

## Appendix 3: Alternative Options for Managing Pests

Pest	Alternative Options	Reasons for preferring the measures specified in the Strategy
<b>Total Control Plant Pests (Marlborough District Council Initiative)</b> African Feather Grass, Bathurst Bur, Bur Daisy, Chinese Pennisetum, Giant Needlegrass, Parrots Feather and Saffron Thistle	Do nothing  Require land occupiers to destroy all plants on land they occupy	Due to the limited distribution of these plant pests, there is substantial regional benefit in controlling them. To 'do nothing' would not achieve the objective and would result in significant net costs to the community as a result of reduced agricultural production.  To require occupiers to destroy all plants would be unlikely to achieve the objective.
<b>Total Control Plant Pests (Marlborough District Council/ Department of Conservation Initiative)</b> Boneseed, Cathedral Bells, Climbing Spindleberry, Eel Grass, Evergreen Buckthorn, Madeira Vine, Moth Plant, Senegal Tea and Spartina Grass	Do nothing  Require land occupiers to destroy all plants on land they occupy	Due to the limited distribution of these plant pests, there is substantial regional benefit in controlling them. To 'do nothing' would not achieve the objective and would result in significant net costs to the community as a result of reduced conservation values.  To require land occupiers to destroy all plants would be unlikely to achieve the objective.
<b>Total Control Animal Pests</b> Rooks	Do nothing  Require land occupiers to destroy Rooks on land they occupy	Due to the limited number of Rooks, there is substantial regional benefit in controlling them. To 'do nothing' would not achieve the objective and would result in significant net costs to the community as a result of reduced agricultural production.  Rooks require professional control due to their wary nature and this option is not considered appropriate.
<b>Containment Control Plant Pests</b>		
Broom and Gorse	Do nothing  Require land occupiers to destroy all plants on land they occupy	The alternative option of 'do nothing' would not achieve the objective and would result in significant additional cost to the community as a result of reduced agricultural production.  This option was considered inappropriate due to the widespread distribution of these plant pests.
Upper Wairau Broom and Gorse Containment Area	Do nothing	The alternative option of 'do nothing' would not achieve the objective and would result in significant additional cost to the community as a result of reduced agricultural production.
Upper Awatere Broom Containment Area	Do nothing  Require land occupiers to destroy all plants on properties classified as 'Core'	The alternative option of 'do nothing' would not achieve the objective and would result in significant additional cost to the community as a result of reduced agricultural production.  To require land occupiers to destroy all plants in the area classified as 'Core' was considered impractical due to the level of infestation of Broom in this area.
Contorta Pine	Do nothing	The alternative option of 'do nothing' would not achieve the objective and would result in wilding pines continuing to spread.

