Riverina Highlands Regional Vegetation Management Plan 2003 Empower people to ensure healthy native vegetation is integrated into a vibrant regional community



REGULATORY MANUAL

This document contains all guidelines and maps referenced in the regulatory plan.

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Title of maps

- 1. 1:100,000 map- Regional Steep and Erodible Land (Western Riverina Highlands)
- 1:100,000 map- Regional Steep and Erodible Land (North-East Riverina 2. Highlands)
- 1:100,000 map- Regional Steep and Erodible Land (Central Riverina 3. Highlands)
- 4. 1:100,000 map- Regional Steep and Erodible Land (South-East Riverina Highlands)

Guidelines: How to Minimise the Environmental Impacts of Clearing

Guidelines for landholders in the Riverina Highlands

Guidelines: How to minimise the environmental impacts of Clearing

Beneficial Conservation Management Exemption Guidelines for Riverina Highlands

Guidelines for Sustainable harvesting of dry to moist open sclerophyll forest within the Riverina Highlands

Noxious Weed Control: Exemption Guidelines for Riverina Highlands The purpose of these guidelines is to document appropriate offset procedures that implement the offset principles in the Riverina Highlands Regional Vegetation Management Plan 2002.

The Riverina Highlands Regional Vegetation Plan 2002, outlines the matters for consideration for the Consent Authority in assessing clearing applications, including the consideration of offsets.

Proponents should consider that:

- (a) Retention of native vegetation is always preferable to clearing.
- (b) The amount of clearing should be minimised.
- (c) Clearing is to be undertaken in a manner that minimises harm and mitigates impact on native vegetation and associated wildlife.

The offset principles (Part 2 Clause 10(2) of the RHRVMP) are as follows:

(a) Offsets must aim for long-term equilibrium that results in an environment of equal value to (or greater value than) that lost, with respect to the full range of floristic, structural and functional issues.

This will be achieved by enhancing both the quality and quantity of native vegetation. Over a specified area and period of time, losses of native vegetation and habitat, as measured by the quality and quantity measure, are reduced, minimised and more than offset by commensurate gains.

Large, hollow bearing trees are a special case. It can be argued that there is no equivalent in terms of ecosystem function, due to the length of time required for hollow formation. In calculating offsets for the clearing of large hollow bearing trees, the goal should be to get net gains for the depleted vegetation types (see below).

(b) Ratios applied in calculating offsets must be proportional to the immediate loss of biodiversity and of ecosystem function, and to the need to guarantee long-term survival.

The calculation of offsets for a particular situation requires individual site assessment. It should be recognised that the scientific knowledge about what constitutes the value of biodiversity and ecosystem function is not complete and the precautionary principle must be applied to the calculation of offsets.

For more information contact the consent authority:

DLWC Albury 512 Dean Street PO Box 829 ALBURY NSW 2641 PH: (02) 6041 6777 FAX: (02) 6021 8405 www.dlwc.nsw.gov.au

1. Benchmark Offset ratios

The following sets out indicative area-based ratios that are a benchmark as to what may be required for consent of a clearing proposal to be given, in order to achieve the "no net loss" target and the "net gain" target for the depleted vegetation types.

Step One: Calculating the area of proposed clearing

All of the areas proposed for clearing of woody vegetation should added together, and stated as a total figure. (for large, hollow bearing trees, see below)

Step two: Finding areas to offset

For each hectare of woody vegetation that is cleared, there must be:

- 2 hectares of 'natural' or 'near-natural'* vegetation fenced off and managed for conservation; or
- 4 hectares of 'modified'* vegetation fenced off and managed for regeneration and conservation; or
- 4 hectares of 'degraded'* vegetation fenced off, managed and enhanced for conservation; or
- 6 hectares of 'degraded'* vegetation fenced off and managed for regeneration and conservation; or
- 10 hectares of revegetation with local native species on cleared land, which either:
 - adjoins and consolidates an existing native vegetation remnant; or
 - connects two or more native vegetation remnants.

