# **Draft Canterbury Regional Pest Management Plan**

**Under the Biosecurity Act 1993** 

Staff Report

8 December 2017

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# **Purpose of Report**

- 1. By Minute 8, dated 1 December 2017, the Hearing Panel directed staff to prepare the draft Canterbury Regional Pest Management Plan and a Staff Report.
- 2. This report addresses the following matters, as directed by the Hearing Panel:
  - a. Staff recommendations on submitter comments on technical and workability matters:
  - b. An assessment of the draft Plan against the matters specified in section 73 of the Biosecurity Act 1993 (**BSA**);
  - c. An assessment of the draft Plan against the requirements of sections 74 of the BSA; and
  - d. Any recommended changes to be made to funding provisions in the RPMP.
- 3. Staff have also provided further comments regarding the directions issued in Minute 8 (para 45. a. i.)
- 4. Minute 8 also directs Staff to prepare cost benefit analysis for Russell Lupin and pest agent conifer trees. These are addressed as part of this Staff Report.

# Staff recommendations on submitter comments

## Waimakariri Ecological and Landscape Restoration Alliance (WELRA)

- 5. Staff appreciate the feedback from WELRA, and seek to respond to the comment seeking the removal of 'written direction' for Rules 6.3.2 and 6.3.3.
- 6. The removal of the trigger 'on receipt of a written direction' will mean that land occupiers are instantly non-compliant based on the actions of their neighbours. Staff consider that Rules 6.3.2 and 6.3.3 require this trigger for several reasons;
  - Council staff will not be aware of locations of wilding conifer operations undertaken by land occupiers. Proactive compliance inspections and monitoring regarding rule compliance will not be possible.
  - b. Staff consider that including this trigger provides certainty for land occupiers to know whether they are in breach of the rule or not, as they will receive explicit notice from the Council.
  - c. Staff note that the purpose of this rule is to ensure that the spread of wilding conifers does not cause unreasonable cost to neighbours. Clause 8(e)(ii) of the National Policy Direction (NPD) relating to Good Neighbour Rules (GNRs) requires that the Council consider whether the costs of compliance with the rule are reasonable relative to the costs that such an occupier would incur,

from the pest spreading, in the absence of a rule. Whilst this can be considered at a region wide level for the purposes of compliance with Clause 8 of the NPD, what is an unreasonable cost for an individual occupier is best determined on a site specific basis. The trigger allows for this site specific consideration.

7. Staff do not recommend the amendment proposed by WELRA. However, it is noted that in response to MPI's further comments, Staff recommend amending the explanation for Rule 6.3.3 to provide greater distinction between Rule 6.3.2 and Rule 6.3.3.

# Otago Regional Council

- 8. Staff have considered Otago Regional Council's comments on the control of Bennett's wallaby, and appreciate the potential impact to the Otago region.
- Otago Regional Council have raised technical and workability issues regarding established wallaby populations outside of the Containment Area not being controlled under the RPMP.
- 10. Staff consider that Objective 6 (ii), precluding the establishment of Bennett's Wallaby outside the Containment Area, will require the control of existing establishments, to ensure that this objective is achieved.
- 11. Staff confirm that there is no requirement for land occupiers to manage wallaby densities outside the Containment Area, except for Rule 6.3.4 which prohibits any person from keeping, holding, enclosing or harbouring wallabies. Staff have not recommended provisions for this, as it is anticipated that land occupiers may not be aware of the presence of wallabies when they are at low levels. Wallabies are notoriously difficult to locate in very low numbers and often hide under scrub and bush cover. Further, enforcement of a rule of this nature is likely to be resource intensive and control is not likely to be effectively delivered by land occupiers.
- 12. Staff acknowledge that wallabies outside of the Containment Area need to be controlled to prevent environmental and production impacts to the wider Canterbury region, and also to the Otago Region. There are a number of tools that are considered to be more effective (both in terms of cost and outcome) than rules for achieving this. This includes the Council undertaking proactive control, research for new technology to aid in the detection of wallabies, and joint approaches with land occupiers and partners (including the Otago Regional Council).
- Staff do not recommend amendments based on Otago Regional Council's comments.

# Banks Peninsula Conservation Trust (BPCT)

- 14. Staff welcome the support from the BPCT regarding goat management on the Peninsula and seek to emphasise the achievement and ongoing reduction of feral goat numbers by the Banks Peninsula Goat Working Group.
- 15. Staff note that the proposed rules do not prevent goat farming on Banks Peninsula. Rather, the rules require all goats to have an animal identification device and to be effectively constrained. This may include fencing. Therefore, an exemption to the rule to enable farming is not required.
- Staff do not recommend amendments based on BPCT's feedback.

# Ministry for Primary Industries (MPI)

17. Staff appreciate the comments provided by MPI, and address these points below.

### Plan Objective 4

- 18. Staff note MPI's feedback regarding the first part of Plan Objective 4. There has been a small change from the wording contained in the Proposal, this was to correct 'prevent' adverse effects, to 'reduce'.
- 19. Staff accept that the first part of the objective applies beyond the Wilding Conifer Containment Area. We note that while the rules require direct action from land occupiers within the Containment Area, there are new restrictions on the species of conifers that can be planted, propagated, and sold throughout the region. This will in some way contribute to a reduction in the spread of wilding conifers across the region. Reducing wilding conifers in areas of the boundary of the Wilding Conifer Containment Area is also likely to prevent spread outside of the Containment Area.
- 20. Staff recommend retaining the first part of the Objective, but that the following changes are applied, to provide greater specificity:

Over the duration of the Plan, progressively contain and reduce by reducing the geographic distribution or and extent of wilding conifers<sup>1</sup>, contorta, Corsican, Scots, mountain and dwarf mountain pines and larch within the Canterbury region to reduce adverse effects on economic well-being and the environment.

21. Retaining the first part of the provision is important, otherwise, the Wilding Conifer provisions would be best suited to sit within the Site-led Programme section of the Plan.

<sup>&</sup>lt;sup>1</sup> Wilding conifers are any introduced conifer tree, including (but not limited to) any of the species listed in Table 3 (page 16) established by natural means, unless it is located within a forest plantation, and does not create any greater risk of wilding conifer spread to adjacent or nearby land than the forest plantation that it is a part of.

#### Plan Rule 6.3.1

- 22. Staff have considered MPI's feedback regarding Rule 6.3.1, and recommend amendments to the rule to provide clarity and ensure consistency with the other wilding conifer and pest agent conifer provisions.
- 23. Staff recommend that the specified pest species are reinserted into the first part of the rule (see below). This will ensure that any planted named pest species are required to be controlled as well as wilding conifers. This is already required as part of Rules 6.3.2 and 6.3.3 for neighbouring properties. Staff recommend the following amendment:

Within the Wilding Conifer Containment Area shown on Map 1 in Appendix 4, occupiers shall destroy all wilding conifers, contorta, Corsican, Scots, mountain and dwarf mountain pines and/or larch present on land they occupy prior to cone bearing, if —

#### Plan Rule 6.3.2

24. MPI have sought the following amendment to Rule 6.3.2, together with a consequential amendment to the explanation to the rule (shown in strike-through):

Within the Wilding Conifer Containment Area shown on Map 1 in Appendix 3, occupiers shall, on receipt of a written direction from an Authorised Person, destroy all wilding conifers, contorta, Corsican, Scots, mountain and dwarf mountain pines and larch present on land they occupy within 200m of an adjoining property boundary prior to cone bearing, if wilding conifers, contorta, Corsican, Scots, mountain or dwarf mountain pines and/or larch have previously been destroyed through control operations on the adjoining property, within 200m of the boundary, since 1 July 2016.

- 25. Staff are seeking to ensure protection for land occupiers that undertake control operations to destroy wilding conifers and/or named pest species. Therefore, the element that MPI is proposing to remove, needs to be retained.
- 26. Staff do not recommend the amendment to Rule 6.3.2 as sought by MPI.

#### Plan Rule 6.3.3

- 27. MPI has highlighted the similarities between Plan Rule 6.3.2 and 6.3.3 and recommends that these are combined to reduce unnecessary duplication.
- 28. Staff agree that duplication should be avoided wherever possible. However, the NPD requires that for a Good Neighbour Rule, 'reasonable steps' are being taken by the occupier. This requires an occupier to be undertaking active management and introduces an element of subjectivity to the enforcement of the rule. Staff would prefer to retain a separate provision for the Good Neighbour Rule, to ensure that the enforcement of Rule 6.3.2 is not compromised.

29. Staff propose to amend the explanation for Rule 6.3.3 to provide greater clarity in the distinction between Rules 6.3.2 and 6.3.3.

Over the duration of the Plan, to ensure that the spread of wilding conifers does not cause unreasonable costs to the occupiers of adjoining properties, where wilding conifers, contorta, Scots, mountain and dwarf mountain pines and/or larch have previously been destroyed through control operations on the adjoining property and the adjoining occupier is undertaking active wilding conifer management.

The rule is required in addition to Plan Rule 6.3.2 to manage the spread of wilding conifers causing unreasonable costs to an adjacent occupier where active wilding conifer management is being undertaken by that land owner. as the National Policy Direction requires that before a rule can be identified as a good neighbour rule, the Council must be satisfied that the adjacent occupier is taking reasonable measures to manage the pest or its impacts.

#### Plan Rule 6.3.4

30. Staff have addressed this feedback as part of the response to Minute 7, and an amended version of rule 6.3.4 has been provided in the draft Plan. A consequential amendment has also been made to the list of Pest Agents in Table 4.

#### Minor edits / amendments

- 31. MPI also sought the following minor edits/amendments:
  - a. In the Explanation to Rule 6.3.1: "Over the duration... where wilding conifers, contorta... species that have been previously..."
  - b. In Footnote 10: "Wilding conifers are any introduced conifer..."
  - c. In Table 13, Principal Measures column: Add 'requirement to act' to the list of principal measures in bold type, given that these are included in the wilding conifer programme.
- 32. Staff accept and recommend that these changes are made.

# Assessment against the Sections 73 and 74 of the BSA

- 33. Staff have prepared a report assessing the Draft Plan against the matters specified in section 73 and the requirements of section 74.
- 34. This is attached at Appendix 1.
- 35. The cost benefit analysis has not yet been undertaken for the pest agent conifer provisions, and has not be considered in the analysis. Once the cost benefit analysis for the pest agent conifer provisions has been undertaken, Staff will review the Assessment Report and confirm whether any amendments are required in light of the cost benefit analysis. If an update is required to the Assessment Report, this will be provided to the Hearing Panel with the cost benefit analysis by 9 February 2018.

36. Staff highlight that this is an assessment of the draft Plan against sections 73 and 74 of the Act, and any further amendments to the document recommended by the Hearing Panel will need to be assessed against these sections.

# **Funding provisions**

- 37. The existing funding arrangements for Environment Canterbury's pest management programme are complex, administratively inefficient and operationally restrictive.
- 38. The aim of the proposed changes to the funding allocation and rating structure is to make funding simple, transparent, fair and efficient. It is expected to reduce transaction costs and provide for greater operational flexibility.
- 39. In broad terms, the detailed, pest by pest, economic analysis required for the RPMP establishes whether there is an economic case for action and, where action is justified, who should pay the costs of the activity, taking account of exacerbators or beneficiaries. Matters of practicality and administrative efficiency were considered but on a case by case basis (rather than on a holistic basis across all pests and Council activities). A holistic approach has been considered as part of development of the Draft Long Term Plan. It has been identified that there are substantial administrative efficiencies in applying a grouped approach to pest cost allocation.
- 40. The proposed changes still respect beneficiaries and exacerbators. However, pests are grouped by their primary impact (production or biodiversity, or where there is a relatively even split, by a split allocation).
- 41. A number of submitters requested that inspection costs are revised, in most cases set to 50:50 rate between occupiers and the regional community<sup>2</sup>.
- 42. It is also recommended (as part of the Long Term Plan process) that the pest districts are combined into a single rural targeted rate. This enables much greater operational flexibility as the Council can respond where and when pests are found, without being constrained by the boundaries of pest districts.
- 43. Details of the cost allocation are set out in the Draft Plan.

#### Staff comments on Directions in Minute 8

44. At paragraph 45(i) of Minute 8, staff are directed to undertake any minor corrections or drafting clarifications that do not change the effect of any of the regulatory provisions. Where these minor corrections require an explanation, this is set out below. All changes have been recorded in Appendix 2.

<sup>&</sup>lt;sup>2</sup> Refer to submissions 16.1, 32.2, 53.7, 56.1, 57.1, 74.3, 90.11

# Section 3.1

45. Staff have made a minor amendment to remove the list formatting. This was because the items included did not contain all the matters set out under section 100B(1) of the Act.

# Plan Rule 6.4.2

46. Staff have inserted the change as directed in paragraph 45.(f.) of Minute 8. However, minor changes have been applied to maintain consistency with Plan Rule 6.4.1.

### **Funding Section**

- 47. Staff have identified some further sections of the interim draft plan that were required to be included in the Proposal document but are not required in the draft Plan and may be removed. This includes:
  - Section 9.1 Analysis of benefits and costs
  - Section 9.2 Beneficiaries and exacerbators
  - Section 9.5 The anticipated costs of implementing the Plan

Whilst the Council must be satisfied in relation to these matters under section 74 of the Act, section 73 of the Act does not require that these matters be specified in the Plan itself.

Staff recommend the removal of Section 9.1, 9.2, and 9.5 from the draft Plan and any consequential amendments to numbering.

# Further cost benefit analysis

# Russell lupin

- 48. As directed by the Hearing Panel, Staff have prepared a further cost benefit analysis for the inclusion of Russell lupin and wild Russell lupin in the draft Plan.
- 49. The benefits of managing Russell lupin primarily relate to biodiversity and environmental values. These benefits have not been quantified in monetary terms, as the cost to undertake this analysis is prohibitively high, and in the absence of any direct market for biodiversity, the results of such analysis are often contentious.
- 50. The analysis of this pest is considered by Staff to meet the requirements of sections 73 and 74 of the BSA, and is included in the Assessment report.
- 51. Key outcomes of the analysis:
  - a. The sustained control approach is deemed to be the preferred approach, and benefits are expected to exceed the costs.

- b. There will be significant harm to biodiversity values in the case of the 'do nothing' scenario.
- c. The costs of a progressive control or eradication programme is considered to be much higher due to greater areas requiring control and the length of time the seed is viable. Also declaring Russell lupin as a pest outright would prevent use as a stock feed and incur increased production costs. Some also consider there to be scenic benefits and value in retaining Russell lupin. There may be a risk of encouraging illegal spreading of the seed if a hardline, eradication approach is undertaken.
- d. The analysis has identified an annual implementation cost of \$1.6M for the sustained control approach, including both direct costs to land occupiers to control Russell lupin and indirect costs for the Council for inspection, monitoring and advocacy.
- e. The beneficiaries of control have been identified as the wider community, who will benefit from the biodiversity gains. Due to this, the costs for inspection, monitoring and advocacy are recommended to be met by the community.
- 52. Refer to Appendix 3 for full details of the cost benefit analysis.
- 53. The analysis was provided in draft to the Russell Lupin Working Group<sup>3</sup> for comment. Feedback was received from NZ Merino Ltd and the Department of Conservation (DOC). Changes were applied as a result of DOC's comments, no changes were required from NZ Merino Ltd's comments.

### Pest agent conifer trees

54. The Hearing Panel has directed Staff to prepare cost benefit analysis on the inclusion of pest agent conifers in the draft Plan. This analysis is to be provided by 9 February 2018.

<sup>&</sup>lt;sup>3</sup> This group includes Environment Canterbury, the Department of Conservation, Land Information New Zealand, NZ Merino Ltd, and Federated Farmers.