Pest	Alternative Options	Reasons for preferring the measures specified in the Strategy
Chilean Needlegrass	<p>Do nothing</p> <p>Require land occupiers to destroy all plants on properties classified as 'Core'</p>	<p>The alternative option of 'do nothing' would not achieve the objective and would result in significant additional cost to the community as a result of reduced agricultural production.</p> <p>To require land occupiers to destroy all plants on properties classified as 'Core' was considered impractical due to the level of infestation of needlegrass on these properties.</p>
Kangaroo Grass	<p>Do nothing</p> <p>Require land occupiers to destroy all plants on properties classified as 'Core'</p>	<p>The alternative option of 'do nothing' would not achieve the objective and would result in significant additional cost to the community as a result of reduced agricultural production.</p> <p>To require land occupiers to destroy all plants on properties classified as 'Core' was considered impractical due to the level of infestation of Kangaroo Grass on these properties.</p>
Nassella Tussock	<p>Do nothing</p> <p>Boundary control regime</p>	<p>The alternative option of 'do nothing' would not achieve the objective and would result in significant additional cost to the community as a result of reduced agricultural production.</p> <p>A Boundary Control regime for Nassella Tussock would not be suitable as the seed of Nassella Tussock will blow up to 10km in strong winds</p>
Nodding Thistle	<p>Do nothing</p> <p>Require land occupiers to destroy all plants on land they occupy</p>	<p>The alternative option of 'do nothing' would not achieve the objective and would result in significant additional cost to the community as a result of reduced agricultural production.</p> <p>This option was considered inappropriate due to the widespread distribution of this plant pest.</p>
Ragwort	<p>Do nothing</p> <p>Require land occupiers to destroy all plants on land they occupy</p>	<p>The alternative option of 'do nothing' would not achieve the objective and would result in significant additional cost to the community as a result of reduced agricultural production.</p> <p>This option was considered inappropriate due to the widespread distribution of this plant pest.</p>
Reed Sweet Grass	<p>Do Nothing</p> <p>Total Control</p>	<p>The alternative option of 'do nothing' would result in Reed Sweet Grass spreading.</p> <p>The alternative option for total control would result in a substantial cost for little Council benefit using existing control/technology.</p>
White-Edged Nightshade	<p>Do nothing</p> <p>Require land occupiers to destroy all plants on properties classified as 'Core'</p>	<p>The alternative option of 'do nothing' would not achieve the objective and would result in significant additional cost to the community as a result of reduced agricultural production.</p> <p>To require land occupiers to destroy all plants on properties classified as 'Core' was considered impractical due to the level of infestation of White-Edged Nightshade.</p>

Pest	Alternative Options	Reasons for preferring the measures specified in the Strategy
<b>Containment Control Animal Pests</b>		
Feral Rabbits	Do nothing	The alternative option of 'do nothing' would not achieve the objective and would result in significant additional cost to the community as a result of reduced agricultural production and the effects on soil conservation.
Possums	Do nothing	The alternative option of 'do nothing' may achieve the objective but the result may also be possums becoming established on one or more offshore islands in the Marlborough Sounds. This would result in significant net costs to the community as a result of reduced conservation values.
<b>Surveillance Pests</b>		
Surveillance Pests	Do nothing	The alternative option of 'do nothing' would not provide Council with an objective to record information on the impacts, the density and distribution of these pests. This information will be important when reviewing the Strategy in 5 years' time for developing future policies.

## Appendix 4: Impacts of Pests and Parties Affected

Pest	Potential and Actual Adverse Effects	Principal Beneficiary/Exacerbator	Beneficiary		Exacerbator	
			Minor	Major	Minor	Major
<b>Total Control Pests</b>						
African Feather Grass	Diminished pasture and livestock production	Occupier		✓		✓
		Dairy, meat and wool sector	✓			
		Regional community		✓		
		Recreationalists	✓			
		Conservation values	✓			
Bathurst Bur	Diminished pasture and livestock production	Occupier		✓		✓
		Dairy, meat and wool sector	✓		✓	
		Regional community		✓		
Boneseed	Displaces native species in coastal areas	Conservation interests		✓		
		Regional community		✓		
		Recreationalists	✓			
		Occupier	✓			✓
Bur Daisy	Diminished pasture and livestock production	Occupier		✓		✓
		Dairy, meat and wool sector	✓		✓	
		Regional community		✓		
Cathedral Bells	Smothers and displaces native vegetation	Conservation interests		✓		
		Regional community		✓		
		Recreationalists	✓			
		Occupier	✓			✓
Chinese Pennisetum	Diminished pasture and livestock production	Occupier	✓			✓
		Dairy, meat and wool sector		✓		
		Regional community		✓		
		Conservation values	✓			
Climbing Spindleberry	Smothers native vegetation	Conservation interests		✓		
		Regional community		✓		
		Recreationalists	✓			
		Occupier	✓			✓
Eel Grass	Smothers native aquatic vegetation in waterways and impedes recreational activities and water flow	Conservation interests		✓		
		Regional community		✓		
		Recreationalists		✓		
		Occupier	✓			✓
Evergreen Buckthorn	Displaces and invades native vegetation in forest, scrub and coastal margins	Conservation interests		✓		
		Regional community		✓		
		Recreationalists	✓			
		Occupier	✓			✓

