



Department of Conservation
Te Papa Atawhai

22 March 2018

DOC-5438518

Jono Underwood
Biosecurity Coordinator
Marlborough District Council
PO Box 443
Blenheim 7240

Dear Jono

Marlborough Regional Pest Management Plan Proposal

Please find enclosed a submission by the Director-General of Conservation in respect of the Marlborough Regional Pest Management Plan Proposal.

Please contact Lionel Solly in the first instance if you wish to discuss any of the matters raised in the submission: phone 03 546 3162 or email lsolly@doc.govt.nz.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Roy Grose'.

Roy Grose
Director Operations
Northern South Island

Encl.

Department of Conservation *Te Papa Atawhai*
Whakātu Nelson Office
Private Bag 5, Nelson 7042
www.doc.govt.nz

BIOSECURITY ACT 1993

SUBMISSION ON THE MARLBOROUGH REGIONAL PEST MANAGEMENT PLAN PROPOSAL

TO: Marlborough District Council

SUBMISSION ON: Marlborough Regional Pest Management Plan Proposal
("the Proposed RPMP")

NAME: Director-General of Conservation

ADDRESS: Address for service:

Department of Conservation
Private Bag 5
Nelson 7042

Attn: Lionel Solly

Telephone: 03 546 3162
Email: lsolly@doc.govt.nz

SUBMISSION BY THE DIRECTOR-GENERAL OF CONSERVATION

1. The specific provisions of the Proposed RPMP that my submission relates to are set out in Attachment 1 to this submission.
2. I **seek** the following decisions from the Marlborough District Council:
 - 2.1 That the particular provisions of Proposed RPMP that I support, as identified in Attachment 1, are retained.
 - 2.2 That the actions and amendments, additions and deletions to the Proposed RPMP sought in Attachment 1 are made.
 - 2.3 Further, consequential or alternative relief to like effect to that sought in 2.1 – 2.2 above, and any consequential amendments required as a result of such relief.
3. I wish to be heard in support of my submission, and if others make a similar submission I may consider presenting a joint case with them at the hearing.

ATTENDANCE AND WISH TO BE HEARD AT HEARING(S)

I do wish to be heard in support of my submission.

SIGNATURE

A handwritten signature in black ink, appearing to read 'Roy Grose', written on a light-colored background.

Roy Grose
Director, Operations, Northern South Island

Date 22/03/2018

Pursuant to delegated authority
On behalf of Lewis Sanson
Director-General of Conservation

Note: A copy of the Instrument of Delegation may be inspected at the Director-General's office at Conservation House Whare Kaupapa Atawhai, 18/32 Manners Street, Wellington 6011.

ATTACHMENT 1: MARLBOROUGH REGIONAL PEST MANAGEMENT PLAN PROPOSAL: SUBMISSION BY THE DIRECTOR-GENERAL OF CONSERVATION

The specific provisions that my submission relates to are set out below. My submissions are set out immediately following these headings, together with the reason and the amendments or other actions I seek from the Marlborough District Council.

Unless specified in each submission point my reasons for supporting are that the policies are consistent with the purposes and principles of the Biosecurity Act 1993 and the National Policy Direction for Pest Management Plans and Programmes.

PLAN SECTION REF	MY SUBMISSION IS THAT	AMENDMENTS (OR OTHER ACTIONS) SOUGHT
General comments: Structure and content	<p>Overall the Proposed RPMP is a sound document that is well aligned with the National Policy Direction (NPD) and guidance material.</p> <p>Whilst a lengthy document, the Proposed RPMP follows a logical structure and is easy to read and understand; and the information on each pest species/programme, including trends in infestation levels and effect of previous control, is useful.</p> <p>The Proposed RPMP could benefit from some additional context, e.g. in relation to the main industries and values at risk from pests or their indirect impacts. It may also be helpful to record that the ratepayer base is low, with only one main city of around 24,000 people; and this may be a reason to prioritise and focus on the particular pests that have been identified.</p> <p>Photographs of each pest might also be useful to assist in identification and reporting; however, this information is likely to be more accessible if it is on Council's website, rather than in the Proposed RPMP document.</p>	<p>Retain Proposed RPMP as notified, subject to the amendments sought in the submissions that follow.</p> <p>Include additional context (explanatory text) in relation to the main industries and values at risk from pests or their indirect impacts; and the effect of the region's low ratepayer base on prioritisation of pest species and programmes.</p> <p>Consider including photographs of each pest, to assist in identification and reporting, unless this is best done separately (e.g. on Council website).</p>
General comments: Strategic intent and alignment with other strategic initiatives	<p>The RPMP has a particular statutory function and purpose, and must be prepared in accordance with the Biosecurity Act and NPD. However, it is also desirable that the approach to biosecurity/pest management:</p> <ol style="list-style-type: none">1. has clear strategic intent and SMART objectives (specific, measurable, achievable, relevant and time-bound);2. supports current strategic (regional and cross-regional) initiatives and programmes for the restoration, protection and enhancement of indigenous biodiversity; and3. supports initiatives and programmes that are currently in development, e.g. the Kotahitanga mō te Taiao alliance between DOC, Councils and iwi; and other collaborative landscape-scale projects that may be progressed during the period of	<p>Addressed in submissions on specific sections of the Proposed RPMP, below</p>

