinands in the water at the abstraction point by more than a minor amount; or*
 - (b) *introduce or increase the concentration of any aesthetic determinands in the drinking water, so that, after existing treatment, it contains aesthetic determinands at values exceeding the guideline values.*
- (3) *A regional council must not include a rule or amend a rule in its regional plan to allow a permitted activity, under section 9, 13, 14, or 15 of the Act, upstream of an abstraction point where the drinking water concerned does not meet the health quality criteria unless satisfied that the activity is not likely to—*
- (a) *increase, by more than a minor amount, the concentration of any determinands in the water at the abstraction point that in the drinking water already exceed the maximum acceptable values for more than the allowable number of times as set out in table A1.3 in Appendix 1 of the Drinking-water Standard; or*
 - (b) *increase the concentration of any determinands in the water at the abstraction point that in the drinking water do not exceed the maximum acceptable values for more than the allowable number of times as set out in table A1.3 in Appendix 1 of the Drinking-water Standard to the extent that the drinking water, after existing treatment, exceeds the maximum acceptable values for more than the allowable number of times as set out in the table in relation to those determinands; or*
 - (c) *introduce or increase the concentration of any aesthetic determinands in the drinking water so that, after existing treatment, it contains aesthetic determinands at values exceeding the guideline values.*

69. I am not convinced that the proposed rules for earthworks and the clearance of vegetation (excluding plantation forestry, which is not regulated by the plan) are contrary to regulation 10.

70. It is important to note that the main sources of fine suspended sediment in Northland's fresh and coastal waters are streambanks and erodible land under pasture.

71. Northland District Health Board requested the inclusion of a new condition in rules C.8.3.1, C.8.4.1 and C.8.4.2 that would require a person who is going to do an earthworks or vegetation clearance activity in the catchment of a registered drinking-water supply to provide the operator of the registered drinking-water supply at least five working days' notice prior to doing the activity. However, I am not convinced that this would be practicable or necessary given the relatively small scale of earthworks permitted by Rule C.8.3.1 and the terms that apply in the rule to manage adverse effects. I also do not think that it would be appropriate for people clearing vegetation. This is because plantation

forestry is the only major vegetation clearance activity and is not covered by the plan, and other types of vegetation clearance activities are of a minor scale.

72. Northland District Health Board also requested the following new condition to be included in rule C.8.5.2 for the alteration or decommissioning of bores:

4) all water takes for the purpose of human consumption are given at least ten working days' notice (in writing or by email) of any alteration being undertaken of the concerned bore.

73. It is not clear to me what the condition would achieve.

74. The Health Board wants rule C.8.5.3, which provides for the construction or alteration of permanent bores, amended to include the following new matter of control:

7) if the water take is for the purpose of human consumption a separation distance to waste water disposal should be maintained as per Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007.

75. I do not think that the matter of control is necessary because the rule contains matters of control to ensure that bores are constructed in a way and in a location that avoids or mitigates against contamination.

76. Whangarei District Council submitted that rules C.8.5.2, C.8.5.3 and C.8.5.4 should be aligned “with the requirements of the Drinking-water standards for New Zealand (Revised 2008)”³², which contain requirements for bore water security. I consider that it would be appropriate to refer to bore head security within the third matter of control under Rule C.8.5.3, which provides for the construction or alteration of a bore. This is because of the importance, as highlighted by the contamination of the Havelock North drinking water supply, of bore head security.

Recommendation

77. I recommend that the third matter of control in rule C.8.5.3 to include bore head security.

³² Whangarei District Council. p.31

Evaluation of recommended changes

78. Section 32AA, RMA requires an evaluation of proposed changes to the Plan. I consider that the recommended amendment to rule C.8.5.3 is of minor effect.

Areal thresholds for earthworks and vegetation clearance activities, and setback distances

Background

79. Rules C.8.3.1, C.8.3.2, C.8.4.1 and C.8.4.2 contain conditions that specify maximum area thresholds earthworks and vegetation clearance. While subjective, the thresholds define the point beyond which the likely adverse effects of the activities are better addressed through resource consenting processes. Rule C.8.2.1 for cultivation includes setback distances from water bodies. The setbacks are for minimising sediment losses to water.

Submissions and analysis

Cultivation

80. The Soil and Health Association stated in its submission “that cultivation that is on land that is not certified organic [should be] a controlled activity requiring a 400m buffer for sensitive spray areas.”³³ While the Association discussed potential adverse effects of certain agrichemicals it did not demonstrate why a 400 metre buffer is required for cultivation around sensitive spray areas or that rules relating to the use of agrichemicals in section C.6.5 are inadequate. Nor did it define what is meant by a sensitive spray area. That is, the submission lacked clarity and I consider that the relief should not be accepted. Additionally, it is not appropriate to apply a control on cultivation when the effects of concern relate to the use of sprays (agrichemicals).
81. There were contrasting submissions on the appropriateness (that is, stringency) of the setback distances in rule C.8.2.1. Federated Farmers of New Zealand considers that the five metre setback distance from water bodies in rule C.8.2.1 is “overly restrictive on flat and lower gradient land and if a blanket setback rule is to be used [then they] request that

³³ The Soil and Health Association of New Zealand. p.9

this rule is amended to cater for land gradient.”³⁴ Federated Farmers requested the 5 metre setback be replaced with two metres in lowland areas (<15°) and five metres in hill country areas (>15°).