Pest	Potential and Actual Adverse Effects	Principal Beneficiary/Exacerbator	Beneficiary		Exacerbator	
			Minor	Major	Minor	Major
Giant Needlegrass	Diminished pasture and livestock production	Occupier		✓		✓
		Dairy, meat and wool sector	✓		✓	
		Regional community		✓		
Madeira Vine	Smothers native vegetation	Conservation interests		✓		
		Regional community		✓		
		Recreationalists	✓			
		Occupier	✓			✓
Moth Plant	Smothers native vegetation	Conservation interests		✓		
		Regional community		✓		
		Recreationalists	✓			
		Occupier	✓			✓
Parrots Feather	Invades and displaces native vegetation. Impedes drainage and causes economic impact on production land.	Primary industries		✓		
		Conservation interests		✓		
		Regional community		✓		
		Recreationalists		✓		
		Occupier	✓			✓
Saffron Thistle	Diminished pasture and livestock production	Occupier		✓		✓
		Dairy, meat and wool sector	✓		✓	
		Regional community		✓		
Senegal Tea	Invades and displaces native vegetation. Impedes drainage and causes economic impact on production land.	Primary industries		✓		
		Conservation interests		✓		
		Regional community		✓		
		Recreationalists		✓		
Spartina Grass	Invades and displaces native vegetation and accelerates sedimentation in estuaries	Occupier	✓			✓
		Regional community	✓			
		Conservation values		✓		
		Recreationalists	✓			
		Marine users	✓			
<b>Containment Control Pests</b>						
Broom	Diminished pasture and livestock production	Occupier		✓		✓
		Dairy, meat and wool sector		✓	✓	
		Regional community	✓			
		Conservation values	✓			
Contorta Pine	Diminished pasture and livestock production. Invades and displaces native vegetation.	Occupier		✓		✓
		Dairy, meat and wool sector		✓		
		Regional community		✓		
		Conservation values		✓		
		Recreationalists		✓		

Pest	Potential and Actual Adverse Effects	Principal Beneficiary/Exacerbator	Beneficiary		Exacerbator	
			Minor	Major	Minor	Major
Gorse	Diminished pasture and livestock production	Occupier		✓		✓
		Dairy, meat and wool sector		✓	✓	
		Regional community	✓			
		Conservation values	✓			
Kangaroo Grass	Diminished pasture and livestock production	Occupier		✓		✓
		Dairy, meat and wool sector		✓	✓	
		Regional community	✓			
		Conservation values	✓			
Nassella Tussock	Diminished pasture and livestock production	Occupier		✓		✓
		Dairy, meat and wool sector		✓	✓	
		Regional community	✓			
		Conservation values	✓			
Nodding Thistle	Diminished pasture and livestock production	Occupier		✓		✓
		Dairy, meat and wool sector		✓	✓	
		Regional community	✓			
		Conservation values	✓			
Ragwort	Diminished pasture and livestock production	Occupier		✓		✓
		Dairy, meat and wool sector		✓	✓	
		Regional community	✓			
		Conservation values	✓			
Reed Sweet Grass	Invades and displaces native vegetation. Impedes drainage and causes economic loss of production	Primary industries		✓		
		Conservation interests		✓		
		Regional community		✓		
		Recreationalists		✓		
White-Edged Nightshade	Diminished pasture and livestock production	Occupier		✓		✓
		Dairy, meat and wool sector		✓	✓	
		Regional community	✓			
		Conservation values	✓			
Feral Rabbits	Damage pasture, crops, pine tree plantations and affect soil quality	Occupier		✓		✓
		Dairy, meat and wool sector		✓		
		Forestry sector		✓		
		Regional community	✓			
		Conservation values		✓		
Possums	Defoliate native species, damage plantation species and spread Bovine tuberculosis	Occupier		✓		✓
		Dairy, meat and wool sector		✓		
		Forestry sector		✓		
		Regional community		✓		
		Conservation values		✓		