"near natural" means vegetation which exhibits the characteristics of near natural vegetation as set out in Regional VegGuide 1.3, included in the Resource Guide.

"modified" means vegetation which exhibits the characteristics of modified vegetation as set out in Regional VegGuide 1.3, included in the Resource Guide.

"degraded" means vegetation which exhibits the characteristics of degraded vegetation as set out in Regional VegGuide 1.3, included in the Resource Guide.

2. Large hollow bearing trees

As mentioned above, large hollow-bearing trees are a resource that is difficult to offset. Hollows may take over 100 years to form, so offsetting the loss of hollow-bearing trees with vegetation of a different age structure, or revegetation, is not consistent with the no net loss principle.

However, in cases where there is no alternative, an offset is required. The following principles for identifying offsets that should be applied to individual sites:

- a minimum offset area applies for each tree>50cm
- patches of remnant trees are preferred to other isolated trees
- remnants that have important functions in the landscape are preferred as offset sites (eg. Riparian strips, connectivity)
- remnants in good condition or high resilience are preferred as offset sites (eg. Ability to regenerate)
- Potential habitat of threatened species are preferred as offset sites
- offsets need to have guaranteed long term management
- (c) Compensation afforded by an offset should be as close as possible to the loss both in proximity and landscape function, while maximising restoration priorities.
- Offsets must be within the boundaries of the property Vegetation Plan (PVP) (attached to the development application)
- The overriding principle is "like-for like", for example,
 - same vegetation community (eg. match gully features, hill-slope etc as well as broad vegetation type)
 - same age and structure of vegetation
 - same vegetation condition (or apply ratios as above)
 - same biodiversity value (eg. number of hollows)
 - same landscape function (eg. connectivity)

(d) Offset values should be regionallybased to take account of climatic and geographical influences.

The RHRVC considers it appropriate to set benchmark and not absolute values for offsets in order for the individual site assessment to take into account of the individual site and regional characteristics. Again, offsets must be within the boundaries of the PVP (and part of the development application).

The assessment of a particular site should consider it in its regional context. For example:

- the relative amounts of vegetation in the area
- rarity of that particular type of vegetation in the area.
- rarity of the habitat resources that site provides in the area
- role for connectivity at the landscape scale (i.e. biolinks)

(e) The continuation of any offset should be guaranteed in perpetuity.

Once the clearing has taken place, this is a permanent change in the landscape, and the offset should also be a permanent change in landscape management.

Proponents should consider entering in to agreements for securing the offset on the registration of the title of the land (eg. mechanisms under Section 88 (b) Conveyancing Act 1919, DLWC Property Agreements, NPWS Voluntary Conservation Agreements)

(f) The management of an offset should be guaranteed in perpetuity.

The process of identifying an offset is based on assessment of vegetation condition and value. If the sites are not actively managed for conservation in to the future, then the offset ceases to compensate for the original clearing.

Conservation management includes management actions where the management of the native vegetation is the first priority. This would include fencing,

weed control, *restoration* activities, and specified grazing management.

Restoration means returning existing habitats to a known past state or to an approximation of the natural condition by repairing degradation, by removing introduced species, or by reinstatement.

Monitoring means ongoing review, evaluation and assessment to detect changes in condition of the natural integrity of a place, with reference to a baseline. See also Regional VegGuide 1.6 in the Resource Guide.

Areas proposed as offsets should be identified on the Property Vegetation Plan (PVP) as areas for conservation management.

(g) Regeneration is always preferable to re-planting as an offset.

Sites identified for offsets and conservation management should address the following priorities (in order):

- High conservation Value sites
- Sites in good condition (eg. near natural sites over modified sites)
- Sites with high resilience (eg potential for natural regeneration)
- Sites with important ecosystem function (eg. riparian strips, wetlands, local corridors, biolinks)
- Sites with important landscape values(eg. recharge, discharge, regional protected lands)

NB: the primary consideration is the equivalence in <u>biodiversity value</u>, and landscape values <u>do not</u> compensate for the loss of biodiversity. For example, selecting for offsets, sites that have degraded vegetation but have good landscape values, such as recharge areas or riparian strips, does not compensate for the loss of a good quality patch of vegetation

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Summary

These guidelines have been produced to assist landholders in the use of the Beneficial Conservation Management exemption contained in the Riverina Highlands Regional Vegetation Management Plan. They explain what the exemption is, its intent, where it applies and the management activities it applies to.