82. Horticulture New Zealand is opposed to the setbacks in rule C.8.2.1 for cultivation. It stated:³⁵

Rather than defined setbacks from waterbodies HortNZ seeks that land preparation activities should be required to implement best practice erosion and sediment control measures for the duration of the land preparation. Industry best practice for cultivation of vegetable crops is deemed to meet or exceed compliance with the Horticulture New Zealand Code of Practice ‘Erosion and Sediment Control Guidelines for Vegetable Production’ (June 2014).

83. Vicki Stephens also wants the setbacks to be deleted because they are arbitrary.³⁶

84. Man O’War Dairies Ltd stated that it is “concerned that a lack of cultivation [I presume in relation to setback distances] may inhibit [its] kikuyu management programme.”³⁷ On the other hand, the Minister of Conservation pointed out:³⁸

The NES for Plantation Forestry will require a minimum 10m setback for permanent rivers, lakes, and outstanding waterbodies and for intermittent rivers and wetlands a minimum 5m setback. These are considered to be a minimum and a wider setback will be required especially where sedimentation is an issue such as in the Northland Region.

85. Regulation 74 of the National Environmental Standard for Plantation Forestry states that land preparation associated with plantation forestry must not occur (as a permitted activity) within 5 metres of a river less than 3 metres wide and a wetland larger than 0.25 hectares. It requires a 10 metre setback for larger rivers, wetlands and lakes.

86. The Minister of Conservation considers that the setbacks should be increased to between 10 and 30 metres depending on the type and location of the water body. Similarly, Northland Fish and Game stated in its submission that “a 5m buffer is not adequate to mitigate the impact of cultivation especially during and just after harvest [and that] the setbacks should be set based on the degree of slope of cultivated land and the size and

³⁴ Federated Farmers of New Zealand

³⁵ Horticulture New Zealand. p.7

³⁶ Vicki Stevens. p.12

³⁷ Man O’War Dairies Ltd

³⁸ Minister of Conservation. p.31

type of the waterbody rather than a one size fits all 5 metre setback for natural wetlands, the beds of lakes, or permanently or intermittently flowing rivers or streams.”³⁹ It wants setback distances between 5 metres and 20 metres, depending on the slope of the land. Haititaimarangi Marae 339 Trust also requested wider setback distances.⁴⁰

87. The Minister of Conservation and Northland Fish and Game rightly highlighted the fact the effectiveness of setback distances vary by their location in the landscape and in relation to the sensitivity of the receiving environment. I acknowledge that a 5 metre setback is arbitrary insofar as its effectiveness will vary based on climate, topography, soil type, cultivation techniques, etc. I also note that mandatory setbacks will affect farm revenue.
88. It is useful to note that the setback width for land preparation (cultivation) required by rule 34.1.4 in the Regional Water and Soil Plan is 5 metres, the same as in rule C.8.2.1 in the Proposed Plan. It is also in the range of at least 3 to 6 metres recommended in the Erosion and Sediment Control Guidelines for Vegetable Production 2014 (Horticulture New Zealand). Basher, et al. (2016) points out the first 3–6 m of buffer plays a dominant role in sediment trapping and that buffers greater than 6 metres are effective and reliable in removing sediment from any situation, with diminishing returns beyond 10 metres.⁴¹
89. I consider that the five metre setback should be retained in Rule C.8.2.1.

Earthworks

90. The thresholds for earthworks in rules C.8.3.1 and C.8.3.2 were also challenged. Haititaimaranga Marae 339 Trust stated in its submission that rule C.8.3.1 should not permit any earthworks within 10 metres of water bodies, with the exception of “activities with environmentally positive outcomes such as riparian planting and the fencing of waterways”.⁴²
91. The Trust also submitted that the setback should be increased from 10 metres to 20 metres on land with a slope greater than 20 degrees. The Minister of Conservation submitted along the same lines, including on rule C.8.3.2.⁴³

³⁹ Northland Fish and Game. p.47

⁴⁰ Haititaimarangi Marae 339 Trust. p.56

⁴¹ Les Basher, Jonathan Moores, Gregor McLean. 2016. Scientific basis for erosion and sediment control practices in New Zealand. Prepared for Tasman District Council by Landcare Research.

⁴² Haititaimaranga Marae 339 Trust. p.57

⁴³ Minister of Conservation. p.33

92. The Royal Forest and Bird Protection Society of New Zealand wants rule C.8.3.1 amended by:⁴⁴
- Significantly reducing the scale of earthworks;
 - Increasing setbacks from waterbodies;
 - Setting limits on earthworks inside the setbacks;
 - Requiring that earthworks outside of the setbacks do not occur at the same time as earthworks within the setbacks; and
 - Specifying that the depth of earthworks must be less than one metre above groundwater.
93. However, the Society did not provide any information or research to underpin their requests.
94. The Royal Forest and Bird Protection Society also states that it “is not clear that the activity must not be in a wetland, the bed of a river or lake, or the coastal environment.” The Society make a good point that it is not entirely clear. The earthworks and vegetation clearance rules were included in the plan for activities outside of water bodies and the coastal marine area. This should be clarified in the Proposed Plan.
95. Tegel Foods Ltd considers that the 5000 m² threshold or “other areas” in rule C.8.3.1 should be increased to one hectare because “if an area is not subject to any particular overlays of ‘risk factors’ then the permitted level of earthworks should be increased to enable development within the region.”⁴⁵ I disagree with the proposition that the permitted activity rule curtails development, especially given that the rule provides for progressive stabilisation.
96. Whangarei District Council also raised “concerns that the potential area, volume, location and associated [earthworks] enabled under [rule C.8.3.1] will have potential adverse, particularly as cumulative effects cannot be addressed.”⁴⁶ In particular, it submitted that the “rule does not restrict large scale earthworks outside of the earthworks season.” It also stated that there are no limits or rules for earthworks in significant areas including sites of cultural significance. I address the later submission point, along with others, later in this report.

⁴⁴ Minister of Conservation. p.58

⁴⁵ Tegel Foods Ltd. p.25

⁴⁶ Whangarei District Council. p.29

97. Spark New Zealand Trading Ltd sought “some further clarification around how [the] thresholds [in rule C.8.3.1] are applied to linear infrastructure”⁴⁷. It stated that “[l]inear infrastructure works can result in a large volume of earthworks over a large distance, but the extent of the work at any one location may be relatively minor and effects such as sediment and erosion can be appropriately managed.” Spark requested the following explanatory text, or similar, is added to the earthworks thresholds in Table 8:

For network utilities, the thresholds apply to the area and volume of work being undertaken at any one time at a particular location, such that progressive closure and stabilisation of works can be adopted to maintain the activity within the permitted thresholds.

98. It is important to note that the rule already provides for the progressive closure and stabilisation. That is because most thresholds in Table 8 apply at any time.
99. Mark Vincent stated that while the “thresholds will always to some extent be arbitrary”⁴⁸ it would be desirable to align the earthworks thresholds in Proposed Plan with the thresholds in the three district plans.
100. I agree with Mark Vincent that it would be desirable to align the thresholds because it must be frustrating for people to have to comply with different rules for the same activity. The issue is that the regional council and district councils manage earthworks for different purposes and therefore it is inevitable that there will be different rules.
101. The relationship between rule C.8.3.1 and C.8.3.2 in terms of the earthworks thresholds is not clear. This was pointed out by Marsden Maritime Holdings, Northport Ltd, Top Energy, Bay of Islands Planning Ltd, Broadspectrum NZ Ltd, Carrington Resort Jade LP and GBC Winstone. Fonterra highlighted the issue succinctly:⁴⁹

For many of the areas listed [in Table 9, rule C.8.3.2], the controlled and permitted activity earthworks thresholds are the same (for all areas other than the Flood Hazard Area). Therefore if an applicant cannot meet the permitted activity rule, it cannot meet the controlled activity rule.

Fonterra seeks that the controlled activity thresholds are either deleted or amended to ensure a workable approach if the permitted activity thresholds are exceeded.

⁴⁷ Spark New Zealand Trading Ltd. p.3

⁴⁸ Mark Vincent. p.5

⁴⁹ Fonterra p.22

102. The intention was to classify earthworks that exceed 5,000 m² in 'other areas' as a controlled activity. Earthworks that exceed the additional thresholds are classed as a discretionary activity. However, this is not immediately obvious when reading rules C.8.3.1 and C.8.3.2. I consider that this can be resolved by deleting table 9 in rule C.8.3.2 and rewriting the rule so that earthworks that exceed 5,000 m² of exposed earth at any time at a particular location or associated with a project are a controlled activity, provided the earthworks are not located:

- Within 10 metres of a natural wetland, the bed of a river or lake;
- In a catchment of an outstanding lake;
- On erosion prone land;
- In a flood hazard or high risk flood hazard area; or
- In the coastal hazard management area.

103. The New Zealand Transport Agency requested a "more graduated approach to earthworks volumes/areas"⁵⁰:

- *[a] controlled activity status is proposed for 'all other activities' >5000m² (ie. do not comply with [the] last line [in] Table 8 and would otherwise default to discretionary)*
- *[a] controlled activity for 'sensitive' activities (listed in remainder of Table 8, excluding last line) but with increased area/volume limits for each item (rather than default to discretionary)*
- *[a] restricted [discretionary] activity for all other activities.*

104. I agree with the first request but am not convinced that an additional controlled activity rule(s) and a restricted discretionary activity rule(s) are needed. Note that a new controlled activity rule for earthworks in flood hazard areas has been recommended to be included in the Proposed Plan, but we remain of the view that the regional council needs to retain discretion over earthworks in other 'sensitive areas'.

Vegetation clearance

105. Several people want rule C.8.4.2 to be amended by significantly reducing the size of the vegetation clearance thresholds⁵¹ While other people consider that the clearance of native woody vegetation should not be a permitted activity.⁵² For example, the Bream Bay

⁵⁰ New Zealand Transport Agency. p.27

⁵¹ Auckland Council. p.9., Bay of Islands Maritime Park Inc. p.4., Minister of Conservation. p.35., Northland Fish and Game. p.51., Whangarei District Council. p.30

⁵² Royal Forest and Bird Protection Society of New Zealand. p.60

Coastal Care Trust stated that it opposes permitting any clearance of woody vegetation in riparian areas.⁵³

106. The vegetation clearance thresholds in rules C.8.4.1 and C.8.4.2 were questioned by Felicity Foy and K & F King.⁵⁴ They submitted that the rules should be aligned with the vegetation clearance rules in the Far North, Whangarei and Kaipara district plans.
107. The district plans contain rules for the clearance of terrestrial indigenous vegetation on land. I have considered the relationship between rule C.8.4.2 in the proposed plan and the rules in the district plans and have concluded that rule C.8.4.2 should be amended so that it only applies to the clearance of indigenous vegetation within riparian areas of a natural wetland or the bed of a river or lake. There are three key reasons why I believe that this is an appropriate thing to do.
 108. First, the clearance of large areas terrestrial indigenous vegetation is uncommon in Northland. In fact, the area of land under native vegetation is increasing. While the clearance of plantation forestry can affect water quality, the activity is regulated under national environmental standards.
 109. Second, Far North, Whangarei and Kaipara district councils have strong rules in their district plans for the clearance of indigenous vegetation. Indeed, they are much more stringent than rule C.8.4.2, albeit for different purposes. While the rules do not explicitly provide for the maintenance of water quality (that is, from elevated sediment inputs) they do implicitly by nature of their stringency. In other words, permitting larger areas of vegetation clearance under the Proposed Plan would be almost redundant because of the more stringent rules in the district plans. It would also be confusing to people, as evidenced in the submissions on rule C.8.4.2.
 110. Third, the clearance of vegetation (mainly intact or regenerating tracts of indigenous vegetation) in riparian areas poses a more significant risk to water quality and aquatic ecosystem health and therefore I consider that it should be regulated in the Proposed Plan.

Recommendation

111. I recommend that the following amendments are made to the Proposed Plan:
-

⁵³ Bream Bay Coastal Care Trust. p.2

⁵⁴ Felicity Foy. p.1., K & F King. p.1

- Change rule C.8.3.2 so that it only applies to earthworks exceeding 5,000 m² in ‘other areas’; and
- Change rule C.8.4.3 so that it only applies to vegetation clearance within 10 metres of a natural wetland or within 10 metres of the bed of a river or lake.

Evaluation of recommended changes

112. Section 32AA of the RMA requires an evaluation of any changes that have been made to, or a proposed for, the plan since the first RMA section 32 evaluation was completed. I consider that making rule C.8.4.3 specific to vegetation clearance within riparian areas is unlikely to result in increased sediment loads to water. I also consider that the recommended change to rule C.8.3.2 is of minor effect.
113. The recommended changes are the most appropriate way to achieve the high-level objectives in the RMA section 32 report and the new objectives to be included in the Proposed Plan.

Scope of the rules with respect to the council’s RMA s30 functions

Background

114. The rules for cultivation, earthworks, vegetation clearance and the construction, maintenance and alteration of bores were included in the Proposed Plan for the purposes of:⁵⁵
- The maintenance and enhancement of the quality of water in water bodies and coastal water;
 - The maintenance and enhancement of ecosystems in water bodies and coastal water; and
 - The avoidance or mitigation of natural hazards.

⁵⁵ RMA s30(1)(c)

115. The rules are not for managing effects on historic heritage, natural character, significant ecological areas and indigenous biodiversity outside of water bodies and the coastal marine area. Some people did not realise this.⁵⁶

Submissions and analysis

116. There were many submissions on the rules for land disturbing activities that are not within the scope of the council's functions under section 30 of the RMA. For example, some people believe that the Proposed Plan should:

- Contain controls for earthworks to prevent the spread of kauri dieback;⁵⁷
- Contain earthworks rules that specifically address the excavation of swamp kauri;⁵⁸
- Contain controls for earthworks in significant ecological areas,⁵⁹ and other significant areas including heritage and tangata whenua areas;⁶⁰
- Include restrictions for earthworks on land in the coastal environment outside of water bodies and the coastal marine area, including in areas identified in the RPS as areas of high and outstanding natural character, in areas that are outstanding natural features and landscape;⁶¹
- Not permit cultivation, earthworks, vegetation clearance and the construction of a temporary bore (or within an area of significance to tangata whenua);⁶²

117. I understand that the council does not have the ability under section 30 of the RMA to make rules that address these matters.

Recommendation

118. I recommend that no changes be made as a result of submissions on matters outside of the council's functions under section 30 of the RMA and the direction in the section 1.6 of the RPS.

⁵⁶ For example, the Royal Forest and Bird Protection Society of New Zealand

⁵⁷ Patuharakeke Te Iwi Trust Board Inc. p.19., Minister of Conservation. pp.33 and 35

⁵⁸ Patuharakeke Te Iwi Trust Board Inc. p.19

⁵⁹ Royal Forest and Bird Protection Society of New Zealand. p.59

⁶⁰ Whangarei District Council. p.29

⁶¹ Minister of Conservation. p. 33

⁶² Mikaera Miru. p.13., Tinopai RMU Ltd. p.15

Other matters

119. Refer to Appendix A for the summary of submission points, analysis and recommendations made on the policy and rules for cultivation, earthworks, vegetation clearance and bores not addressed in the key matters sections of this report.

Appendix A - Response to other matters raised in submissions

The following table does not include the summary of submission points, analysis and recommendations made on the key matters in the main body of the report.