PLAN SECTION REF	MY SUBMISSION IS THAT	AMENDMENTS (OR OTHER ACTIONS) SOUGHT
	<p>the RPMP.</p> <p>For both (2) and (3), the agencies and investors involved (both current and potential) require some certainty that gains derived from any specific programme are supported and can be sustained over the longer term.</p> <p>The separate (non-statutory) Biosecurity Strategy is a useful complement to the RPMP in respect of these matters; and to a large extent they will depend on voluntary collaboration between partner organisations, landowners and the wider community. However, the RPMP can provide further strategic direction and a regulatory backstop to support the delivery of programs on the ground.</p>	
General comments: Consistency and alignment of pest management programmes across regional boundaries	<p>The Marlborough region borders the Canterbury, Nelson and Tasman regions; and the Canterbury and Tasman-Nelson Regional Pest Management Plans are also currently under development, albeit at different stages of the statutory process.</p> <p>It is generally beneficial to have consistency in pest management programmes across administrative boundaries; this simplifies compliance for occupiers of land that spans regional boundaries and is more likely to ensure that programme objectives can be met.</p> <p>There are some areas where pest management programmes in the Proposed RPMP are consistent with those of adjoining regions – e.g. in the treatment of broom and gorse in the Upper Wairau Valley, which borders the Howard-St Arnaud control area in the Proposed Tasman-Nelson RPMP. However, a comparison between the Marlborough and Tasman-Nelson RPMPs (Attachment 2) does show a number of differences between the regions, both in terms of the organisms identified as pests, and the pest management programmes that are proposed. A comparable analysis with the proposed Canterbury RPMP has not yet been done.</p> <p>Some of these differences may be justified and/or of little consequence. However, any inconsistencies that are likely to impact on work programs across regions should be identified and if possible resolved.</p>	Identify any inconsistencies between the proposed RPMPs for Marlborough, Canterbury and Tasman-Nelson that are likely to impact on work programs across regions; and work with the neighbouring regional council(s) to resolve these inconsistencies, if possible.
4.3.2 Road reserves	Weed species (some of which are included in the Proposed RPMP, others which are not) can be introduced or spread as a result of road works, either through the transportation and use of river gravels at the site or dirty machinery, with weed seed carried in/on both.	Work with Marlborough Roads to manage emergent weed issues associated with road works.

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	<p>Section 4.3.2 details who is responsible to control the subjects of the Proposed RPMP on road reserves. Ideally this should be wider in scope and cover weeds like wattle, to prevent or mitigate future weed problems. If each work site is visited early enough, control of any weed species present is quick, easy and inexpensive.</p> <p>I would also encourage Council to consider implementation of a pathway management plan for weeds that are transported in gravel/hardcore used for roading etc, where management controls at the point of extraction and sorting (quarries, river-bed extraction sites) would reduce the spread of pest weeds through the region.</p>	<p>Undertake cost-benefit analysis for a pathway management plan for weeds that are transported in gravel/hardcore used for roading etc, where management controls at the point of extraction and sorting (quarries, river-bed extraction sites) would reduce the spread of pest weeds through the region. Include this programme in the RPMP if it is found to be feasible and cost-effective</p>
5 Relationship with the National Policy Direction (NPD)	Overall the Proposed RPMP is well aligned with the National Policy Direction (NPD) and guidance material.	
6 The subjects of this Proposal	<p>Comments on particular pest organisms identified in Table 2, and the proposed management programmes, are given below.</p> <p>In addition to the subjects currently listed in Section 6, Table 2, I submit that the following species should be included in the Proposed RPMP:</p> <ul style="list-style-type: none"> • Plague skink <i>Lampropholis delicata</i>: Eradication / Exclusion programme • Koi carp <i>Cyprinus carpio</i>: Exclusion programme • Gambusia <i>Gambusia affinis</i>: Exclusion programme • Brown bullhead catfish <i>Ameiurus nebulosus</i>: Exclusion programme • Rudd <i>Scardinius erythrophthalmus</i>: Exclusion / Eradication programme • Perch <i>Perca fluviatilis</i>: Exclusion programme • Tench <i>Tinca tinca</i>: Exclusion programme (for parts of district where not present) <p>Koi carp, Gambusia, Catfish, Rudd, Perch and Tench are currently identified as ‘pest fish’ in Marlborough (www.marlborough.govt.nz/environment/biosecurity/other-pests/pest-fish); but were not pest species declared under Council’s Regional Pest Management Strategy, with dedicated management programmes.</p> <p>Additional information on these species is given in Attachment 3.</p> <p>There are several pest species referenced in the proposed Tasman-Nelson RPMP that are not listed in the Proposal for Marlborough. A comparable analysis with the Canterbury</p>	<p>Add the following species to the list of subjects to be managed within the RPMP for Marlborough:</p> <ul style="list-style-type: none"> • Plague skink <i>Lampropholis delicata</i>: Eradication / Exclusion programme • Koi carp <i>Cyprinus carpio</i>: Exclusion programme • Gambusia <i>Gambusia affinis</i>: Exclusion programme • Brown bullhead catfish <i>Ameiurus nebulosus</i>: Exclusion programme • Rudd <i>Scardinius erythrophthalmus</i>: Exclusion / Eradication programme • Perch <i>Perca fluviatilis</i>: Exclusion programme • Tench <i>Tinca tinca</i>: Exclusion programme (for parts of district where not present). <p>Identify any inconsistencies between the proposed RMPs for Marlborough, Canterbury and Tasman-Nelson that are likely to impact on work programs across regions; and work with the neighbouring regional council(s) to resolve these inconsistencies, if possible.</p>