# **Appendix**

Appendix 1: Assessment against the Sections 73 and 74 of the BSA

Appendix 2: Summary of changes applied to the draft Plan

Appendix 3: Russell lupin cost benefit analysis

# AN ASSESSMENT OF THE PROPOSAL FOR THE CANTERBURY REGIONAL PEST MANAGEMENT PLAN AGAINST THE REQUIREMENTS OF SECTIONS 73 AND 74 OF THE BIOSECURITY ACT 1993

#### **Background and purpose**

Environment Canterbury has prepared a Draft Canterbury Regional Pest Management Plan (the Plan) under the Biosecurity Act 1993 (the Act). Section 73 of the Act outlines matters that must be set out in the Plan. Section 74 outlines matters the Council must consider and be satisfied with when making the Plan. Section 74 refers to requirements of the National Policy Direction (NPD).

The purpose of this report is to provide an assessment of the draft Plan against the requirements of sections 73 and 74 of the Act. This includes assessment of its consistency with the NPD.

#### Analysis undertaken

An analysis of the Proposal for the Canterbury Regional Pest Management Plan was undertaken against sections 70 and 71 of the Act and NPD to identify how requirements were met and, where necessary, documented within the Proposal or supporting analysis.

An important component of compliance with the Act is an economic analysis of the Proposal, including cost benefit analysis and consideration of various funding matters (in a similar manner to a section 32 report on a plan under the Resource Management Act). This economic analysis was undertaken by Mr Simon Harris of Land Water People and is outlined in his report "Meeting the requirements of the Biosecurity Act 1993 and National Policy Decision for Pest Management 2015: Analysis of costs and benefits". This report is referred to below as the "CBA Report". Further economic analysis was required for Russell lupins, as the Hearing Panel is recommending a significant change from the original Proposal. This further analysis was undertaken by Environment Canterbury and is referred to as the 'Russell lupin Cost Benefit Analysis'.

In response to Minute 8 issued by the Hearing Panel, Staff are undertaking further economic analysis in relation to the inclusion of pest agent provisions for conifers. This is referred to as the 'Conifer Pest Agent Cost Benefit Analysis' and will be provided to the Hearing Panel by 9 February 2018.

Results of the analysis undertaken against the requirements of sections 73 and 74 of the Act is shown in table format below. Each table shows the relevant clauses of sections 73, 74 and the NPD, respectively. For each clause, a description is provided of how the requirements of the Act have been met including a reference to the relevant section of the Plan or CBA Reports. Where necessary, further commentary is given, including whether the Council can be satisfied with matters listed in the Act.

It is noted that there is considerable overlap and repetition within the requirements of sections 73, 74 and the NPD. Consequently, there is repetition in the resulting references and comments within the tables.

Once the Conifer Pest Agent Cost Benefit Analysis is completed, Staff will review the analysis against the requirements of section 73 and 74 of the Act to confirm that the requirements are still met. If any amendment to the analysis is required as a result of the Conifer Pest Agent Cost Benefit Analysis, Staff will advise the Panel at the time the Conifer Pest Agent Cost Benefit Analysis is provided to the Panel.

#### Conclusion

It is concluded that the draft Plan together with the supporting economic analysis, complies with sections 73 and 74 of the Act and the NPD, with the exception of the eradication objective for feral goats on Banks Peninsula.

The Hearing Panel, as delegated authority by the Canterbury Regional Council must be satisfied that the Draft Plan complies with sections 73 and 74 of the Act. Staff have provided rationale in

response to Minute 9 as to the reasons why Staff consider that the recommended objective for feral goats does not meet s74(d).

# TABLE 1: SECTION 73: FOURTH STEP: APPROVAL OF PREPARATION OF PLAN AND DECISION ON MANAGEMENT AGENCY

# Section 73(3) of the Biosecurity Act 1993 provides that the Draft Plan must set out the following matters:

Section of Act	Requirement	How it is met in the Draft Plan?
		[Relevant section of the Draft Plan with comment, where needed].
	Matters to be specified	
73(3)	A plan must specify the following matters:	
73(3)(a)	The pest or pests to be eradicated or managed:	Section 4.1 lists the organisms that are declared as pests.
73(3)(b)	The plan's objectives:	Section 6 outlines the objectives of the Plan.
73(3)(c)	The principal measures to be undertaken to achieve the objectives:	The principal measures to be used in the Plan are outlined in section 5.3 and measures to be used for each pest are outlined in Section 6. The principal measures described are broad as the choice of specific tools depends upon specific circumstances such as site characteristics and willingness of landowners to take action.
73(3)(d)	The means by which the achievement of the plan's objectives will be monitored or measured:	Section 7.1 provides details on monitoring of the objectives and outcomes for each pest.
73(3)(e)	The sources of funding for the implementation of the plan:	Section 9 outlines how the Plan will be funded.
73(3)(f)	The limitations, if any, on how the funds collected from those sources may be used to implement the plan:	No limitations are specified.
73(3)(g)	The powers in Part 6 to be used to implement the plan:	Section 8.1 outlines the powers to be used to implement the Plan.
73(3)(h)	The rules, if any:	All rules are contained and explained in Section 6.
73(3)(i)	The rules, if any, that are intended to be good neighbour rules:  Clause 8 of the NPD provides directions on good neighbour rules. An assessment against these directions has been undertaken in accordance with section 74 of the Act as set out in the table below.	The following rules are intended to be good neighbour rules and are clearly identified in Section 6: Rules 6.3.3, 6.4.2, 6.4.5, 6.4.12, 6.4.14, 6.4.17, 6.4.20 and 6.4.24.
73(3)(j)	The management agency:	Section 3.1 of the draft Plan states that Environment Canterbury will be the management agency.

73(3)(k)	The actions that local authorities, local authorities of a specified class or description, or specified local authorities may take to implement the plan, including contributing towards the cost of implementation:	Section 3.1 states that Environment Canterbury, as the management agency, will use the measures described in the Plan, in conjunction with its operational procedures, to implement the Plan. This includes the monitoring and funding actions.  Sections 3.3.3 and 3.3.4 refer to the requirement for territorial authorities to control pests on land they occupy and the control of pests in road reserves, respectively.
73(3)(l)	The portions of road, if any, adjoining land covered by the plan and, as authorised by section 6, also covered by the plan:	Section 3.3.4 outlines responsibilities in road reserves and the portions of road to which the Plan applies.
73(3)(m)	The commencement date and the termination date:	Section 1.3 currently specifies that the date of commencement will be in accordance with the section 77 of Act. The starting date will be added when the Council affixes it's seal to the plan in accordance with section 77(1). The termination date is set 20 years from commencement.
73(3)(n)	Any matters required by the national policy direction.	Refer to Table 3 regarding compliance with the NPD.
73(4)	Compensation	
	A plan -	
73(4)(a)	May provide for the compensation for losses incurred as a direct result of the implementation of the plan:	Section 3.2 provides that the plan will not provide for compensation to be paid to any persons meeting their obligations through its implementation.
73(4)(b)	Must not provide for the payment of compensation for the following losses:	Section 3.2 provides that the plan will not provide for compensation to be paid to any persons meeting their obligations through its implementation.
	(i) loss suffered because a person's income derived from feral or wild organisms is adversely affected by the implementation of the plan:	
	(ii) loss suffered before an inspector or authorised person establishes the presence of the pest on the place of the person suffering the loss:	
	(iii) loss suffered by a person who fails to comply with the plan.	
73(5)(a)-(s)	Rules	The plan includes rules for the purposes described in the Act.
	A plan may include rules for all or any of the following	

purposes:

- (a) requiring a person to take specified actions to enable the management agency to determine or monitor the presence or distribution of the pest or a pest agent:
- (b) requiring a person to keep records of actions taken under the rules and to send to the management agency specified information based on the records:
- (c) requiring the identification of specified goods:
- (d) prohibiting or regulating specified methods that may be used in managing the pest:
- (e) prohibiting or regulating activities that may affect measures taken to implement the plan:
- (f) requiring audits or inspections of specified actions:
- (g) specifying, for the purposes of section 52(a), the circumstances in which the pest may be communicated, released, or otherwise spread:
- (h) requiring the occupier of a place to take specified actions to eradicate or manage the pest or a specified pest agent on the place:
- (i) requiring the occupier of a place to take specified actions to eradicate or manage the habitat of the pest or the habitat of a specified pest agent on the place:
- (j) prohibiting or regulating specified activities by the occupier of a place if the activities are of the kind that would promote the habitat of the pest on the place:
- (k) requiring the occupier of a place to carry out specified activities to promote the presence of organisms that assist in the control of the pest on the place:
- (I) prohibiting or regulating specified activities by the occupier of a place, which deter the presence on that place

	of organisms that assist in the control of the pest:	
	(m) requiring the occupier of a place to carry out specified treatments or procedures to assist in preventing the spread of the pest:	
	(n) requiring the owner or person in charge of goods to carry out specified treatments or procedures to assist in preventing the spread of the pest:	
	(o) requiring the destruction of goods if the goods may contain or harbour the pest or otherwise pose a risk of spreading the pest:	
	(p) prohibiting or regulating specified uses of goods that may promote the spread or survival of the pest:	
	(q) prohibiting or regulating the use or disposal of organic material:	
	(r) prohibiting or regulating the use of specified practices in the management of organisms that may promote the spread or survival of the pest:	
	(s) prohibiting or regulating the movement of goods that may contain or harbour the pest or otherwise pose a risk of spreading the pest.	
73(6)	A rule may –	
73(6)(a)	Apply generally or to different classes or descriptions of persons, places, goods, or other things:	The rules apply generally or to different classes or descriptions of persons, places, goods or other things.
73(6)(b)	Apply all the time or at 1 or more specified times of the year:	The rules either apply all of the time or at specified times of the year.
73(6)(c)	Apply throughout the region or in a specified part or parts of the region with, if necessary, another rule on the same subject matter applying to another specified part of the region:	The rules either apply throughout the region or in a specified part or parts of the region.

73(6)(d)	Specify that a contravention of the rule creates an offence	The rules specify that a contravention of the rule creates an offence under
	under section 154N(19).	section 154N(19)

#### TABLE 2: SECTION 74 FIFTH STEP: SATISFACTION ON CONTENTS OF PLAN AND REQUIREMENTS

Section 74 of the Biosecurity Act 1993 provides that if the Council<sup>1</sup> is satisfied that section 73 has been complied with, the council may take the fifth step in the making of a plan, which is for the Council to consider whether the Council is satisfied, in relation to the plan prepared under section 73,—

Section of Act	Requirement	Can the Council be satisfied?
74(a)	That the plan is not inconsistent with—	
	(i) the national policy direction; or  The NPD contains the following relevant directions:  Clause 4 – Directions on setting objectives	Yes. Section 2.2.2 addresses this, along with the analysis of compliance with the NPD outlined in Table 3.
	Clause 5 – Directions on programme description Clause 6 – Directions on analysing benefits and costs	
	Clause 7 – Directions on proposed allocation of costs for pest management plans	
	Clause 8 – Directions on Good Neighbour Rules	
	(ii) any other pest management plan on the same organism; or	Yes, see Section 2.3.1 of the Plan.
	(iii) any pathway management plan; or	NA. There are no applicable pathway management plans.
	(iv) a regional policy statement or regional plan prepared under the Resource Management Act 1991; or	Yes, Section 2.3.2 discusses the relationship with RMA plans and policy statements.
	(v) any regulations; and	Yes, Section 2.3.3 of the Plan discusses this.
		It is noted that regulations is defined in the Act as regulations made under the Biosecurity Act 1993.
74(b)	That, for each subject of the plan, the benefits of the plan outweigh the costs, after taking account of the likely consequences of inaction or other courses of action; and	Yes, the costs and benefits are summarised within the CBA reports, along with alternate actions or inaction. The detailed assessments of these matters are contained in the CBA reports and in the CBA sections of the Proposal (9.1 and

<sup>1</sup> The Council has delegated to the Hearing Panel the powers, functions and duties of the Council set out in Sections 73 and 74 of the Act.

		9.2).
74(c)	That, for each subject of the plan, persons who are required, as a group, to meet directly any or all of the costs of implementing the plan—  (i) Will accrue, as a group, benefits outweighing the costs; or  (ii) Contribute, as a group, to the creation, continuance, or exacerbation of the problems proposed to be resolved by the plan; and	Yes, the beneficiaries and exacerbators are documented within the CBA reports and in the CBA sections of the Proposal (9.1 and 9.2). The benefits accrued as a group and the contribution of groups to the problems proposed to be resolved by the Plan are set out in the CBA reports.
74(d)	That, for each subject of the plan, there is likely to be adequate funding for the implementation of the plan for the shorter of its proposed duration and 5 years; and	A funding analysis is set out in section 9 of the Plan. The Council, as the management agency, has the authority to rate and amend rates to implement the Plan.
		All subjects of the Plan (with the exception of feral goats) are expected to have adequate funding for the implementation of the Plan for its proposed duration and 5 years.
		Feral goats have been recommended by the Hearing Panel to be eradicated within a 10 year timeframe. A reduction in goat numbers (between 10 – 50%) is expected to have adequate funding for the implementation of the plan (next 15 years). At this point in time there is unlikely to be adequate funding to implement an objective to eradicate feral goats within a 10 year timeframe.
74(e)	That each rule -	
	(i) will assist in achieving the plan's objectives; and	Yes. The rules provide an essential regulatory backup to ensure actions taken by landowners, the Council or other parties are effective and efficient. The specific reasons for each rule are provided in the explanations accompanying the rules in Section 6.
	(ii) will not trespass unduly on the rights of individuals.	Yes. The Plan has undergone a legal review prior to being presented to the Hearing Panel. Most of the rules are the same or similar to rules already in place in Canterbury and many other areas of New Zealand. The new rules do not unduly trespass on the rights of individuals.

# TABLE 3: NATIONAL POLICY DIRECTION (NPD) FOR PEST MANAGEMENT 2015

Section 73 of the Biosecurity Act 1993 requires the Plan to set out (among other things):

# (3)(n) Any matters required by the national policy direction.

# Section 74 of the Biosecurity Act 1993 requires the Council<sup>2</sup> to consider whether the Council is satisfied that the Plan is not inconsistent with the national policy direction.

Section of the NPD	Requirement	How does this meet the ss73 and 74 requirements/ how this is addressed in the Plan
4. DIRECTION	NS ON SETTING OBJECTIVES - Pest Management Plan	
4(1)	For each subject in a proposal for a pest management plan, or in a pest management plan, the objectives in the plan must:	
4(1) (a)	state the particular adverse effect or effects of the subject on the matters listed in section 54(a) of the Act that the plan addresses; and	The adverse effects of each pest are described in the relevant objectives set out in section 6.
4(1)(b)	state the pest management intermediate outcomes that the plan is seeking to achieve, being one or more of the following intermediate outcomes:	All pests are to be managed under programmes which seek to achieve either exclusion, eradication, progressive containment, sustained control or
	(i) "exclusion" which means to prevent the establishment of the subject that is present in New Zealand but not yet established in anarea;	protecting values in places (site-led outcomes). These outcomes are reflected in the objectives of the Plan in section 6.
	(ii) "eradication" which means to reduce the infestation level of the subject to zero levels in an area in the short to medium term;	
	(iii) "progressive containment" which means to contain or reduce the geographic distribution of the subject to an area over time;	
	<ul><li>(iv) "sustained control" which means to provide for ongoing control of the subject to reduce its impacts and its spread to other properties;</li></ul>	
	(v) "protecting values in places" which means that the subject that is capable of causing damage to a place is excluded or eradicated from that place, or is contained, reduced, or controlled within the place to an extent that protects the values of that place; and	
4(1)(c)	for each applicable outcome in sub clause (1)(b)(i) to (iv), specify -	
	(i) the geographic area to which the outcome applies; and	The geographic area to which the outcome applies is described in each objective, being either the Canterbury region or a specified area shown on the maps contained in Appendix 3.

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<sup>&</sup>lt;sup>2</sup> The Council has delegated to the Hearing Panel the powers, functions and duties of the Council set out in Sections 73 and 74 of the Act.

	(ii) the extent to which the outcome will be achieved (if applicable); and	The extent to which the outcomes will be achieved under the Plan are specified within each objective.
	(iii) the period within which the outcome is expected to be achieved; and	The period within which outcomes are expected to be achieved is generally the duration of the plan. Where necessary, the objectives state the outcome to be achieved in the first 10 years as required by 4(1)(f) below.
4(1)(d)	for the outcome in sub clause (1)(b)(v) ["protecting values in places"] (if applicable), specify —  (i) one of the following:	In each of the objectives that relate to site-led programmes with intermediate outcomes of "protecting values in places", the relevant geographic area is defined with reference to maps set out in Appendix
	(A) the geographic area to which the outcome applies (if practicable); or	3.
	(B) a description of a place to which the outcome applies; or	
	(C) the criteria for defining the place to which the outcome applies; and	
	(ii) the extent to which the outcome will be achieved (if applicable); and	
	(iii) the period within which the outcome is expected to be achieved; and	
4(1)(e)	In relation to sub clause (1)(d)(i)(B) and (C), if a description or criteria is used to describe places to which an outcome applies, the description or criteria must give sufficient certainty, in the view of the relevant regional council (in the case of regional pest or pathway management plans) or the Minister responsible for the plan (in the case of national pest or pathway management plans), to land owners and occupiers so that they are aware that the outcome applies to them; and	Maps, rather than a description or criteria, are used to describe places.
4(1)(f)	if the period within which the pest management intermediate outcome is expected to be achieved is more than 10 years, state what is intended to be achieved in the first 10 years of the plan, or during the current term of the plan prior to next review (as applicable).	Where necessary, 10-year outcomes are provided. In many instances the outcome is on-going and applies year on year (such as preventing the spread of a containment pest).
5. DIRECT	TIONS ON PROGRAMME DESCRIPTION	
5(1)	For each subject in a pest management plan or pathway management plan, the plan must contain one or more of the following programmes, and may not contain any other types of programmes:	All pests are included within one of these programmes. There are no other programmes included in the Plan.
	(a) "Exclusion Programme" (if applicable) in which the intermediate outcome for the programme is to prevent the establishment of the subject, or an organism being spread by the subject, that is present in	

	New Zealand but not yet established in an area:	
	(b) "Eradication Programme" (if applicable) in which the intermediate outcome for the programme is to reduce the infestation level of the subject, or an organism being spread by the subject, to zero levels in an area in the short to medium term:	
	(c) "Progressive Containment Programme" (if applicable) in which the intermediate outcome for the programme is to contain or reduce the geographic distribution of the subject, or an organism being spread by the subject, to an area over time:	
	(d) "Sustained Control Programme" (if applicable) in which the intermediate outcome for the programme is to provide for ongoing control of the subject, or an organism being spread by the subject, to reduce its impacts on values and spread to other properties:	
	(e) "Site-led Pest Programme" (if applicable) in which the intermediate outcome for the programme is that the subject, or an organism being spread by the subject, that is capable of causing damage to a place is excluded or eradicated from that place, or is contained, reduced, or controlled within the place to an extent that protects the values of that place:	
	<ul> <li>(f) for pathway management plans, if none of the programmes in subclause</li> <li>(a) to (e) are applicable, the plan must contain a "Pathway Programme" in which the intermediate outcome for the programme is to reduce the spread of harmful organisms.</li> </ul>	
5(2)	The specific names for programmes as set out in sub clause (1)(a) to (f) must be used as appropriate in all pest management plans and pathway management plans.	The Plan uses these specific names.
5(3)	The programme selected for a subject in a plan under sub clause (1) must be consistent with the pest management intermediate outcome stated for the subject in the plan under clause 4 of this national policy direction.	The programmes are consistent with the intermediate outcomes under clause (4) (see previous comment on clause 4 above).
6. DIRECT	TONS ON ANALYSING BENEFITS AND COSTS	
6(1)	When determining the appropriate level of analysis of the benefits and costs of the plan for each subject for the purposes of a proposal for a pest management plan or pathway management plan, a proposer must consider:	The criteria for determining the level of analysis have been applied and are documented in Appendix B of the CBA Report. This has also been considered as part of the Russell lupin Cost Benefit Analysis.
	(a) the level of uncertainty of the impacts of the subject, or an organism	

	being spread by the subject, and of the effectiveness of measures; and	
	(b) the likely significance of the subject, or an organism being spread by the subject, or of the proposed measures, in terms of stakeholder interest and contention, and total costs of the proposed plan; and	
	(c) the likely costs of the programme relative to the likely benefits; and	
	(d) the level of certainty and the quality of the available data.	
6(2)	In the proposal for a pest management plan or pathway management plan, an analysis of the benefits and costs of the plan for each subject must:	The cost benefit analysis for each pest complies with these steps. The details are document within the CBA Reports and were summarised within the Proposal.
	(a) identify, and quantify (if practicable), the impacts of the proposed subject or an organism being spread by the subject; and	In relation to (g), (h) and (i) the risks and, where possible, mitigation
	(b) identify two or more options for responding to the subject or an organism being spread by the subject (one option must be either takin no action or taking the actions that would be expected in the absence a plan); and	measures are described. The quantified benefits and costs have been adjusted to take account of these.  of
	(c) identify, and quantify (if practicable), the benefits of each option; and	The non-quantified benefits and costs have been described. Where quantified costs and benefits indicate a negative net benefit from the
	(d) identify, and quantify (if practicable), the costs of each option; and	programme, the unquantified benefits and costs are described, and a dollar
	(e) state the assumptions (if any) on which the on which the impacts, benefits and costs are based; and	figure given for the clause of the unquantified net benefits required to achieve an overall positive net benefit. The Council should consider and satisfy itself as to whether the benefits outweigh the costs in these
	(f) be at an appropriate level of detail as determined in accordance with sub clause (1); and	instances.
	(g) take into account any risks that each option will not achieve its objecti and	The Proposal summarises the options considered and clearly identifies the preferred option (Proposed Objective) and outlines the reason for selecting
	(h) identify any realistic mitigation options for the risks identified in sub clause (2)(g); and	this option.
	(i) adjust the benefits and costs of each option as appropriate to take account of sub clause (2)(g) and (h); and	
	(j) clearly identify which option is preferred.	
6(3)	When taking into account any risks that each option will not achieve its objective under sub clause (2)(g), a proposer must consider:	This has been done and is documented in the CBA Report for each pest.

	(a) the technical and operational risks of the option; and	
	(b) the extent to which the option will be implemented and complied with; and	
	(c) the risk that compliance with other legislation will adversely affect implementation of the option; and	
	(d) the risk that public or political concerns will adversely affect implementation of the option; and	
	(e) any other material risk.	
6(4)	When taking into account any risks that each option will not achieve its objective under sub clause (2)(g), a proposer must:	The analysis of quantifiable benefits has followed the approach described in section 6(4)(a)(i).
	(a) for analyses where the benefits are fully quantified, either:	In relation to section 6(4)(b) the risks to the programme for each pest are
	(i) estimate the residual risks as a probability of success and calculate the expected benefits of the option by multiplying the benefits by the probability of success; or	documented for both quantified and non-quantified benefits.
	(ii) state the residual risks to the programme and calculate what the probability of success would need to be to make the expected benefits equal the costs; and	
	(b) for all other analyses (where the benefits are not fully quantified):	
	(i) state the residual risks to the programme and, where practicable, give an indication of likelihood and impact; and	
	(ii) specify which of the benefits are most likely to be affected if the risk eventuated.	
6(5)	The proposer of a pest management plan or pathway management plan must document the assessments made in sub clauses (1), (3) and (4) and make them publicly available with the proposal for a pest or pathway management plan.	The assessments are contained within the CBA Report which has been made publicly available.
7. DIRECTIO	DNS ON PROPOSED ALLOCATION OF COSTS FOR PEST AND PATHWAY MANAGEMEN	T PLANS
7(1)	If a proposer of a pest or pathway management plan is determining an appropriate grouping of subjects, or organisms being spread by the subject, for cost allocation analysis, the proposer must consider:	The cost allocation has been analysed for each pest individually, and as a result of that analysis pests have been grouped by the primary benefit from control (production, biodiversity, or both).
	(a) whether the subjects, or organisms being spread by the subject, have	

		similar groups of beneficiaries and exacerbators; and	
	(b)	whether the exacerbators have similar existing legislative responsibilities and rights; and	
	(c)	if applicable, whether the organisms in a proposed pest management plan are at a similar stage of infestation and whether the proposer has similar management objectives for the organisms.	
7(2)		determining the appropriate cost allocation to be proposed for a pest gement plan or pathway management plan, a proposer must:	
	(a)	identify and estimate the direct costs of the plan and identify the indirect costs of the plan; and	(a) The direct and indirect costs are shown in the CBA Report for each pest.
	(b)	where possible, identify the beneficiaries of the plan; and	(b) and (c) The beneficiaries and exacerbators were identified and described in the Proposal and CBA Report for each pest.
	(c)	where possible, identify the active and passive exacerbators; and	(d) All these matters are addressed for each pest within the CBA Report.
	(d)	determine whether the best cost allocation method is to have beneficiaries or exacerbators or a mixture of both bearing the costs of the plan and determine the appropriate cost allocation by considering all of the following matters:	
	(i)	the legislative responsibilities and rights of beneficiaries and exacerbators;	
	(ii)	the management objectives of the plan and the stage of infestation;	
	(iii)	the most effective agents to undertake the control to meet the objectives of the plan;	
	(iv)	if proposing that beneficiaries bear any of the costs of the plan, how much each group of beneficiaries will benefit from the plan and whether each group of beneficiaries will benefit more than the amount of costs that it is proposed that it bear;	
	(v)	if proposing that exacerbators bear any of the costs of the plan, how much each group of exacerbators is contributing to the problem addressed by the plan;	
	(vi)	the degree of urgency to make the plan;	
	(vii)	efficiency and effectiveness of the cost allocation method and proposed cost allocation;	
	(viii)	practicality of the cost allocation method and proposed cost allocation;	

	(ix)	administrative efficiency of the cost allocation method and proposed cost allocation;		
	(x)	security of funding of the cost allocation method and proposed cost allocation;		
	(xi)	fairness of the cost allocation method and proposed cost allocation;		
	(xii)	whether the proposed cost allocation is reasonable;		
	(xiii)	(xiii) the parties who will bear the indirect costs of the plan;		
	(xiv)	the need for any transitional cost allocation arrangements;		
	(x)	the mechanisms available to impose the cost allocation; and		
	(e)	consider what is the best mechanism(s) to impose the cost allocation, taking into account the cost allocation method chosen, the most effective control tools and agents to undertake the control to meet the objectives of the plan, practicality, administrative efficiency, security of funding and any statutory requirements; and	(e) All the matters listed in 7(e) have been considered in choosing the co allocation mechanism and an overall judgement made as to which is the best mechanism. This is reflected in various parts of the Plan, including t choice of programme, objective, principal measures (see section 6 of the Plan) and the matters contained in section 9 of the Plan. Alternative methods of control were considered as part of the Proposal (see section	
	(f)	document the steps and assessments carried out under sub clause (a) to (e) and the rationale for the proposed allocation of costs, and make them publicly available with the proposal for a pest or pathway management plan.	of the Proposal)  (f) Section 9 of the Proposal outlines the rationale for the proposed allocation of costs. This is supported by the detailed analysis in the CBA Report.	
8. DIRECTIO	NS ON G	OOD NEIGHBOUR RULES		
8(1)	mana sub cl	e a rule can be identified as a good neighbour rule in a regional pest gement plan, the regional council must be satisfied of the matters in lause (a), (c), and (d) and must comply with the requirements in sub e (b) and (e):	The statements for this section (below) reflect the test of whether the Council <sup>3</sup> can be satisfied.	
	(a)	In the absence of the rule, the pest would spread to land that is adjacent or nearby within the life of the plan and would cause unreasonable costs to an occupier of that land.	Yes. The Council can be satisfied as the good neighbour rules apply only to pests whose characteristics and ability to spread are well known and would cause unreasonable costs to an occupier of adjacent land.	
	(b)	In determining whether the pest would spread as described in sub clause (a) the regional council must consider the proximity and characteristics of the adjacent or nearby land and the biological characteristics and	Yes, as above. In addition, the rules for each pest reflect the distribution of the pest and distance and speed with which it can spread.	

<sup>&</sup>lt;sup>3</sup> The Council has delegated to the Hearing Panel the powers, functions and duties of the Council set out in Sections 73 and 74 of the Act.

	behaviour of the particular pest.	
(c)	The occupier of the land that is adjacent or nearby, as described in sub clause (a), is taking reasonable measures to manage the pest or its impacts.	Yes. The rule only applies if the adjacent occupier is undertaking control actions. In implementing the rule, inspection will determine whether such control actions are being undertaken.
(d)	The rule does not set a requirement on an occupier that is greater than that required to manage the spread of the pest to adjacent or nearby land as described in sub clause (a).	Yes. The control methods are well known and able to be applied cost effectively. The Plan also provides for occupiers to apply for an exemption.
(e)	In determining the rules to be set to manage the costs to an occupier of land that is adjacent or nearby, of the pest spreading, the regional council must consider:	Yes, for the reasons given in (a) to (d) above. Also see Section 32 and Appendix E of the CBA Report which specifically address 8(c)(ii).
(i)	the biological characteristics and behaviour of the particular pest; and	
(ii)	whether the costs of compliance with the rule are reasonable relative to the costs that such an occupier would incur, from the pest spreading, in the absence of a rule.	

# Summary of changes applied to the draft Plan

	Area of draft RPMP	Change			
In response t	In response to directions in Minute 8 – Paragraph 37 (a)				
Referenced b	elow is the paragraph	of Staff commentary in response to Minute 5			
3.	The following statement regarding the source of the pest incursion continuum was included:  Original source of diagram unknown, modified by Environment Canterbury November 2017.				
8.	Section 6.1	The following paragraph has replaced the text from direction 9.(d.) from Minute 5.  Where an exclusion pest is found to be present in Canterbury, an incursion response will be undertaken and a management plan will be developed. This includes assessment of response actions and timeframes for the removal/destruction of the pest. Factors determining the feasibility of immediate removal/destruction include the level and distribution of infestation, the ability and options available for control. If a newly detected pest is found to be wide-spread, it may not be feasible to eradicate it immediately.			
12.	Section 6.4, Rule 6.4.9	The following amendment has been made:  (b) be party to a Written Management Agreement that has not been terminated (unless the Regional Council determines such an agreement is not required). For the purpose of this rule, prevent mean the preclusion of the plant's ability to release panicle seed.			
34.	Section 6.5, Rule 6.5.3	Rule 6.5.3 has been removed			

		The following amendment has been made to rule 6.4.24	
	Section 6.4, Rule 6.4.24	All occupiers on rural zoned land and crown owned and public conservation estate land within the Canterbury Region shall, on receipt of a written direction from an Authorised Person, eliminated all wild Russell lupin within 10 metres of the adjoining property boundary where the occupier is taking reasonable steps to eliminate wild Russell lupin within 10m of that boundary.	
		The objective for feral goats has been amended based on the original drafting in the interim draft plan, and per Staff comment on 20 November:	
	Section 6.5, Objective 23	Manage domestic and farmed goats, and <u>reduce</u> the population of feral goats within the Containment Area shown on Map 14 in Appendix 3 to prevent adverse effects on the environmental values.	
		Within the Containment Area shown on Map 14 in Appendix 3, the population of feral goats will be <u>reduced by 10%</u> within 10 years of the commencement of the Plan.	
	Map 14	Map 14 in Appendix 4 has been updated to align with the changes to Objective 23:	
39.		Amount of reduction over 10 years: Reduce the population of feral goats within the Containment Area by 10%	
		Reason for site-led programme: Reduce the impact of feral goats on biodiversity values within the Banks Peninsula Containment Area.	
40.	Appendix 4	Maps 1, 2, 4, 5 in Appendix 4 which were incorrectly showing the entire Waitaki District were replaced with new maps.	
41.	Section 5.3, 3. Service Delivery	Part (a) of 3. Service delivery has been amended as below:	
41.		(a) where it is funded to do so by a targeted or general rate;	
In response to	directions in Minu	te 8	
37 (a) i	Staff have made a minor amendment to remove the list formatting. This was because the items in did not contain all the matters set out under section 100B(1) of the Act.		
•		Staff have made a minor amendment to remove the list formatting. This was because the items	

37 (a) ii	Section 6.4, Objective 19	The Russell lupin Objective has been revised based on direction 9.(k.) in Minute 5	
45 (a)	Section 6.5	Staff have inserted the following into Section 6.5 to provide guidance to clarify how site led programmes are included:  Additional site-led programmes may be developed beyond the commencement of the Plan.  These may be non-regulatory and managed outside of the Plan, or they may require regulation to ensure the objective is met. If regulation is required, a review of the Plan may be required.  The scope of the site-led programme will determine the extent of the review process. In particular, the scale of the impacts on persons who are likely to be affected by the programme will be a key consideration in the nature and extent of consultation that is required.	
45 (b)	Appendix 1	'Pest Management Liaison Committees' has been removed from the glossary	
45 (c)	Section 2.2.5	"and the Freshwater Fisheries Regulations 1983" has been added to the title under section 2.2.5 together with a consequential amendment to the list of documents:  Wild Animal Control Act 1997, and the Wildlife Act 1953, and the Freshwater Fisheries Regulations 1983	
45 (d)	Appendix 2	Horehound was inserted into Appendix 2	
45 (e)	Appendix 2	Staff have amended the reference to feral goats in Appendix 2, as below:  Feral goat (excluding feral goats within the Containment Area shown in Map 14 in Appendix 4)	
45 (f)	Rule 6.4.2	Staff have made the directed amendment to Rule 6.4.2 (Bennett's Wallaby Good Neighbour Rule), with a minor amendment:  maintaining wallaby densities on land they occupy to at or below Level 3 on the Guilford Scale.	
45 (g)	Section 9.3 (now Section 9.1)	Table 36 has been replaced with a new funding formula (see draft Plan for details)	

45 (g)	Section 9.3 (Now Section 9.1)	The description and text for the cost allocation and funding rationale has been amended (see draft Plan for details).	
45 (g)	Section 9.4	Due to changes proposed to the cost allocation and funding formula, much of section 9.4 Pest management rates – description has become redundant and has been removed. (See the Funding provisions section in the Staff Report for details).	
		Plan Rule 6.3.4 has been included as outlined in the response to Minute 7.	
45 (h)	Rule 6.3.4	Additional to the matters set out in Minute 7, this includes specifying the date from which publicly funded control operations were undertaken will trigger the compliance with Rule 6.3.4. This was inserted to ensure consistency with Plan Rule 6.3.2 and 6.3.3.	
		A consequential amendment has also been made to Table 4 to change 'Introduced conifer tree' to 'Pest Agent Conifer' and include a definition of 'Pest Agent Conifer'.	
45 (i)		Undertake any minor corrections or drafting clarifications that do not change the effect of any of the regulatory provisions.	
		Footnote 11 has been modified based on feedback from MPI:	
45 (i)	Plan Objective 4, footnote	Wilding conifers are any introduced conifer tree, including (but not limited to) any of the species listed in Table 3 (page 16) established by natural means, unless it is located within a forest plantation, and does not create any greater risk of wilding conifer spread to adjacent or nearby land than the forest plantation that it is a part of.	
	Plan Objective 4,		
45 (i)	Principal measures to be used	'Requirement to act' was included in the Principal measures to be used for Plan Objective 4, based on feedback from MPI.	

		<del>-</del>		
45 (i)	Plan Rule 6.3.1	The explanation of rule 6.3.1 was updated based on feedback from MPI  Over the duration of the Plan, to ensure that new infestations of wilding conifers are prevented at sites where wilding conifers contorta, Corsican, Scots, mountain and dwarf mountain pines, larch and/or any other planted conifer species that have previously been destroyed through publicly funded control operations.		
45 (i)	Plan Rule 6.3.2	A minor change for consistency of wording with Rules 6.3.3 and 6.3.4 was made: on receipt of a written direction from an Authorised Person,		
45 (ii)	Plan Rule 6.3.3, Explanation of rule	A minor change for consistency of wording with all other Explanations of rule sections:  Explanation of the rule		
45 (i)	Plan Objective 7, Alternatives considered	The 'Alternatives considered' element has been removed for Boneseed. This was required to be included in the Proposal document, but had not been removed from the interim draft plan document as this had been for other pests.		
45 (i)	Sections 9.1, 9.2, 9.5	Sections 9.1, 9.2, 9.5 have been removed as these sections are not required to be included in the Plan under the Act.		
45 (i)	Section 2.3.2	Section 2.3.2 has been amended to ensure consistency with section 74(a)(iv) of the Act. The change is as below:  The Plan must not be inconsistent with the Canterbury Regional Policy Statement (RPS) or any regional plan developed in accordance with the RMA.		
45 (i)	Throughout draft Plan document	<ul> <li>The following formatting changes have been applied:</li> <li>Some pest images replaced with high quality images</li> <li>Advice Note column width increased</li> <li>Appendix 3 and 4 reordered to enable easier splitting of the document to remove / upload map section separately (all references to Appendix 3 and Appendix 4 have been updated)</li> <li>Colours changed to Environment Canterbury standard colours.</li> </ul>		

# Changes made in response to submitter comments

Referenced be	Referenced below is the paragraph of Staff Report document				
		Based on feedback from MPI, staff have made the following amendment to Plan Objective 4 (see Staff Report section on MPI's comments for discussion):			
20.	Plan Objective 4	Over the duration of the Plan, progressively contain and reduce by reducing the geographic distribution of and extent of wilding conifers, contorta, Corsican, Scots, mountain and dwarf mountain pines and larch within the Canterbury region to reduce adverse effects on economic well-being and the environment.			
	Plan Rule 6.3.1	Based on feedback from MPI, staff have made the following amendment to Plan Rule 6.3.1 (see Staff Report section on MPI's comments for discussion):			
23.		Over the duration of the Plan, progressively contain and reduce by reducing the geographic distribution of and extent of wilding conifers, contorta, Corsican, Scots, mountain and dwarf mountain pines and larch within the Canterbury region to reduce adverse effects on economic well-being and the environment.			
	Plan Rule 6.3.3, explanation of rule	Based on feedback from MPI, staff have made the following amendment to explanation for Plan Rule 6.3.3 (see Staff Report section on MPI's comments for discussion):			
29.		Over the duration of the Plan, to ensure that the spread of wilding conifers does not cause unreasonable costs to the occupiers of adjoining properties, where wilding conifers, contorta, Scots, mountain and dwarf mountain pines and/or larch have previously been destroyed through control operations on the adjoining property and the adjoining occupier is undertaking active wilding conifer management.			
		The rule is required in addition to Plan Rule 6.3.2 to manage the spread of wilding conifers causing unreasonable costs to an adjacent occupier where active wilding conifer management is being undertaken by that land owner. as the National Policy Direction requires that before a rule can be identified as a good neighbour rule, the Council must be satisfied that the adjacent occupier is taking reasonable measures to manage the pest or its impacts.			

# **Economic Analysis for Russell Lupin**

# 1. Purpose

This report provides an economic analysis for the inclusion of Russell Lupin in the Regional Pest Management Plan. It is prepared in accordance with the requirements of the Biosecurity Act 1993 and the related National Policy Direction for Pest Management 2015 (NPD).

# 2. Description

Russell lupin (*Lupinus polyphyllus*) is an introduced plant that can rapidly establish in braided rivers, wetlands and lake margins. Its seeds remain viable for up to 20 years. Lupins have been actively spread in the Canterbury hill and high country for both their scenic value and as a fodder crop. Russell Lupins adversely affect biodiversity and the natural character of braided rivers.

# 3. Proposed Plan

The Russell Lupin is proposed to be included in the sustained control programme. Wild Russell Lupin is declared a pest and planted Russell Lupin a pest agent. The RPMP rules prohibit planting within 200m of a braided river, 50 metres from a non-braided river and 10 metres from an artificial watercourse or property boundary. It also requires clearance of wild Russell Lupin within these same setbacks.

# 4. Cost Benefit Analysis

### 4.1. Level of analysis

The criteria for determining the level of analysis, as outlined in s6 (1) of the NPD, are:

- 1. Level of uncertainty of impacts and effectiveness of measures
- 2. Stakeholder interest, contention and total costs
- 3. Likely costs relative to benefits
- 4. Level of certainty and quality of data

The level of analysis required is low to moderate. The reasons for this conclusion are summarised in Table 1.

Table 1: Assessment of the level of analysis required.

Criteria	Assessment	Reasons	
1	М	Impacts known, effectiveness greater when in the early intervention phase (which applies to much of Canterbury high country areas).	
2	М	Strongly sought by conservation interests and no strong objection by key land owner representatives (FFNZ, Merino NZ).	
3	М	Strong biodiversity benefits of control are expected to exceed costs. This is in part due to the continuing spread and increasing adverse impacts if not controlled at this point. Control also protects the previous investment made by DOC, community groups and landowners.	
4	L	The impacts are readily described but neither the benefits or the costs are able to be reliably quantified.  Moderate to high level of uncertainty and poor quality of data in regard to known extent and costs of control.	

#### 4.2. Impacts

The impacts of Russell Lupin are outlined in the evidence provided to the RPMP Hearing Panel for the Department of Conservation. In summary, the spread of Russel Lupin in river beds adversely affects the habitat of rare and threatened bird species, lizards, invertebrates and native plants. It also provides cover for predators on these species. Some of these species are endemic to NZ and considerable public investment has been made over many years to protect the habitat by clearing it of weeds and controlling predators. The benefits of this earlier investment are threatened by the spread of Russell Lupin. Although the weed is widely distributed, there remain large areas free of it.

Over time lupins stabilise braided riverbeds, allowing other plant pest species to establish and increase the channelization of the rivers. This change to the natural character adversely affects native fish, which are also a source of food for birds.

Control at this point is intended to avoid these adverse impacts and to prevent or reduce the spread to new areas.

## 4.3. Benefits and Costs of Options

**Do nothing**: This option will result in continuing spread with increasing costs of control in areas of high biodiversity value or a significant loss in biodiversity (if control is not undertaken). The costs of this option are expected to exceed the benefits. A significant risk

with option is that if nothing is done now, future options will be limited by the increased scale of the problem and potentially irreversible biodiversity losses.

**Proposed:** This is the preferred option. It is one of sustained control to reduce the spread to new areas and prevent re-infestation of areas where control has been undertaken. The proposed rules require clearance adjacent to water ways and boundary clearance through Good Neighbour Rules. This level of control is regarded as sufficient to realise significant biodiversity benefits while avoiding the far larger costs of declaring Russell Lupin a pest or requiring more widespread clearance. For these reasons, the benefits are expected to exceed the costs.

No attempt has been made to place a monetary value on the biodiversity benefits as the cost of doing so is prohibitively high and, in the absence of any direct market for biodiversity, the results of such analysis are often contentious.

A risk with this approach is that the proposed measures are insufficient to contain the spread. This may be due to the control work not being undertaken (due to either deliberate non-compliance, ignorance of the requirement or unaware of the presence of the plants) or spread through other sources, including deliberate spread for scenic benefit. Mitigation of this risk is through inspection and monitoring of the outcome over time. Changes can be made to the programme over time if necessary.

Despite the risks of non-compliance or spread through other means, the benefits are still expected to exceed the costs.

**Progressive control or eradication:** This option not preferred at this point as Russell Lupin is widespread and seed remains viable for many years. The costs of progressive containment or eradication would be far higher and the marginal (additional) benefits for biodiversity are low compared with the preferred option. Declaring it a pest would also prevent use as a stock feed. As experience grows with sustained containment the option of moving to progressive containment can be re-evaluated.

There are also benefits from the scenic appearance of Russell Lupin which are valued by some of the community and would be lost if widespread control were undertaken. There is a risk that if the plant is declared a pest and widespread control is undertaken, some people may illegally spread seed.

#### 5. Allocation of costs

#### 5.1. Beneficiaries and exacerbators

The beneficiaries and exacerbators are:

- Beneficiaries are the wider community who will benefit from the biodiversity gains.
- Active exacerbators are anyone who deliberately spreads the plant.
- Passive exacerbators are people with Russell Lupin already on their property and not undertaking control.

#### 5.2. Direct and indirect costs of control

The estimated annual cost of implementation is \$1.6M. There is considerable uncertainty around this estimate and figures provided by the Department of Conservation suggest the cost per ha cost used in this analysis may be high, particularly in terms of maintenance control following the initial knockdown.

Two alternative scenarios demonstrate the sensitivity of this estimate to changes in assumptions. These are shown in table 1. The direct costs are the costs to landowners to control Russell Lupins and the indirect costs are the Council's costs for inspection, monitoring and advocacy. It is assumed that the proposed rules will not result in any significant loss of production for landowners.

Table 1: The cost of implementing the plan

Scenario	Control cost	Council cost	Total Annual cost
Base scenario (7,790ha x \$200/ha)	\$1,557,000	\$50,000	\$1,607,000
Low scenario (5,220ha x \$100/ha)	\$522,000	\$20,000	\$542,000
High scenario (15,570ha x \$300/ha)	\$7,800,000	\$80,000	\$7,880,000

#### 5.3. Recommended allocation of costs

The factors to be considered in allocating the costs are described in Table 2 (below). As Russell Lupin is not declared a pest and the control is only required adjacent to waterways and boundaries where work is being undertaken, it is difficult to target active exacerbators (other than landowners using it as a fodder crop). As landowners with lupin on their properties are passive exacerbators and are well placed to undertake control, it is appropriate that they bear the direct costs of control. As the wider community benefits from biodiversity and maintaining the natural character of braided rivers, the costs of inspection, monitoring and advocacy are appropriately paid by the Council on behalf of the community.

Table 2: Matters for consideration in allocating costs for Russell Lupin

Legislative rights and responsibilities	None known.
Management objectives	Sustained control.
Stage of infestation	Moderate. Widespread infestations but a potentially far larger area remains susceptible.
Most effective control agents	Land holders are most effective because it requires control on their property.
Urgency	Moderate urgency to prevent future spread.

Efficiency and effectiveness	Requiring land holders to control around waterways and boundaries where it is being controlled by neighbours is efficient because it controls only in areas required and does not require more widespread removal. In most circumstances, it is expected to be sufficiently effective to provide the benefits sought.
Practicality of targeting beneficiaries	Beneficiaries are the wider community (for biodiversity benefits) and can be targeted by Council rates.
Practicality of targeting exacerbators	Targeting active exacerbators is difficult except where they are also land owners. Targeting landowners, as passive exacerbators, is readily achievable.
Administrative efficiency	Administratively efficient as control undertaken by landowners. Inspection and, when needed, enforcement, can be undertaken.
Security	The funding mechanisms are secure in that the land owners are responsible for the control and if they do not undertake control, this can be done and monies recovered through legal action, if needed.
Fairness	Charges relate directly to benefits or exacerbators. Fairness is a politically determined judgement.
Reasonable	Costs are regarded as reasonable and discussion with rural representatives indicate these would be acceptable.
Parties bearing indirect costs	None likely.
Transitional cost allocation arrangements	None required.
Mechanisms available	Direct payment for control by landowners can be enforced through the rules in the RPMP or recovered from the land owner if necessary. Council can fund its costs through rates or charges set in accordance with its Long Term Plan.