Provision	Summary of main submission points	Discussion	Recommendation
Other	Kaipara District Council submitted that new bores should be required to be fitted with a bore backflow device to protect the aquifer from contamination, and that the condition should require ongoing maintenance.	I consider that this matter is adequately addressed under Rule C.8.5.3 and in Policy D.4.23.	To not grant the relief sought because it is adequately covered in the Proposed Plan.
C.8.2.1	New Zealand Deer Farmers Association submitted that the definition of highly erodible land does not provide sufficient resolution to adequately assess environment risk associated with cultivation and that the term 'ephemeral watercourse' should be deleted from the rule because (a) it is not defined in the Proposed Plan, and (b) they would be difficult to identify overly restrictive to exclude cultivation from. ⁶³	I recommended in the body of this report that a definition for an ephemeral watercourse (stream) should be included in plan. I also consider that the definition will be able to be applied.	To not grant the relief sought.
C.8.2, C.8.2.1	The Royal Forest and Bird Protection Society submitted that rule C.8.2.1 should be amended to not allow cultivation within a significant wetland or within the beds of lakes and rivers, of the coastal marine areas.	The rules in section C.8.2 of the plan apply to cultivation activities outside of water bodies. Activities in the beds of lakes and river and in wetlands are addressed in section C.2 of the plan	To not grant the relief sought.

⁶³ New Zealand Deer Farmers Association. p.15

Provision	Summary of main submission points	Discussion	Recommendation
C.8.3	The Royal Forest and Bird Protection Society of New Zealand requested a new rule that would prohibit earthworks within a significant ecological area or significant wetland.	The rules in section C.8.3 of the plan apply to earthworks activities outside of water bodies. Activities in the beds of lakes and river and in wetlands are addressed in section C.2 of the plan. It is also useful to note that regional councils functions under the RMA do not provide for controlling the use of land for the purpose of maintaining or enhancing significant ecological areas outside of water bodies and the CMA. Similarly, the RPS limits the council's function of maintaining indigenous biodiversity to within water bodies and the CMA.	To not grant the relief sought.
C.8.2.2	Foy F and King K & F submitted that rule C.8.2.2 be amended to a permitted activity.	The submitters did not provide any reasons to support their request.	To not grant the relief sought.
C.8.2.2	Man O'War Dairies Ltd stated that it is concerned that the highly erodible land map may be inaccurate for its Moerewa Station and Pinny Farm Group farms	The highly erodible land map (now recommended to be called erosion prone land) depicts 16 land use capability maps at the 1:50,000 scale. Therefore, there could be some uncertainties or inaccuracies associated with the mapping. However, Man O'War Dairies Ltd did not provide any specific information on the nature and location of the potential inaccuracies, and for this reason I am not able to make a recommendation to change the maps.	Retain the map as proposed.
C.8.2.2	Northland Fish and Game asked for the matters of control in rule C.8.2.2 to be amended by including new matters of control over measures to avoid, remedy or mitigate adverse effects on: <ul style="list-style-type: none"> • Biodiversity, including aquatic habitat and area of significant indigenous vegetation and significant habitats of indigenous fauna 	I do not believe the requested matters of control are necessary. First, it is important to distinguish between the land use control functions of the regional council and those of district councils. The former do not include the control of the use of land for the protection of terrestrial biodiversity, habitats and ecosystems and natural character. Northland Regional Council can only regulate land use for the purposes of maintaining and enhancing water quality and aquatic ecosystem health.	To not grant the relief sought but make minor amendments to clarify the intent of the first matter of control.

Provision	Summary of main submission points	Discussion	Recommendation
	<ul style="list-style-type: none"> • The natural character of wetlands, lakes, rivers and their margins • Surface and groundwater quality and sources of drinking water. <p>It also opposed to applications for resource consents under rule C.8.2.2 being precluded from public notification.</p>	<p>The main issue associated with cultivation with respect to water quality and aquatic ecosystems is losses of fine sediment.</p> <p>Second, I consider that the matters of control in the rule are adequate. That they include effects on water quality, the scale, location and timing of cultivation, and erosion and sediment control measures.</p> <p>However, for completeness I consider that the first matter of control be amended to “Measures to avoid or mitigate adverse effects on surface and groundwater quality”</p>	
C.8.2.2	<p>The Royal Forest and Bird Protection Society is seeking a change to the activity classification of rule C.8.2.2 to a discretionary activity because “[i]t is not appropriate to provide an activity status where a consent cannot be declined for cultivation activities in wetlands, outstanding lakes, highly erodible land or where significant indigenous biodiversity can be identified.”⁶⁴</p> <p>It also wants a new non-complying activity rule for cultivation within wetlands, the beds of lakes and rivers and “the coastal marine area that is identified as an outstanding natural character area.”</p>	<p>The Royal Forest and Bird Protection Society has misunderstood the scope of rule C.8.2.2. That is, it does not apply to cultivation within water bodies and the coastal marine area. Land use activities within those areas are dealt with elsewhere in the plan.</p> <p>I appreciate the Society’s concern about the inability to not grant a resource consent for cultivation under a controlled activity rule (for example, where it will be done on highly erodible land or within the catchment of an outstanding lakes). Nevertheless, I am not persuaded that it is necessary to change the activity classification of the rule to a discretionary activity because the matters of control should be sufficient to avoid or mitigate unacceptable adverse environmental effects.</p>	To not grant the relief sought.
C.8.3	Haititaimarangai Marae Trust 339 wants the plan to contain restrictions on	It is not clear to me what is meant by coastal areas. This is important because regional councils do not	To not grant the relief sought.

⁶⁴ Royal Forest and Bird Protection Society of New Zealand. p.58

Provision	Summary of main submission points	Discussion	Recommendation
	earthworks in sensitive coastal areas to protect the natural character of the areas. ⁶⁵	<p>have the function of controlling land use activities outside of the coastal marine area for the purposes of preserving the natural character of terrestrial environments.</p> <p>That being said, I consider that the rules in section C.8.3, including with the recommended amendments set out in this report, will appropriately control sediment losses from earthworks activities.</p>	
C.8.3	Refining New Zealand considers that it is “appropriate that a specific consenting pathway be provided to enable its ongoing [earthworks] operations to be undertaken without undue restriction.” ⁶⁶ It wants a restricted discretionary rule for earthworks within or adjacent to the Refining New Zealand Marsden Point site that exceed one or more of the earthworks thresholds in Table 8 in C.8.3.1.	I am not persuaded that a specific rule for earthworks within or adjacent to the Refining New Zealand Marsden Point site is warranted. In addition, it is not clear to me what the company meant by its statement that in the absence of a specific rule its ongoing operations would be subject to undue restriction.	To not grant the relief sought.
C.8.3.1	Bay of Islands Planning Ltd, Broadspectrum NZ Ltd and Carrington Resort Jade LP is opposed to the requirement in rule C.8.3.1 that erosion and sediment control measures must be implemented in accordance with the <i>Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region 2016</i> because (a) “it is not advisable to tie in requirements to an	I disagree with the points made by the submitters. That is, the Erosion and Sediment Control Guidelines for the Auckland Region are not subject to review and they are entirely appropriate for earthworks in the Northland region (for example, the regions share a very similar climate, surface geology and physical geography). In the event that the guideline is updated then so can the plan.	To not grant the relief sought.

⁶⁵ Haititaimarangi Marae Trust 339. p.58

⁶⁶ Refining New Zealand. p.25

Provision	Summary of main submission points	Discussion	Recommendation
	external document which may be subject to review”, and (b) “[i]t is also likely that items within the document may not be appropriate to the conditions found in Northland.” ⁶⁷	It is useful to note that there was support from other submitters for the reference to the guidelines in rule C.8.3.1. ⁶⁸	
C.8.3.1	GBC Winstone submitted that “it is not appropriate for the PRPN to adopt external documents as part of the PRPN.” ⁶⁹ It considers that condition two of the rule should be amended by removing the reference to the guidelines and including a note in the rule that “best-practice erosion and sediment control measures in the Northland regional is considered to be in general accordance with the Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region (2016)”.	GBC Winstone did not elaborate on why it is not appropriate to adopt external (that is, reference) documents in the plan. I note that Part 3, Schedule 1 of the RMA provides for the incorporation of documents by reference in plans and Proposed Plans.	To not grant the relief sought.
C.8.3.1	Mangawhai Harbour Restoration Society Inc and LaBonte’ A&R requested to amend condition 2) to exclude coastal dune restoration and to amend condition 6a) by stating ‘except where dunes must be recontoured through removal of non-native materials	I have spoken with Laura Shaft, the NRC Coast-Care coordinator, who has informed me that there are times that removal of introduced materials (as part of coastal care work) leads to a reduction in height of dune crests. The overall outcome however is positive and I therefore support this requested relief. I do not support the request to amend condition 2) as this may be a key way to avoid or mitigate potential adverse effects on land.	Amend rule as outlined in the <i>Proposed Regional Plan for Northland – S42A recommended changes</i>
C.8.3.1	Ruakaka Parish Residents and Ratepayers Association request to clarify	I consider that the requirement that earthworks must not reduce the height of dune crests, as well as the	To not grant the relief sought.

⁶⁷ Bay of Islands Planning Ltd. p.32., Broadspectrum NZ Ltd. p.5., Carrington Resort Jade LP. p.13

⁶⁸ Minister of Conservation. p.32., Auckland Council. p.7., Haititaimarangai Marae 339 Trust. p.57., Northland Fish and Game. p.49

⁶⁹ GBC Winstone. p.41

Provision	Summary of main submission points	Discussion	Recommendation
	whether dune management is being actively pursued.	requirement that specific provisions for coastal dune restoration demonstrate that dune management is being pursued. No changes are recommended.	
C.8.3.1	<p>Whangarei District Council expressed concerns that rule C.8.3.1 “does not have a notification provision which would enable NRC to be aware of the potential scale and volume of the proposed earthworks, there is not trigger for monitoring.”⁷⁰</p> <p>It also considers that the rule should be amended by including a new condition that would require an erosion control plan “be submitted and approved by the NRC’s Compliance Manager prior to significant earthworks being be [sic] undertaken in order of the efficacy of the erosion and sediment control measures to be verified by NRC staff.”</p>	<p>A notification condition was considered by the council during the drafting the Proposed Plan but was not included in the rule C.8.3.1 because it only provides for small-scale earthworks, which are happening on a very frequent basis.</p> <p>I do not think it is necessary to require people undertaking small-scale earthworks to prepare and submit erosion control plans to the regional council.</p>	To not grant the relief sought.
C.8.3.2	Rowan Tautari and Patuharakeke Te Iwi Trust Board Inc. submitted that the matters of control in rule C.8.3.2 should include mahinga kai and access to mahinga kai, and indigenous biodiversity where it affects tangata whenua ability to carry out cultural and traditional activities. ⁷¹	The submitters did not explain why the additional matters of control should be included in the rule. That is, they did not provide any information that shows earthworks on land have or are having adverse effects on mahinga kai and access to mahingai kai or aquatic indigenous biodiversity where it affects the ability of tangata whenua to carry out cultural and traditional activities.	To not grant the relief sought.

⁷⁰ Whangarei District Council. p.29

⁷¹ Rowan Tautari, p.16., Patuharakeke Te Iwi Trust Board Inc. p.16.

Provision	Summary of main submission points	Discussion	Recommendation
C.8.4	The Minister of Conservation wants a new restricted discretionary rule for the clearance of vegetation within the coastal environment that is not permitted by rules C.8.4.1 or C.8.4.2 to give effect to the New Zealand Coastal Policy Statement 2010. ⁷²	<p>Policy 1 in the New Zealand Coastal Policy Statement provides criteria by which the coastal environment is to be defined. One criterion is that it includes the coastal marine area. It is important to reiterate – because there is some confusion around the scope of rules for land disturbing activities – that the rules only to the clearance of terrestrial vegetation. Not vegetation in water bodies or the coastal marine area. GBC Winstone suggested that this could be made clear by changing the title of rule C.8.4.1 to “Vegetation clearance outside rivers, lakes, wetlands, the coastal hazard management area and the coastal marine area.” I endorse this.</p> <p>It is also important to note that the rules are for the purposes of maintaining and enhancing water quality and aquatic ecosystems, and in respects avoiding and mitigating natural hazards.</p> <p>Turning to the Minister of Conservation’s request, I consider that it would provide for matters that are outside of the scope of the regional council’s functions under RMA s30 (for example, impacts on natural character, landscapes and features). It is also not necessary with respect to providing for the maintenance and enhancement of water quality and aquatic ecosystems.</p>	To not grant the relief sought.
C.8.4.1 and C.8.4.2	First Gas Ltd sought amendments to rules C.8.4.1 and C.8.4.2 to allow the removal of vegetation to be cleared to provide for	Note I recommended earlier in this report that the definition of vegetation clearance should be amended to exclude clearance around network utilities. This will satisfy First Gas Ltd.’s concerns.	To not grant the relief sought.

⁷² Minister of Conservation. p.36

Provision	Summary of main submission points	Discussion	Recommendation
	the regionally significant infrastructure maintenance or enhancement. ⁷³		
C.8.4.1	Hicks M has requested to amend condition 4) as follows: <i>...there is no disturbance of indigenous or migratory bird nesting sites, or habitat used for feeding or roosting,</i>	I do not support the relief sought as I consider that the inclusion of 'habitat used for feeding' in particular is too broad and arguably, could include all areas within proximity to the coastal marine area.	To not grant the relief sought.
C.8.4.1	LaBonte' A&R request condition 1 of the rule to be amended as follows: <i>1) no native dune vegetation is removed or cleared, unless it is reinstated or replaced, and ...</i> They also want the notification requirements reduced from 10 to 5 working days.	I do not believe that it should be a permitted activity to remove any native dune vegetation so I do not support the submitters request to amend condition 1). I consider that the retention of native dune vegetation is integral to giving effect to policies 25 and 26 of the New Zealand Coastal Policy Statement and the submitters relief would not achieve this as there would be no guarantee that it would be replaced or with what vegetation and if it would survive. I also do not support the request to amend the notification requirements to 5 working days. I have spoken with the NRC Coast Care Co-ordinator, Laura Shaft, and she agrees that 10 working days should be the minimum to allow for investigation and modification to plans if needed. These works should be planned (as opposed to ad-hoc) and so I believe that the notification requirements of the Proposed Plan should remain.	To not grant the relief sought.
C.8.4.1	Mangawhai Harbour Restoration Society Inc. want condition 4 of the rule amended as follows:	I do not support the requested relief to amend condition 4, as it infers that people could disturb bird nesting sites outside of 01 September to 28 February. The existing wording is a standard condition, used in	To not grant the relief sought.

⁷³ First Gas Ltd. p.19

Provision	Summary of main submission points	Discussion	Recommendation
	<p>4) <i>There is no disturbance of indigenous or migratory bird nesting sites <u>between 1 September and 28 February (inclusive) to avoid disturbance of birds during breeding, roosting and nesting periods.</u></i></p> <p>They also want the notification requirements reduced from 10 to 5 working days.</p>	<p>many permitted rules within the Proposed Plan and I am not convinced that it should be amended.</p> <p>I have addressed the request to amend the notification requirements in my response to Labonte' directly above. I have nothing further to add here.</p>	
C.8.4.1	Royal Forest and Bird Protection Society NZ submitted that vegetation clearance must not include clearance of significant indigenous vegetation or clearance in the habitats of significant indigenous species.	I do not support the requested amendments because I consider that the rule is sufficiently restrictive to ensure protection of significant indigenous vegetation, noting that a consent will be required to remove any native dune vegetation.	No change.
C.8.4.1	Ruakaka Parish Resident and Ratepayers Association have requested to clarify how the notification requirements under conditions 6 and 7 will be monitored.	I note that the submitter has not actually requested any amendment to the rule. How the rule will be monitored is covered in the Proposed Regional Plan monitoring strategy.	No change.
C.8.4.1	Spark New Zealand Trading Ltd have requested to delete or amend C.8.4.1(5) to ensure the standard is clear and certain as to how compliance is achieved.	I do not support the request to delete or amend condition 5) relating to coastal hazard risk. I consider that this condition is necessary as vegetation clearance within close proximity to the coastal marine area does have the potential to exacerbate coastal hazard risk on other property.	No change.
C.8.4.1	<p>Top Energy have requested to amend the rule as follows:</p> <p>....</p> <p><i><u>The clearance of vegetation in the coastal hazard management area required to establish new, and maintain and replace existing electricity transmission infrastructure including</u></i></p>	I do not support the requested relief as the submitter has not demonstrated why it is appropriate. However, I note that the definition of 'vegetation clearance' is proposed to be amended to exclude clearing vegetation around network utilities. I consider this will go some way to meeting the submitters request.	No change to rule.

Provision	Summary of main submission points	Discussion	Recommendation
	<u><i>access tracks is excluded from Rule C.8.4.2,</i></u>		
C.8.4.1	Whangarei District Council supports intent of the rule but suggests that vegetation clearance and replanting should be restricted to the appropriate coastal planting season. Submitter also suggests a shorter timeframe than the proposed 3 months in Clause 3 is appropriate to provide for revegetation due to the risk of dune erosion in adverse weather events.	I support the submitters requested relief. I have spoken with the regional council's coast care co-ordinator (Laura Shaft), who also agrees with the submitters requested amendments. The appropriate planting season is May to September inclusive as there is a high chance that vegetation planted in other months will not survive. I recommend amending condition 3) so that re-vegetation occurs 'no later than two months' after clearance.	Amend rule C.8.4.1 as outlined in the <i>Proposed Regional Plan for Northland – S42A recommended changes</i>
C.8.4.2	Horticulture New Zealand submitted: <i>"It is therefore appropriate to permit clearance of indigenous vegetation where works meet best practice erosion and sediment control measures for the duration of land disturbance. Industry best practice is deemed to be the Erosion and Sediment Control Guidelines for Vegetable Production 2014."</i> ⁷⁴	It is not clear to me how Erosion and Sediment Control Guidelines for Vegetable Production 2014 are relevant to the clearance of native vegetation.	To not grant the relief sought.
C.8.4.3	Te Roroa Development Group submitted that rule C.8.4.3 should be changed to a non-complying or prohibited activity.	I do not think changing the activity classification of rule C.8.4.3 is necessary	To not grant the relief sought.
C.8.3 and C.8.5	The New Zealand Geothermal Association submitted that "[i]n order to protect [significant geothermal features] and to properly control activities that	The Association did not provide any evidence that earthworks of the drilling of bores has the potential to or is likely to adversely affect significant geothermal	To not grant the relief sought.

⁷⁴ Horticulture New Zealand. p.54

Provision	Summary of main submission points	Discussion	Recommendation
	<p>might adversely affect them, significant geothermal features need to be identified and mapped on the face of the plan and a new rule needs to provide that activities including earthworks, drilling of bores, taking and discharge of water within 100 metres of [a] significant geothermal feature⁷⁵ as a restricted discretionary activity.</p>	<p>features. For this reason, I am not persuaded that the requested rule should be included in the plan.</p> <p>Note that submissions relating to the identification and mapping of significant natural features are addressed in a separate report (see s42A report – significant natural and historic heritage).</p>	
C.8.5	<p>The New Zealand Geothermal Association also submitted that “[t]he rules related to constructing, altering and decommissioning bores need to acknowledge the particular issues when bores are accessing geothermal formations – in particular to require consistency with relevant standards.”⁷⁶</p> <p>The Association requested specific rules for the construction, alteration and decommissioning bores intersecting geothermal water that require compliance with:</p> <ul style="list-style-type: none"> • Ministry of Commerce Health and Safety Guidelines (for shallow bores); and • NZS 2403:2015 (for deep geothermal bores). 	<p>I am not familiar with the guidelines and standards for but they appear to be intended to ensure the safe management of shallow bores safe drilling and management of deep bores, respectively.</p> <p>It is not apparent to me why they should be required to be observed under a regional rule for water quality and quantity management purposes.</p>	To not grant the relief sought.
C.8.5.3	The Minister of Conservation wants “effects on and distance from any	Effects on groundwater is also a matter of control. However, I consider that for clarity it would be useful	Amend matter of control 4) in rule C.8.5.3 to

⁷⁵ New Zealand Geothermal Association. p.5

⁷⁶ Ibid

Provision	Summary of main submission points	Discussion	Recommendation
	wetland” as an additional matter of control in rule C.8.5.3.	to amend the matter of control to “Measures to avoid, remedy or mitigate effects on the quality and quantity of groundwater and connected surface water.”	“Measures to avoid, remedy or mitigate effects on the quality and quantity of groundwater and connected surface water; and”
C.8.5.3	Northland Fish and Game and the Royal Forest and Bird Protection Society submitted that rule C.8.5.3 should be amended to exclude bores within or adjacent to wetlands. ⁷⁷	The submitters did not provide any reasons to justify their submission point, other than the rule does not protect wetlands. I consider that the controlled activity rule, as amended per my recommendations, is adequate to protect wetlands the adverse effects of constructing bores.	To not grant the relief sought.

⁷⁷ Northland Fish and Game. p.52., Royal Forest and Bird Protection Society. p.61