PLAN SECTION REF	MY SUBMISSION IS THAT	AMENDMENTS (OR OTHER ACTIONS) SOUGHT
	RPMP proposal has not yet been done. As noted above, any inconsistencies that are likely to impact on work programs across regions should be identified and if possible resolved.	
7 Programmes	<p>The choice of management programme – and the specific objective – should be informed by the values to be protected or at risk, the pests that impact on the values, the area affected (or potentially affected), the level to which the pest must be controlled to manage impacts to an acceptable level, and an analysis of the benefits and costs that satisfies the requirements of the NPD.</p> <p>More detailed comments on particular pest management programmes are given below; but in general – and focussing particularly on those pests that threaten biodiversity and conservation values – I support the choice of pest management programmes in the Proposed RPMP, and the specific objectives for those programmes.</p> <p>I note that the Proposed RPMP does not include any ‘site-led’ management programmes (although the programmes for Brushtail possums and Willow-leaved hakea are similar in effect). Site-led programmes could be considered for (other) defined places/sites where values are being (or may be) adversely affected by one or more pest species, and where site-led management is an appropriate and cost-effective option to protect those values. E.g. the Upper Wairau (currently identified in the programmes for broom and gorse) could be the subject of a site-led programme to manage a wider range of river bed weeds (see Attachment 4).</p>	<p>Retain programmes and objectives as proposed, subject to the amendments sought in these submissions.</p> <p>Evaluate potential to use site-led management programmes for defined places/sites (e.g. the Upper Wairau Valley). Identify preferred course of action for bringing such programmes into the RPMP, if they are an appropriate and cost-effective option.</p>
7 Programmes 7.3 Boneseed 7.5 Brushtail possum 7.7 Cathedral bells 7.10 Climbing spindleberry 7.16 Evergreen buckthorn 7.20 Madeira vine 7.22 Moth plant 7.34 Spartina	<p>As part of the development of the 2007 Regional Pest Management Strategy (RPMS), the Council and DOC developed a joint initiative that related to the implementation of a number of species-led programmes (primarily in the Sounds). This joint initiative was drafted into the 2007 RPMS and the programmes have progressed operationally to this day.</p> <p>The Proposed RPMP provides for the continuation of these programmes, with costs allocated across both the regional community (Council) and DOC. I support the inclusion of these programmes, and a Memorandum of Understanding between Council and DOC is currently being drafted to set out the arrangements for their implementation as joint initiatives.</p>	<p>Retain these programmes run as joint initiatives between Council and DOC</p> <p>Amend wording used in specific programmes as follows:</p> <ul style="list-style-type: none"> 7.5 Brushtail possums: Under ‘principle measures to achieve the objective’, item 1(b), change the word ‘control’ to ‘destroy’ (or ‘eradicate’). Under Rule 7.5.2.1, change ‘within 5 working days’ to ‘within 24 hours’ 7.10 Climbing asparagus: Under ‘principle measures to achieve the objective’ change item (1) to read ‘Inspection by Council, <u>in conjunction with the Department of Conservation</u>, may include staff or

PLAN SECTION REF	MY SUBMISSION IS THAT	AMENDMENTS (OR OTHER ACTIONS) SOUGHT
	<p>The specific pest programmes that this applies to are:</p> <ul style="list-style-type: none"> • Boneseed • Brushtail possum (Islands) • Cathedral bells • Climbing spindleberry • Evergreen buckthorn • Madeira vine • Moth plant • Spartina <p>Some minor amendments to the wording used in specific programmes are requested as follows:</p> <ul style="list-style-type: none"> • 7.5 Brushtail possums: Under 'principle measures to achieve the objective', item 1(b), change the word 'control' to 'destroy' (or 'eradicate'). Under Rule 7.5.2.1, change 'within 5 working days' to 'within 24 hours' (it is preferable to find out about a possible island incursion as soon as possible). • 7.10 Climbing spindleberry: Under 'principle measures to achieve the objective' change item (1) to read 'Inspection by Council, <u>in conjunction with the Department of Conservation</u>, may include staff or contractors: ...' • 7.20: Madeira vine: 'Proposed allocation of costs' should record that costs have been allocated across both the regional community (Council) and the Department of Conservation (to reflect preceding table). • 7.34 Spartina: Under 'costs of each option' (Eradication), change DOC's contribution from \$55,000 to \$33,000, and change the total annual cost from \$77,000 to \$55,000 	<p>contractors: ...'</p> <ul style="list-style-type: none"> • 7.20 Madeira vine: amend 'proposed allocation of costs' to record that costs have been allocated across both the regional community (Council) and the Department of Conservation • 7.34 Spartina: Under 'costs of each option' (Eradication), change DOC's contribution from \$55,000 to \$33,000, and change the total annual cost from \$77,000 to \$55,000
<p>7 Programmes</p> <p>7.11 Contorta pine</p> <p>7.12 Corsican pine</p> <p>7.15 European larch</p> <p>7.23 Mountain pine</p> <p>7.32 Scots pine</p> <p>7.37 Western white pine</p> <p>7.39 Wilding conifers</p>	<p>Submissions and comments in respect of wilding conifers are appended as Attachment 5.</p>	<p>Refer to Attachment 5</p>

PLAN SECTION REF	MY SUBMISSION IS THAT	AMENDMENTS (OR OTHER ACTIONS) SOUGHT
7 Programmes 7.14 Eel grass 7.25 Parrot's feather 7.26 Purple loosestrife 7.33 Senegal tea	I support the inclusion of these pest species to be managed under the Sustained Control (Eel grass, Parrot's feather, Purple loosestrife) and Exclusion (Senegal tea) programmes	Retain programmes for these species as proposed
7 Programmes 7.30 Rough horsetail	I understand that rough horsetail is also a threat to agriculture (the Horizons RPMP proposal states that it 'Has the capability to seriously affect pastoral productivity'), and this should be recognised	Amend information on 'why it is a threat' and 'impacts' to include effects on pastoral productivity.
8 Monitoring	<p>Council has had an effective monitoring programme in respect of pests included in the current Regional Pest Management Strategy; and the benefits of this are illustrated in the information on current situation and trends included in the Proposed RPMP.</p> <p>It is important that monitoring and surveillance continue; and the monitoring section of the RPMP should be supported by a more detailed monitoring/surveillance plan covering each pest (or group of pests). I accept that this level of detail may not be appropriate within the RPMP itself and is more likely to be incorporated in the Operational Plan (referenced in this section).</p> <p>The RPMP – or the more detailed monitoring/surveillance plan – should also address how the Council will monitor and if necessary enforce landowners/occupiers' compliance with the rules in the RPMP.</p>	Prepare a more detailed monitoring/surveillance plan to support this section of the Proposed RPMP.
10 Powers conferred	This is a useful summary of the powers that may be conferred to authorised persons under Part 6 of the Act.	Retain as proposed
Glossary	The Glossary includes some terms that do not appear to be used in the Proposed RPMP (e.g. 'Biological Control' (footnotes only), 'Crown Land', 'Means of Achievement', 'Organic Material', 'Pest Agent', 'Restricted Place' and 'Unwanted Organism'), and these references could therefore be deleted.	Delete unnecessary terms (those not used in RPMP)