What is the Beneficial Conservation Management Exemption?

The exemption was developed to promote, without the need to obtain consent, clearing that involves the management of native vegetation for conservation outcomes in accordance with appropriate guidelines. Its intention is to encourage better informed, 'active management' of native vegetation. The exemption applies to the Regional Linear Reserves and Regional Protected Land - Streamsides Management Areas in the Riverina Highlands Vegetation Region. Those Management Areas are described in the Plan.

Beneficial Conservation Management Exemption*

Management activities undertaken on land to ensure the maintenance and enhancement of the conservation values of the site, but limited to periodic grazing for grassland management, burning or weed removal, and restoration of native ecosystems (in each case, in accordance with the Beneficial Management Conservation Management Exemption Guidelines for Riverina Highlands obtainable from the Department of Land and Water Conservation).

* From Schedule 4 (1) of the Plan. Also referred to in Clause 12 and Schedule 2 of the Plan.

The need for active management

Almost all areas of remnant vegetation in farmland require some sort of active management to maintain or improve the site condition. Active management means actively managing native vegetation to maximise biodiversity values and minimise land degradation.

Active management can include:

- 1. Managing the grazing of grasslands,
- 2. Burning for conservation benefits,
- 3. Weed removal, and
- 4. Restoration of native ecosystems

Active management of a site requires monitoring to assess the need to adapt a particular management regime. The specific management recommendations will vary from site to site and over time, in response to changing vegetation condition. They depend on factors such as:

- Flora and fauna species present (or absent)
- Status of the native vegetation seed bank
- Characteristics of the weed species (eg annual vs perennial)
- Degree of degradation of the site

In general, if the site is in near natural condition, the continuation of current management might be most appropriate. If the site is moderately degraded modified then it might need some weed control and minor changes to the grazing regime. If the site is highly degraded then it could require complete restoration. This may include weed and pest control, revegetation and a modified grazing regime.

TYPES OF ACTIVE MANAGEMENT

Managing the grazing of grasslands

In some grassland areas active management may require a modified grazing regime in order to improve the site condition and/or to promote natural regeneration. Grazing can be used effectively as a management tool to improve aspects of vegetation condition such as quality and structure. Strategies may include grazing for:

- The management of grass biomass (eg. opening up inter-tussock space to reduce competition in order to encourage forbs)
- The management of weeds (eg. exotic grasses - grazing these at specific times

that reduce their potential to flower, set seed and regenerate.)

The greatest potential gains, especially in Linear Reserves, will be from active management of those areas that are already of high or medium conservation value and in good condition.

General grazing management principles and strategies

- Avoid set stocking
- Control grazing to allow desirable native plants to set seed and regenerate
- Target grazing to reduce the flowering, seed set and regeneration potential of exotic weeds
- Alter grazing management in response to dry or wet conditions (eg reduce grazing pressure)
- Manage the total grazing pressure where appropriate (eg fence out and protect areas more sensitive to grazing pressures)
- Monitor the effects of grazing

Refer to VegNote 2.7* for more information about grazing and native vegetation; and

VegNote 2.10 for more information about Native grasslands

2. Burning for conservation benefits

Burning is often suggested as a means of encouraging regeneration in remnant areas. Experience has shown that many sites can experience an increased weed load as a result of burning, so the application of burning to sites that have not had a burning history should be approached with caution.

There are three factors that may influence the outcome of a burn:

- Seasonality
- ♦ Intensity
- Frequency

As a general rule, if the site is in good condition, and the past management has involved burning, then the maintenance of

that regime is appropriate. Ensure that any necessary fire permits are obtained first.

General Management principles

- Burn in a mosaic, never burn the whole site all at once
- Avoid burning during regeneration events or seed set
- Monitor the effects of the burn

Refer to VegGuide 2.6* for more information about fire and native vegetation

3. Controlling Weeds

Environmental weeds are one of the major causes of environmental degradation in NSW. They displace and prevent the regeneration of native plant species. The whole structure of the native vegetation can change. This results in loss of habitat for native animal species, which can lead to the local extinction of these species.

Other problems created by environmental weeds include:

- Fuel loads can increase, changing the area's fire regime.
- Shading out of ground covers, leading to accelerated rates of soil erosion.
- Changes in water flow, rates of run off and nutrient cycling.

In the Regional Protected Land Management Area - Streamsides, the Riverina Highlands Regional Vegetation Management Plan 2003 applies to exotic species and dead standing timber. Woody weed removal undertaken under the Beneficial Conservation Management exemption must be:

- By manual control methods only, including bush regeneration techniques such as cutting and painting stumps with herbicide
- Applied only to exotic plants less than three metres in height

Soil disturbance caused by weed removal can have significant impacts on soil stability,

especially on streamsides. Removal methods that disturb soil are not exempt. Contact your local DLWC office for more information on the permits that may be required.

Refer to VegGuide 2.5* for more information about weeds and native vegetation. For management of grass weeds – see grazing section above.

4. Restoring native ecosystems

Restoration means returning existing habitats to a known past state or to an approximation of the natural condition by repairing degradation, by removing introduced species, or by reinstatement.

Reinstatement means to reintroduce to a place one or more species or elements of habitat that are known to have existed there naturally at a previous time.

The restoration strategies will vary from site to site, but in general:

- Natural or assisted regeneration is always preferable to planting of tubestock or direct seeding,
- If diverse or fragile vegetation (especially the ground flora) is present, large scale ripping may not be appropriate, consider individual hand planting of the site and spot spraying, rather than broad-scale spraying,
- Consider appropriate spacing and species diversity for the type of vegetation you are restoring (eg. Woodland versus forest).
- Plant local native species only (consider both species AND provenance).

Refer to VegGuide 3.1-3.5* for more information about re-establishing native vegetation

Refer to "Revegetation Guide for the South West Slopes" available from DLWC

*VegGuides are part of the Riverina Highlands Resource Guide and are available from DLWC offices. Additional information is available from other organisations such as Greening Australia.

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DLWC Albury 512 Dean Street PO Box 829 ALBURY NSW 2641 PH: (02) 6041 6777 FAX: (02) 6021 8405 www.dlwc.nsw.gov.au These guidelines relate to the use of the Private Native Forestry Exemption contained in the Riverina Highlands Regional vegetation Management Plan.

The guidelines describe sustainable approaches to *selective logging* operations and forest management practices for *dry open forest* and *moist open forest* on private property in the Riverina Highlands. They are subject to review as more research and experience in their application occurs.

Forest management practices and selective logging operations that are consistent with these guidelines do not require development consent from DLWC.

Landholders conducting forestry operations that are not consistent with these guidelines must apply for and obtain formal development consent from DLWC prior to the commencement of operations.

Likewise, operations proposed for sensitive areas such as *Regional Protected Land* will also require development consent from DLWC.

Using the exemption does not remove landholder obligations in relation to Aboriginal sites under the National Parks and Wildlife Act or in relation to water pollution under the Protection of the Environment Operations Act.

The onus is on the landowner and the operator to be fully satisfied that the proposal to clear native vegetation is within the parameters of the *exemption* before forestry operations commence.

Bold, italicized words are explained on page 7.

Maintaining the forests

The vegetation associated with dry and moist open forest on private property has been extensively cleared over the years. Although the remaining vegetation is generally subject to some form of

disturbance, it is still a valuable ecological resource that needs appropriate protection and management.

This guideline will be useful for those wishing to continue supplementing farm income with sustainable native forestry. whilst maintaining improving the ecological values of the forest being actively managed. The ecological value of native forests include biodiversity conservation, wildlife habitat, natural pest control, shade and shelter, and maintenance of genetic diversity. These forests may even be useful as an indicator of sustainable agriculture.

There are also economic, aesthetic, and land and water degradation control benefits (such as reducing salinity risk, and improving water quality) in protecting native forests.

Maintaining all these benefits over the long term is important for our economy and our environment.

So it's important to ensure that the use of these forests is sustainable, ie. that their use can continue indefinitely without causing environmental degradation or depleting future productivity.

The Riverina Highlands Regional Vegetation Management Plan 2002

The Riverina Highlands Regional Vegetation Management Plan 2002 was introduced with the aim of achieving a 'no net loss' of native vegetation situation in the Riverina Highlands Region. It will assist in planning for sustainable development and prevent inappropriate clearing of

native vegetation. The DLWC is the consent authority for the *Riverina Highlands Regional Vegetation Management Plan (RHRVMP)* 2002.

The RHRVMP 2002 takes into account the regeneration potential and silviculture of the forest, the conservation of the flora and fauna, social and economic considerations, heritage values, and land and water degradation prevention.

Some clearing activities can be undertaken without the need to seek formal development consent. One of these exemptions, the **Private Native Forestry Exemption**, is defined in the Plan as follows:

RHRVMP 2002 Schedule 4 Clause 11)

- (1) The clearing of native forest dominated by Alpine Ash (Eucalyptus delegatensis), Mountain Gum dalrympleana), Ribbon Gum (E. viminalis), Eurabbie (E. globulous ssp. bicostata), Red Stringybark (E. macrorhyncha), Broad Leafed Peppermint (E. dives) or Narrow Leafed Peppermint (E. radiata) in the course of its being selectively harvested on a sustainable basis or managed for forestry purposes (timber production) consistent with the Guidelines For Sustainable Harvesting of Dry to Moist Open Sclerophyll Forest within Riverina Highlands of New South Wales, available from the Department of Land and Water Conservation.
- (2) The minimum forest tree crown cover, after harvesting, must be at least 40% of what would be expected for an undisturbed site characterised by similar tree species and in a similar location.

- (3) The volume harvested must not exceed the equivalent of an average of 3 cubic metres per hectare per annum over a period of 20 years or more.
- (4) This activity may be carried out without consent only if the Department of Land and Water Conservation has been given notice of the proposed clearing prior to the commencement of clearing.
- (5) Where the volume harvested will be more than 500 cubic metres of product in total on any contiguous landholding in any one year period, this activity may be carried out without consent only if a forestry management plan documenting forest management practices and harvesting operations has prepared. If a forestry management plan is required for any clearing but is not produced at the request of the Director-General of the Department of Land and Water Conservation, this item does not allow the clearing until after it is produced.
- 6) A *forestry management plan* should be prepared by a suitably qualified person and contain aerial photographs, topographic maps and written information that cover the following:

(a) Land information:

- (i) description of the area to which it relates,
- (ii) a locality plan and identification of access roads,
- (iii) identification of natural features (drainage lines, swamps, soil types, vegetation types, significant landscape, cultural and heritage values, threatened species etc),
- (iv) identification of improvements (buildings, roads, bridges, drainage line crossings, fences, gates, powerlines, dams etc).

(b) Tending/silviculture details:

- (i) the history and documentation of previous logging or disturbance,
- (ii) a detailed description of vegetation types, growth and form characteristics,
- (iii) an explanation of proposed noxious weed and pest animal controls,
- (iv) a silviculture strategy, including a tree marking program,
- (v) a fire management strategy.

(c) Harvesting details:

- (i) a description of the location of harvesting operations, major snig tracks, and log dumps,
- (ii) details of conservation measures, including number and type of trees to be protected, locations of drainage-line crossings and exclusion areas, such as filter strips,
- (iii) a description of the effect of weather restrictions on harvesting operations, and on road maintenance,
- (iv) a timetable showing the period in which logging will occur,
- (v) details about the intensity of the operation, species to be logged, types of machinery to be used, product types, and felling and extraction procedures, (vi)details of health and safety measures.

Planning and management

Thorough planning reduces the environmental impact and operational costs of harvesting. Soils, water quality and flow. site productivity, biodiversity, wildlife habitats. culturally important sites and the broader landscape can all be affected by forest operations, so must be considered at the planning stage.

It is strongly recommended that landholders and/or contractors develop a *Forest Management Plan*, which would include a harvest plan. An FMP is a requirement for larger operations (see clause 5). This helps to ensure that

the forest will be managed for longterm economic viability and could assist in securing finance for your forest products business. It can also help to demonstrate that sustainable forest practices are being adopted.

Areas not to be harvested

The following areas must not be harvested without development consent. In addition, the felling of trees into these sensitive areas is not permitted.

Excluded Areas

- 1. Regional Protected Land.
- 2. Areas within 20 metres of any other obvious creek, major flood runner, wetland (swamp, lagoon) or *drainage line*. These areas require a *filter strip* for protection.
- 3. Areas on or within 20 metres of an Aboriginal scarred tree, mound, midden, burial site or other culturally important site.
- 4. Areas of land that have not previously been harvested or significantly disturbed.
- 5. 10 metres of any dam or wetland,
- 6. 20 metres from any caves and disused mines,
- 7. 20 metres from wet T-tree thickets,
- 8. 20 metres from any known threatened flora site, and
- 9. 30 metres from any northern corroboree frog breeding site.

Threatened plant and animal habitats

Forests provide habitat for a range of threatened plant and animal species. These guidelines are designed at protecting the habitats and mitigating against any potential long-term impacts to the habitats of a threatened species. More information on threatened plant and animal species,

populations and communities is available from NPWS offices.

The following specific matters are addressed in the **Harvesting Operations** – **Felling** requirements following:

- Trees showing "V notches used by yellow-bellied gliders similar to the following picture are not to be fallen,
- Do not fall any trees in which swift or superb parrots or regent honeyeaters are seen feeding.
- Prevent damage to flowering banksias and grass trees.
- Roost or nest trees for raptors and owls

Trees to be retained and provision for regeneration within harvested areas

Sustainable harvesting requires enough suitable trees to be retained to minimise habitat loss and allow the forest to recover to a similar structure before the next harvest. In practice this means the following practices must be observed in the use of the exemption:

- 1. Retaining more than 50% of trees with a *DBHOB* of greater than 40 cm within the area to be logged (some clumping and gap promotion is permissible to promote regeneration, although gaps should not be greater than 40 metres diameter).
- 2. Retaining all trees greater than one metre DBHOB in moist open forest, and all trees of more than 75 cm DBHOB in dry open forest.
- 3. Retaining a minimum of five habitat trees and five recruitment trees per hectare. Where no such trees are present, the largest 10 trees per hectare must be retained. The trees retained in '2' (above) can be used to help satisfy this requirement.

- 4. Maintaining an *uneven age structure* where it already exists, and similar species mix.
- 5. Retaining native understorey, where it already exists, and avoid disturbing *groundcover* wherever possible.

Harvesting operations 1. Felling

- Trees selected for harvesting must be clearly marked with paint and/or flagging tape.
- Always aim to fell logs where they:
 - can be easily extracted;
 - minimise damage to surrounding trees; and
 - fall safely.
- Fell away from filter strips.
- Do not fell trees or allow other operation to encroach listed exclusion areas.
- Trees listed under "Threatened plant and animal habitat" above must not be felled.
- Retain and protect from damage any dead tree, unless it is safety hazard.
- If a tree accidentally falls into a filter strip it must not be removed.



2. Constructing roads and snig tracks

Location

 Roads and snig tracks are the areas most prone to erosion in logging operations. To minimise erosion, all roads and snig tracks should be properly planned, designed and constructed.

- Road and snig track location should take advantage of natural features such as ridges and natural benches.
- Areas to avoid include:
 - swamps, lagoons and wetlands;
 - unstable slopes;
 - steep slopes;
 - *drainage feature pro*tection areas; and
 - areas of rock outcrop.
- Minimise drainage feature crossings.
- Locate roads higher on the slope to reduce the catchment area above.
- Mark road location prior to clearing and construction.

Clearing

- The extent of clearing for construction shall be minimised.
- The debris from clearing should be stacked:
 - outside drainage feature protection zones;
 - outside the toe of fill *batters*;
 - away from *drainage structures*.

Construction techniques which reduce water pollution

- Lay back or step cut batters that are higher than 1.5 metres to a stable slope to prevent slumping and erosion.
- Compact fill batters to ensure stability.
- Stockpile topsoil in a suitable location, and re-spread on exposed soils to control erosion and assist revegetation.
- Locate borrow pits away from drainage feature protection zones.
- For snig tracks, use *walkover* techniques to minimise soil and vegetation disturbance.
- Construct proper crossings over drainage lines to help minimise the amount of sediment reaching them.

These could be causeways, *culverts*, log crossings or bridges. Remember, construction of significant structures may require a *3A permit* from DLWC.

Drainage

- Well constructed roads and snig tracks have effective drainage with run-off being directed onto stable areas
- Drainage works should be carried out as the road is constructed.
- Roads can be constructed with a combination of *infall*, *outfall*, and *crowning* as long as the necessary and appropriate table drains, mitre drains, culverts, and roll-over banks are constructed.
- Infall drainage should be used if:
 - soil is highly erodible and fill batter is likely to erode, and
 - if fill batter will be more than 1.5 metres high.

3. Drainage feature protection

- *Drainage depressions* must be protected by a *buffer zone*.
- Drainage lines need a filter strip for protection. In addition, no new roads or snig tracks shall be constructed within a filter strip (unless a 3A permit has been obtained).
- No machinery is to enter a filter strip unless it is crossing at a designated crossing point, or constructing a crossing.
- Trees must be felled and winched away from filter strips.

4. Drainage line crossings

- Drainage line crossings should be stable structures such as causeways, culverts, bridges or log crossings.
- Construct crossings as close as possible to right angles to the water flow.

- Minimise damage to the bed and banks during construction.
- Do not deposit *spoil* in the drainage line.
- Plan construction to coincide with low water flows.
- Deposit tree debris and excess soil outside the filter strip and where it will not be washed back into the drainage line.
- Do not use log dams or fill crossings ('gully stuffers') as they obstruct water flow, cause turbulence and can lead to serious erosion.

5. Wet conditions

- Snig tracks and roads should not be used for timber extraction when:
 - there is run-off from its surface, or
 - significant damage to the track or road is likely.
- Earthworks should not be carried out when the soil is saturated.

6. Log dumps

- Dumps should be kept as small as possible.
- Locate dumps on ridges and other well-drained areas. Avoid unstable and steep areas.
- Keep them well away from drainage depressions and drainage lines.
- If it is necessary to 'scalp' topsoil from the site, place it in a stockpile so that it can be re-spread when logging ceases.

7. Groundcover management

- Managing groundcover during logging operations is essential to minimise soil erosion and sedimentation.
- Topsoil generally contains more nutrients and is less likely to erode than subsoil, so keeping disturbance to a minimum will

- prevent erosion and assist regeneration of vegetation.
- Effective groundcover means at least 70% of the ground surface is protected by a cover of vegetation, leaf litter, and *slash*.
- If disturbance has occurred, the techniques used to improve groundcover include:
 - stripping, stockpiling, and respreading topsoil, and
 - sow seed when the soil is still friable, and when seasonal conditions
- are best for seed germination and establishment.

Note: using the winch rope will create less disturbance; keep the blade up, don't disturb the surface unnecessarily.

Definitions

A **3A permit** provides conditions for excavation activities within 40 metres of a 'river' or water body. It is most relevant for road construction close to, and over drainage lines. 3A permits are available through DLWC.

Batter. An earth slope formed during road construction either by the placing of fill material or by cutting into the natural hillside.

Buffer zone. A 5 metre strip of vegetation or ground cover each side of the apparent centre of a drainage depression retained to retard sediment movement and reduce the risk of erosion. Operations in a buffer zone must minimise soil and vegetation disturbance, which includes not crossing the drainage depression when the soil is saturated.

Crowning is the shaping of the road surface to allow water to run to both sides.

Culvert. One or more adjacent enclosed conduits for conveying water underneath a road or track.

DBHOB is diameter of a tree at breast height (130 cm above the ground).

Drainage depression. A smoothly concave area that conveys run-off water only during or immediately after periods of rainfall. They may be subject to seasonal water logging and spring activity. The vegetation in and around drainage depressions may indicate a wetter micro-environment than the surrounding country.

Drainage feature is the area that water either accumulates, or is concentrated and flows down-slope. Drainage features are more commonly known as drainage depressions, drainage lines, rivers, creeks, streams, swamps, wetlands or watercourses.

Drainage feature protection is the type of protection given to drainage features, including filter strips. protection strips, buffer zones and habitat reserves. For this publication, a drainage feature protection is a buffer zone (on drainage depressions), or a drainage lines). filter strip (on Protection widths are prescribed according to the value of the drainage feature, and the protection it is then given will range from minimal disturbance, to no logging, unless development consent has been given by DLWC.

Drainage line. A channel, down which surface water naturally concentrates and flows. A drainage line is more significant than a drainage depression in that it will begin to exhibit one or both of the following features:

- evidence of active erosion, or

- the channel will be more than 30 cm deep and have a well defined
- bed and banks.

Drainage structure. Any structure that will convey water safely under or away from roads, including culverts, mitre drains and table drains.

Dry open forest typically includes *Eucalyptus macrorhyncha*, (Red Stringybark), *Eucalyptus dives*, (Broad-leaved Peppermint) and *Eucalyptus polyanthemos* (Red Box).

Filter strip. A 20 metre strip of vegetation or groundcover each side of a drainage line (measured out from the defined bank) that is closed to logging so as to retard the movement of sediment, reduce the risk of erosion, maintain habitat values and link corridors in important parts of the landscape.

Groundcover. Material that covers the ground surface and has the effect of reducing erosion. Groundcover may include living or dead vegetation, leaf litter, tree debris, gravel, rock, straw and mulch.

Habitat is the natural environment of an animal or plant.

Habitat trees are the larger trees with a well-developed spreading crown and hollows of different sizes. Habitat trees can provide food and shelter for birds, bats, possums, gliders, reptiles and frogs. Retaining habitat trees is vital to sustain the ecological integrity of an area.

Infall is a drainage method used in road construction where the whole surface width is *in* sloped against the natural surface side slope. A table

drain and culverts should convey the runoff water this type of surface generates

Moist open forest typically includes Eucalyptus viminalis (Manna Gum), Eucalyptus robertsonii (Robertsons Peppermint) or Narrow-leaf Peppermint) and Eucalyptus dalrympleana (Mountain Gum).

Outfall is a drainage method used in road construction where the whole surface width is sloped out in the same direction as the natural surface side slope. It is important to safely convey the runoff water this type of surface generates when fill batters exceed 1.5 metres in height.

Recruitment tree is a large tree (dominant in its age class) with the potential to develop into a habitat tree.

Regional Protected Lands are defined in Riverina Highlands Regional Vegetation Management Plan 2002 (Part 1 Clause 4) and include Regional Protected Lands - Steep and Erodible and Regional Protected Lands - Streamsides. Steep land is land that is generally greater than 18° slope. Erodible lands include the following categories:

- Category e4: Extremely erodible and dispersible solid on granite source material, mapped to include slopes greater than 110.
- Category e6: Extremely erodible soils on massive granite outcrops, mapped to include slopes greater than 120.
- