

Analysis of Good Neighbour Rules for Broom and Gorse in the Proposed Tasman Nelson Regional Pest Management Plan

19 October 2018



Executive Summary

The Joint Committee for the Proposed Tasman Nelson Regional Pest Management Plan 2018-2029 (RPMP) has recommended that the proposed boundary control rules for gorse and broom in their respective sustained control programmes outside the Howard-St Arnaud area be replaced with good neighbour rules (GNRs).

This report specifically addresses section 8 (Directions on Good Neighbour Rules) of the National Policy Direction for Pest Management 2015 (NPD). Section 8 (1) of the NPD requires that:

- (1) Before a rule can be identified as a good neighbour rule in a regional pest management plan, the regional council must be satisfied of the matters in sub clause (a), (c), and (d) and must comply with the requirements in sub clause (b) and (e):
 - 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 the 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 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.
 - 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).
 - 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:
 - (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 the rule.

Section 8 provides the framework for the analysis presented in this report. The report concludes that the proposed GNRs for gorse and broom (outside the Howard–St Arnaud area) are consistent with the requirements of the NPD.

Context

When the Biosecurity Act 1993 (the Act) was amended in 2012, it introduced the concept of “Good Neighbour Rules” (GNRs). Such rules specifically address the costs that the spread of a pest from land onto adjacent or nearby land would cause neighbours. A GNR manages the externalities (costs imposed) by transferring some cost on to the occupier of the land that has the pest, where costs are caused to adjacent occupiers and those costs are likely to be unreasonable.

A GNR is particularly applicable to managing the effects and costs incurred by “progressive containment”, and “sustained control” pests like broom and gorse that have entrenched infestations that are difficult to manage. The objectives for these types of pests are to halt their further spread and reduce the level of infestation where it is possible to do so.

This report applies the tests for the GNRs in accordance with section 8 (Directions on Good Neighbour Rules) of the NPD. The purpose of the rule is explained along with an overview of the information used or assumptions made.

Test for Good Neighbour Rules

Section 8 of the NPD provides that:

- (1) Before a rule can be identified as a good neighbour rule in a regional pest management plan, the regional council must be satisfied of the matters in sub clause (a), (c), and (d) and must comply with the requirements in sub clause (b) and (e):
 - 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 the 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 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.
 - 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).
 - 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:
 - (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 the rule.

Buffer Distances

The process of setting any rule is hampered by the lack of perfect information about the location and size of the infestations of many of the pests. The RPMP takes a buffer and proximity approach to the GNRs by defining a nominal distance from the boundary of land that is clear, or being cleared of the

pest. The specified buffer distance manages the major sources of the spread of the pests from infested land to clear land, encompassing the area with the highest probability of the origin of spread.

The nominal distances chosen for broom and gorse (10m for each) are based on balancing an analysis of the characteristics of and behaviour of spread as researched and reported by Landcare Research (2014) (referenced herein as LCR) or Waikato Regional Council (2014) (referenced herein as WRC) with a practicable distance that can be managed before the costs on the exacerbator (the occupier who the rule applies to) would outweigh the benefits to their neighbour (the one taking reasonable measures to control the pest).

Definition of the Crown

Crown lands can be a source of pest spread and the GNRs bind the Crown as equally as other land occupiers for the purposes of managing the spread of pests. Under section 5 of the Act, the Crown is bound to GNRs.

For the purposes of the GNRs, the “Crown” has the meaning as given in the Public Finance Act 1989 where the “Crown”:

- a. means the Sovereign in right of New Zealand; and
- b. includes all Ministers of the Crown and all departments;

but

- c. does not include:
 - (i) an Office of Parliament; or
 - (ii) a Crown entity; or
 - (iii) A State enterprise named in Schedule 1 of the State-Owned Enterprises Act 1986.

Under the Plan, the State-Owned Enterprises (SOEs) are treated the same as all other occupiers and are bound by any rule that does not have an exception within it.

Analysis of the Broom and Gorse GNRs

Objective

The objective for broom and gorse outside the Howard-St Arnaud area is to control broom and gorse to minimise their impacts and slow their spread to other properties.

Rules

Good Neighbour Rule for Broom	<p>Over the duration of this Plan, Crown and private land occupiers within the Tasman-Nelson region outside the Howard - St Arnaud area, (i.e. all land with the region except the area shown in Map 8 of the RPMP), must destroy broom on their land located within 10 m of the boundary of land that is clear, or being cleared, of broom.</p>
Good Neighbour Rule for Gorse	<p>Over the duration of this Plan, Crown and private land occupiers within the Tasman-Nelson region outside the Howard - St Arnaud area, (i.e. all land with the region except the area shown in Map 15 of the RPMP), must destroy gorse on their land located within 10 m of the boundary of land that is clear, or being cleared, of broom.</p>

Purpose / intent of rule

The purpose of these rule is to control the spread of these pests onto adjoining land that is clear, or being cleared, of the pests. Note: The rule similarly applies to the whole of the Tasman-Marlborough boundary line, where Marlborough District Council (MDC) is actively managing gorse on the Marlborough side of the two districts boundary.

Assessment following the NPD

NPD tests	Comment / consideration
<p>(a) In the absence of a rule, the pest would:</p> <p>(i) spread to the land that is adjacent or nearby within the life of the plan and; ✓</p> <p>(ii) would cause unreasonable costs to an occupier of that land. ✓</p>	<p>Both broom and gorse have dispersal mechanisms that would allow them to spread to adjacent land within the 10-year life of the RPMP. See assessment (b).</p> <p>These pests are significant agricultural production weeds that reduce the value of arable land and pastures and are a threat to economic wellbeing. Once widely established, they can be difficult to manage and management can come at significantly more cost than normal pastoral management.</p> <p>They have a long-lived seed bank that adds to the length of time (and hence cost) it takes to control the infestation.</p>

NPD tests	Comment / consideration
<p>(b) When determining whether the pest would spread, consider:</p> <p>(i) the proximity and characteristics of the adjacent or nearby land and; ✓</p> <p>(ii) the biological characteristics and behaviour of the particular pest. ✓</p>	<p>Broom and gorse are primary colonisers of almost every land class. It is considered that land that is affected by broom and gorse will be similar to the characteristics of the adjacent or nearby land and therefore equally prone to the same pest. These pests can infest grazed pastures.</p> <p>The dispersion distance of these pests (below) indicate the distance considered as “adjacent” or “nearby”.</p> <p>Broom and gorse are spread ballistically with seed being shot away up to 5m from the source plant and slope angle or rain wash can spread them further (WRC and LCR). Where gorse and broom grow on stream margins, the seed of these species can also be transported downstream by streams and rivers to affect nearby neighbours - probably several km (LCR). Stock and machinery movement between farms will spread seed further.</p>
<p>(c) Whether the occupier of the land that is adjacent or nearby is taking reasonable measures to manage the pest and its impacts. ✓</p>	<p>The rule is written so it only comes into effect when this is the case.</p> <p>Evidence that the neighbour is taking reasonable measures includes:</p> <ul style="list-style-type: none"> • The land is clear of these pests; • Evidence of control such as dead shrubs; • A documented broom/gorse management programme; or • Other evidence as determined by an Authorised Person
<p>(d) The requirement of an occupier is not greater than that required to manage the spread of the pest to adjacent or nearby land. ✓</p>	<p>The buffer approach is an economically realistic option compared to a requirement to destroy these pests across the entire property.</p> <p>The 10m buffer distance is a practical distance for managing the spread arising from farm machinery between farms or stock movement across boundaries, and is related to the spread characteristics of the pest.</p>

NPD tests	Comment / consideration
<p>(e) In determining the rules to be set to manage the costs, the regional council must consider:</p> <p>(i) The biological characteristics of and behaviour of the pest; ✓</p> <p>(ii) Whether the costs of compliance with the GNR is reasonable relative to the costs that an occupier would incur if the pest spread in the absence of the rule. ✓</p>	<p>Assessment (b) shows that the dispersion distances are equal to or greater than the buffer distance prescribed in the rule. On the basis of this, it can be ascertained that the cost to the exacerbating neighbour is not more than that which is required to manage spread.</p> <hr/> <p>The costs associated with these pests can be significant.</p> <p>The 10m buffer with the boundary is a practical distance over which control of broom and gorse can be undertaken before the cost of control would be unreasonable compared to the benefits.</p> <p>The quantitative analysis of costs and benefits presented in the revised CBA show that, at regional scale, the benefits outweigh the cost of compliance. At regional scale, the rule is reasonable.</p>

The GNR for the sustained control of broom (outside the Howard – St Arnaud area) and gorse (outside the Howard – St Arnaud area) satisfy the directions given in section 8 of the NPD.