ATTACHMENT 2:

COMPARISON BETWEEN PEST MANAGEMENT PROGRAMMES IN PROPOSED REGIONAL PEST MANAGEMENT PLANS FOR MARLBOROUGH AND TASMAN-NELSON

	Marlborough			Tasman/Nelson		
Name	Management Programme	GNR	Notes / Restrictions	Management Programme	GNR	Notes / Restrictions
African feather grass	Sustained control			Eradication		
Banana passion vine	-			Progressive containment		Golden Bay-Riwaka, Upper Buller
Bathurst bur	Sustained control			Eradication		
Blackberry	-			Sustained control		Boundary rule only
Black spot	-			Sustained control		Boundary rule only
Bomarea	-			Progressive containment		
Boneseed	Sustained control		Joint initiative between MDC & DOC	Eradication		Outside Port Hills
Boxthorn	-			Eradication		
Broom	Sustained control	Yes	Separate objectives/ rules for Upper Awatere Broom Control Zone, Middlehurst Gorge Containment Area, Upper Wairau Broom and Gorse Control Zone, Upper Wairau Broom and Gorse Containment Area, Waima/Ure Broom and Gorse Control Zone, and remainder of district	Sustained control		Sustained control in Howard St Arnaud area; Boundary rule only outside Howard-St Arnaud area
Brushtail possum	Exclusion		Possum-free islands in Marlborough Sounds; Joint initiative between MDC & DOC	Site-led		Waimea Estuary

	Marlborough			Tasman/Nelson		
Name	Management Programme	GNR	Notes / Restrictions	Management Programme	GNR	Notes / Restrictions
Bur daisy	Eradication			-		
Cathedral bells	Sustained control		Joint initiative between MDC & DOC	Eradication		
Chilean needle grass	Sustained control			Exclusion		
Chinese pennisetum	Sustained control			Progressive containment		
Chocolate vine	-			Progressive containment		
Climbing asparagus	-			Progressive containment		Eastern Golden Bay
Climbing spindleberry	Eradication		Joint initiative between MDC & DOC	Eradication		
Codling moth	-			Sustained control		Boundary rule only
Contorta pine	Sustained control		Emphasis is on collaborative programmes; no rules in RPMP (except that for wilding conifers)	-		
Corsican pine	Sustained control		Emphasis is on collaborative programmes; no rules in RPMP (except that for wilding conifers)	-		
Darwin's barberry	-			Site-led		St Arnaud Village
Eel grass	Sustained control			-		
Egeria	-			Eradication		
Entire marshwort	-			Eradication		
European canker	-			Sustained control		Boundary rule only
European larch	Sustained control		Emphasis is on collaborative programmes; no rules in RPMP (except that for	-		

	Marlborough			Tasman/Nelson		
Name	Management Programme	GNR	Notes / Restrictions	Management Programme	GNR	Notes / Restrictions
			wilding conifers)			
Evergreen buckthorn	Sustained control		Joint initiative between MDC & DOC	-		
Feral cats	-			Site-led		Waimea Estuary
Feral rabbits	Sustained control			Eradication		Golden Bay
Ferrets	-			Site-led		Waimea Estuary
Fireblight	-			Sustained control		Boundary rule only
Gambusia	-			Eradication		DOC responsible party
Giant buttercup	-			Sustained control		Boundary rule only
Giant needle grass	Sustained control			-		
Gorse	Sustained control	Yes	Separate objectives/ rules for Upper Awatere Gorse Control Zone, Upper Wairau and Waima/Ure Broom and Gorse Control Zones, and remainder of district	Sustained control		Sustained control in Howard St Arnaud area; Boundary rule only outside Howard-St Arnaud area
Greater bindweed	-			Site-led		St Arnaud Village
Gunnera	-			Progressive containment		
Himalayan balsam	-			Eradication		
Holly	-			Site-led		St Arnaud Village
Hornwort	-			Exclusion		
Indian myna	-			Exclusion		
Indian ring-necked parakeet	-			Eradication		
Kangaroo grass	Sustained control			-		
Knotweeds	-			Progressive containment		

	Marlborough			Tasman/Nelson		
Name	Management Programme	GNR	Notes / Restrictions	Management Programme	GNR	Notes / Restrictions
Koi carp	-			Exclusion		DOC responsible party
Lagarosiphon	-			Sustained control		
Madeira vine	Sustained control		Joint initiative between MDC & DOC	Eradication		
Mediterranean fanworm (Sabella)	Exclusion			Sustained control		
Moth plant	Sustained control			-		
Mountain pine	Sustained control		Emphasis is on collaborative programmes; no rules in RPMP (except that for wilding conifers)	-		
Nasella tussock	Sustained control			Progressive containment / Sustained control		Progressive containment outside Cape Soucis area; Sustained control in Cape Soucis area
Nodding thistle	-			Sustained control		Boundary rule only
Old man's beard				Progressive containment		Golden-Bay-Riwaka, Upper Buller
Parrots feather	Sustained control			-		
Perch	-			Eradication		DOC responsible party
Phragmites	-			Exclusion		
Powdery mildew	-			Sustained control		Boundary rule only
Purple loosestrife	Sustained control			Progressive containment		
Queensland poplar	-			Progressive containment		
Ragwort	-			Sustained control		Boundary rule only
Red-eared slider turtle	-			Eradication		
Reed sweet grass	Sustained control			Progressive containment		
Rooks	Exclusion			Exclusion		

	Marlborough			Tasman/Nelson		
Name	Management Programme	GNR	Notes / Restrictions	Management Programme	GNR	Notes / Restrictions
Rough horsetail	Sustained control			-		
Rowan	-			Site-led		St Arnaud Village
Rudd	-			Eradication		DOC responsible party
Russell lupin	-			Site-led		St Arnaud Village
Saffron thistle	Sustained control			Eradication		
Scots pine	Sustained control		Emphasis is on collaborative programmes; no rules in RPMP (except that for wilding conifers)	-		
Senegal tea	Exclusion			Exclusion		
Spartina	Eradication		Joint initiative between MDC & DOC	Eradication		DOC responsible party
Stoats	-			Site-led		Waimea Estuary
Sycamore	-			Site-led		St Arnaud Village
Taiwan cherry	-			Site-led		NE Nelson city
Tall wheat grass	Sustained control			-		
Tench	-			Eradication		DOC responsible party
Variegated thistle	-			Progressive containment		
Velvet leaf	-			Exclusion		
Wallabies	Exclusion			Exclusion		
Weasels	-			Site-led		Waimea Estuary
Western white pine	Sustained control		Emphasis is on collaborative programmes; no rules in RPMP (except that for wilding conifers)	-		
White-edged nightshade	Sustained control			Progressive containment		

	Marlborough			Tasman/Nelson		
Name	Management Programme	GNR	Notes / Restrictions	Management Programme	GNR	Notes / Restrictions
Wild ginger	-			Progressive containment		Golden Bay-Kaiteriteri
Wild kiwifruit	-			Eradication		
Wilding conifers	Sustained control		Emphasis is on collaborative programmes. Rule requiring occupiers to destroy wilding conifers only applies to land within a Collaborative Wilding Conifer Programme Area, upon written notification that the programme has ceased and/or met the objectives	Site-led		Mt Richmond Forest park, Abel Tasman National Park, Nelson Lakes National Park (areas to be defined)
Willow-leaved hakea	Eradication		Rangitoto ki te Tonga/D'Urville Island	-		
Woolly nightshade	Sustained control			Progressive containment		Golden Bay
Yellow bristle grass	-			Sustained control		Golden Bay and Upper Buller
Yellow flag	-			Progressive containment		
Yellow jasmine	-			Progressive containment		

ATTACHMENT 3: ADDITIONAL INFORMATION ON PEST SPECIES MENTIONED IN SUBMISSION

Plague skink

The plague skink, sometimes known as rainbow skink, is a small lizard introduced to New Zealand from Australia. Plague skinks are able to reach high population densities in a relatively short time, potentially competing with our native lizard species for food, habitat and space. Plague skinks were first recorded in Auckland during the 1960s, probably arriving accidentally in cargo. Since then, they have steadily expanded their range through the North Island and are currently found from Northland to Waikato and the Bay of Plenty, with outlying populations at Whanganui, Palmerston North and Foxton Beach. They were not thought to be present or established in the South Island but have recently been identified at sites in Waikawa and Riverlands. Eradication of these populations would be the most desirable objective, if feasible; but otherwise an Exclusion programme should be included in the RPMP in relation to offshore islands, to protect their important values.

Invasive fish

Invasive fish species have a limited distribution in South Island waterways. Marlborough District waterways remain almost free of invasive fish and continued effort is needed to prevent populations establishing here.

The key negative impacts invasive fish have on waterways include:

- Competition for native and sports fish for food and habitat
- Predation of freshwater invertebrates, fish eggs and larvae
- Reduction of water quality (particularly increased turbidity)
- Local eradication of important macrophyte species

The following species are proposed to be included in the Marlborough District RPMP.

Koi carp (*Cyprinus carpio*)

Status: unwanted organism (Biosecurity Act 1993). Noxious fish (Freshwater Fisheries Regulations 1983).

There are no records for koi carp in the Marlborough District (New Zealand Freshwater Fish Database – accessed via DOCgis (13/03/18)). Populations detected in the Nelson region were eradicated in 2001–03. Koi carp have been included in the proposed Tasman-Nelson RPMP and are to be managed under an Exclusion Programme (responsible party—DOC).

Support as an 'Exclusion Programme' pest in the Proposed RPMP. The focus should be preventing koi carp from becoming established in Marlborough District waterways, and if populations are detected,

then all efforts should be taken to eradicate them.

Gambusia (*Gambusia affinis*)

Status: unwanted organism (Biosecurity Act 1993).

There are no records for gambusia in the Marlborough District (New Zealand Freshwater Fish Database – accessed via DOCgis (13/03/18)). In the South Island gambusia are only known to be present from a few sites in the Nelson Region and these populations are subject to an eradication programme. Gambusia have been included in the proposed Tasman-Nelson RPMP, to be managed under an Eradication Programme (responsible party—DOC).

Support as an 'Exclusion Programme' pest in the proposed Marlborough District RPMP. The focus should be preventing gambusia from becoming established in Marlborough District waterways, and if populations are detected, then all efforts should be taken to eradicate them.

Brown bullhead catfish (*Ameiurus nebulosus*)

Status: no legal status in New Zealand. However, under the Fisheries (Amateur Fishing) Regulations 2013 catfish must be killed on capture, and under the Fisheries (Commercial Fishing) Regulations 2001 live sale is prohibited.

There are no records for brown bullhead catfish in the Marlborough District (New Zealand Freshwater Fish Database – accessed via DOCgis (13/03/18)). In the South Island, catfish have been identified in Lake Mahinapua (West Coast), and there are historical records for Canterbury, but surveys have yet to detect them.

Support as an 'Exclusion Programme' pest in the Proposed RPMP. The focus should be on preventing brown bullhead catfish from becoming established in Marlborough District waterways and if populations are found, taking all efforts to eradicate them.

Rudd (*Scardinius erythrophthalmus*)

Status: noxious fish (Freshwater Fisheries Regulations 1983). Sports fish in Auckland/Waikato Fish and Game region (Freshwater Fisheries Regulations 1983).

There has been one known detection of rudd in the Marlborough District, in the Taylor Dam ([New Zealand Invasive Fish Management Handbook](#)). Efforts were made to eradicate this population and are thought to have been successful.

Elsewhere in the South Island:

- The proposed Tasman-Nelson RPMP has listed rudd to be managed under an Eradication

Programme (responsible party—DOC).

- Rudd are known to be present in certain Canterbury waterways and are subject to a control programme led by the DOC Mahaanui Office.
- One population of rudd is known to be present on the West Coast.

The focus should be on preventing rudd from becoming established in Marlborough District waterways and, if populations are found, eradicating them. This species would therefore be subject to an Exclusion pest management programme (if the previously known incursion has been eradicated) or an Eradication programme (if not).

Perch (*Perca fluviatilis*) and tench (*Tinca tinca*)

Status: both are sports fish (Freshwater Fisheries Regulations 1983) and managed by Fish and Game.

There are no records for perch in the Marlborough District (New Zealand Freshwater Fish Database—accessed via DOCgis (13/03/18)), but tench have been found in the Taylor Dam. Attempts by DOC and Council to eradicate this population were unsuccessful, and the programme was discontinued.

Perch and tench are known to be present in other South Island waterways:

- Tench have been detected in waterways within the Nelson Region. The proposed Tasman-Nelson RPMP has listed perch and tench to be managed as eradication programmes (responsible party—DOC).
- Tench are present in a few Canterbury and North Otago (coastal sites) waterways.
- Perch are present in Canterbury, Otago and Southland waterways.
- Perch are also established on the West Coast but tench are not known from the region.

Both species are currently identified as 'pest fish' in the Marlborough District (www.marlborough.govt.nz/environment/biosecurity/other-pests/pest-fish); but were not pest species declared under Council's Regional Pest Management Strategy, with dedicated management programmes.

Support as 'Exclusion Programme' pests in the Proposed RPMP. The current focus should be on preventing perch from becoming established within the district; and from preventing tench from becoming established in other waterbodies within the district (beyond the Taylor Dam).

ATTACHMENT 4: ADDITIONAL INFORMATION ON WEED MANAGEMENT IN UPPER WAIRAU VALLEY

Wairau Riverbed, upstream of Wash Bridge

In the Wairau riverbed, DOC works with LINZ (administrators of the riverbed) to provide control of weeds. The weeds of concern are broom, gorse, wilding conifers, tree lupin, crack and grey willow, brush wattle, Californian poppy and Spanish heath. Control of woody weeds on the active riverbed is important for maintaining river bird nesting habitat, and for retaining the wild and scenic braided river environment.

		Notes on control rationale and distribution
Broom	<i>Cytisus scoparius</i>	Containment control. Sparse upstream from Bushcamp stream confluence, common downstream
Gorse	<i>Ulex europaeus</i>	Containment control. Sparse upstream from Bushcamp stream confluence, occasional downstream
Wilding Douglas fir	<i>Pseudotsuga menziesii</i>	Common downstream of Bull Paddock stream confluence
Wilding contorta pine	<i>Pinus contorta</i>	Occasional downstream of Bull Paddock stream confluence
Wilding radiata pine	<i>Pinus radiata</i>	Common downstream of Bull Paddock stream confluence
Tree lupin	<i>Lupinus arboreus</i>	Preventing spread upriver. Currently confined to riverbed. Maintaining river bird breeding habitat. Controlled Dip Flat to Bull Paddock stream confluence. Extensive cover of river islands downstream of Bull Paddock.
Crack willow	<i>Salix fragilis</i>	Preventing establishment. Adults and wildings under control upstream of Bull Paddock stream confluence.
Grey willow	<i>Salix cinerea</i>	Occasional downstream of Six Mile stream. Young plants are controlled when seen
Brush wattle	<i>Paraserianthes lophantha</i>	Preventing spread upriver. Occasional near Wash Bridge.
Spanish heath	<i>Erica lusitanica</i>	Occasional downstream of Dip Flat

Red Hills

The Red Hills is a nationally significant ecosystem and is home to a suite of threatened plants that are reliant on the special soil environment of ultramafic rocks.

Most of the conservation management work in the Red Hills is focused on controlling wilding conifers, principally *Pinus contorta* and Douglas fir. The aim of control is to prevent wilding trees from reaching coning age. Seed rain from Douglas fir plantations nearby is an exacerbator and results in requirement for ongoing control to prevent the Red Hills flanks changing, over time, into Douglas fir forest.

Broom and gorse patches are controlled every year either from the air or on foot, in conjunction with the wilding conifer work.

Current broom and gorse containment area, Upper Wairau

DOC supports the continued control of broom and gorse upstream of the Wash Bridge. There are conservation benefits for the Wairau riverbed, and for the ultramafic glacial gravel slopes of the south eastern Red Hills. Both these environments are highly susceptible to invasion by broom and gorse.

Red Hills

It is important to prevent broom and gorse establishment on the Red Hills because, in addition to excluding the unusual plant communities by taking up their space, broom and gorse are nitrogen fixers and have the potential to change the soil environment of the ultramafic soils. Scattered patches of broom and gorse are regularly seen and controlled on the lower slopes. The vector for spread is assumed to be birds known to carry broom seed (such as quail), and goats and pigs which are occasional in the area.

Wairau Riverbed

A significant amount of resource goes into controlling broom in the Wairau riverbed, and control efforts over the last 10 years have diminished broom and gorse in the Wairau, upstream of the Six Mile stream confluence. Upstream of roughly the Bull Paddock stream confluence the persistent broom sites are well-known and not many plants are found outside these known sites each season. In the stretch between Bull Paddock and Six Mile streams, broom is commonly found but has been reducing in abundance each year.

In the Wairau riverbed downstream of the Six Mile creek confluence, broom has been increasing rather than diminishing over recent years. Our control efforts in the riverbed have prevented the weed seeding in the riverbed but there are numerous new plants every year. It is clear that re-infestation is not coming from within the Wairau riverbed, but from the tributary streams that feed it. This is documented in numerous seasonal control reports provided over the past 15 years. Staff undertaking the control for the past decade believe that erosion of riverbanks holding broom seed in the soil, and broom plants overhanging the Six Mile and Stoney Creeks (and their tributaries) in forestry land, are the sources of new broom seed in the main Wairau riverbed.

Relating to the new RPMP names and descriptions, we would support a Progressive Containment Programme or a Site-led Programme for broom and gorse above the Wash Bridge.

If broom and gorse control is to continue in the riverbed above the Wash Bridge, we would like to see the following measures for reducing the re-infestation potential to public land:

1. **Requiring plantation forestry managers and landowners to control all broom and gorse in young plantation forest.** Currently broom and gorse control enforcement in production forestry is only applied to plants along forestry boundaries. When forestry blocks are logged and until the canopy of a replacement crop is closed, are obvious danger times for an escalation of broom and gorse, and it is during these times that effective control of broom and gorse by private land managers and owners is be important to help prevent spread to the adjacent Red Hills.
2. **Requiring forestry managers and landowners to control broom and gorse up to 10m from waterways in closed-canopy production forestry.** Currently there is re-infestation of the main Wairau riverbed coming from broom and (to a lesser extent) gorse in private forestry land surrounding Six Mile and Stoney creeks, we believe that if plants overhanging waterways were eliminated the seed input would be greatly reduced, perhaps solving this problem.

Tree lupin control in the Upper Wairau riverbed

Control of tree lupin in the Wairau riverbed between a point 1km downstream of Dip Flat, and Bull Paddock Creek confluence, has been carried out by DOC staff each summer since 2008. We are seeing good success with this programme and could apply the control methods developed to a wider area if funding allowed.

During the 2000's, tree lupin invaded the Wairau riverbed from downstream. The mechanism for the seed moving against the flow of water is unknown but we suspect it involves wind. This perennial shrub is now dominant over most of the riverbed islands below the Bush Paddock stream confluence.

It is rare above the wash bridge, to see a yellow lupin plant outside the riverbed gravels. This species is confined at present to the riverbed system.

In order to retain river bird nesting habitat and to prevent the lupin from spreading upstream and reaching the Wairau headwaters and Molesworth, a DOC-funded weed control programme has been steadily pushing the lupin distribution back down the river. The control programme is now in its 9th year and involves aerial boom spraying of lupin under a resource consent held by LINZ, with ground-work follow-up to ensure that no seeding plants are left. Restricted levels of funding mean that this work ends at the Bush Paddock stream confluence. Downstream of this point the riverbed becomes much wider and would involve a lot more work. Each year at least \$6500 is spent on helicopter boom spraying, \$1200 on herbicides and approximately 100 hours of staff labour. Brief investigations into biocontrol possibilities showed that there are no effective biocontrols available for tree lupin.

The control work is carried out in December and January, to avoid disturbing any river bird nesting.

The 15km stretch of Wairau riverbed between Bull Paddock Stream and the Wash bridge is now supporting a very solid start of what we suppose will become a complete coverage of tree lupin, but we are successful in keeping the riverbed upstream of this point clear of this weed.

The longevity of lupin seed combined with the frequent turn-over of river gravels has meant that we have had a new crop of lupin every year across the control area. Staff have noted a reduction in numbers of new plants particularly in the upper reaches over the last three or four summers, and last summer were able to concentrate the aerial operation to the most downstream of the infestation, because the upper reaches could be dealt with solely from the ground. In the coming summer staff hope to be able to control tree lupin without the need for aerial spraying upstream of Chinaman stream.

DOC would support the introduction of a Site-led programme for lupin control in the Wairau riverbed, upstream of the confluence with Bull Paddock stream.

Wilding conifers

There is a wilding conifer problem on both the Wairau riverbed and on the Red Hills. There is a need to reduce the amount of Douglas fir and Pinus contorta seed in the Upper Wairau environment. We support measures that encourage landowners and public land managers to communicate and work together towards a solution for this issue, including the appropriate use of planning controls to regulate future plantations.

Summary of recommendations:

- Continue with a broom and gorse containment area or similar.
- Require control of all broom and gorse in forestry operations, or at least within 10m of a land boundary or watercourse that enters the Wairau, or where there is not a closed forest canopy (in recently logged and newly-planted forestry)
- Introduce a site led control programme for tree lupin in the Upper Wairau (upstream of Bull Paddock Stream confluence)

ATTACHMENT 5: SUBMISSIONS AND COMMENTS ON WILDING CONIFER PROGRAMMES

Background

Marlborough is one of the more prone regions of New Zealand for wilding conifer invasion. Existing infestations occur in and around Mt Richmond Forest Park, Molesworth Station, Branch Leatham catchment and Raglan Range, the Wye catchment, and the Marlborough Sounds. There is wilding conifer spread throughout the region of radiata pine and Douglas fir from plantation forests woodlots and shelterbelts. Wilding conifer spread will be occurring at many sites where there is low grazing pressure and insufficient control is carried out. The impacts of wilding conifers, and control costs, will increase over time.

Regional Councils, DOC, LINZ and MPI have prepared guidance material for inclusion of rules in Regional Pest Management Plans. These guidelines were prepared by MPI in April 2016. The purposes were to provide consistency in RPMP's and to help implement the NZ Wilding Conifer Management Strategy 2015 – 2030.

Species-specific programmes

7.11 Contorta pine, 7.12 Corsican pine, 7.15 European larch†, 7.23 Mountain pine, 7.32 Scots pine, 7.37 Western white pine

† Note that all species of larch and hybrids are currently invasive, and this should be reflected in the programme for this species (and in Table 2 of the Proposed RPMP).

The threats and impacts associated with wilding conifers are generally summarised well in the Proposed RPMP. However, the assessments of economic impacts tend to focus on costs associated with reduction of land area available for extensive grazing and do not consider indirect economic costs associated with reduction in water yield – which can impact on downstream abstractive users and recreational values. The estimate of 433,259 hectares (39% of the land area) being a high or very high vulnerability to wilding conifer invasion will impact water yields if grassland is replaced by conifer forest. There is also a loss of landscape values and costs around managing fire risk.

These indirect impacts/costs mean that there should also be more beneficiaries (persons are likely to benefit from wilding conifer control). For example, ECAN's analysis of costs and benefits identified water users as receiving 50% of the benefits of the wilding conifer control.

The objective for each of these programmes is to “*ensure the ongoing control of [species] within the Marlborough region in order to minimise adverse effects on the environment, enjoyment of the natural environment and economic wellbeing*”. The principle measures to achieve these objectives are a

combination of collaborative programs (which sit outside the Proposed RPMP), property inspections, education and advocacy. Some programmes (e.g. for western white pine) also state that land owners and/or occupiers or other persons may be required to act where rules or statutory obligations dictate that pests are to be destroyed, the presence of pests is to be reported, or pests are not to be spread; however, the programmes do not include any such rules.

I am not convinced that the measures included in the Proposed RPMP, and reliance on collaborative programs outside the RPMP, will achieve the stated objectives for these species. It will be a high risk if the starting point is some years away and nationally-funded collaborative programmes do not eventuate.

So far there is only one MPI-funded collaborative program, for the Tarndale area of Molesworth station. Relying on voluntary efforts and the efforts of bodies such as the South Marlborough Landscape Restoration Trust and Marlborough Sounds Restoration Trust, outside the national program, is high risk. The four-year \$16m MPI funding package is fully allocated and the only management unit to be funded in Marlborough (Molesworth) is only partly funded. Any funding after this funding packages finishes in 2019/20 is subject to another successful budget proposal. Even if new funding becomes available from 2020/21 there is no surety that any Managements Units in Marlborough will be provided funding. There is a high probability that wilding conifers will continue to spread throughout Marlborough making sustained control difficult to achieve.

Under 'costs of each option', costs for Sustained Control vary from \$0 (e.g. European larch) to \$500 a year (e.g. contorta pine); and costs on effects on values is expected to be insignificant. These costs assume substantial funding for collaborative wilding conifer programmes outside the RPMP. However, under the 'no RPMP' option (with no programme or funding) the cost of effects on values is low but increases exponentially over time.

I submit that the level of funding proposed for these programmes, and reliance on collaborative initiatives outside the RPMP, is unlikely to achieve sustained control; and that costs will increase exponentially over time.

Amendments (or other actions) sought:

1. Amend programme 7.15 (European larch) and Table 2 to include all species of larch and hybrids.
2. Review information on costs and beneficiaries to account for indirect impacts of wilding conifers, e.g. on water yield.
3. Review costs/benefits of wilding conifer programmes in the absence of collaborative initiatives outside the RPMP.

4. Amend Proposed RPMP to provide appropriate regulatory 'backstop' to achieve programme objectives in the event that collaborative initiatives outside the RPMP do not eventuate or are ineffective (e.g. due to lack of 'buy-in' from occupiers within affected areas).

7.39 Wilding conifers

The general programme for wilding conifer includes the 10 species recognised nationally, as well as two additional species: *Pinus monticola* and *P. patula*.

The programme includes two commercial species causing a level of wilding conifer spread: *P.radiata* and *Pseudotsuga menziesii*. There is no background or commentary about these two species.

The objective of this sustained control programme is to “*ensure the ongoing control of wilding conifers on land within the Marlborough region that has been subject to a Collaborative Wilding Conifer Programme in order to minimise adverse effects on the environment, enjoyment of the natural environment and economic wellbeing.*” The principle measures to achieve this objective are collaborative programs (which sit outside the Proposed RPMP), property inspections, education and advocacy. Land owners and/or occupiers or other persons may also be required to act where rules or statutory obligations dictate, and in this respect Rule 7.39.2.1 requires occupiers to destroy all wilding conifers present on their land prior to cone bearing if they are within a Collaborative Wilding Conifer Programme Area. This rule only applies upon written notification that the programme has ceased and/or met the objectives.

As noted with respect to the species-specific programmes (above), there is currently only one Collaborative Wilding Conifer Programme Area (in Molesworth); and this is a high-risk approach for the Marlborough region if national funding for other programmes is delayed or does not eventuate.

Amendments (or other actions) sought

As for species-specific programmes (above).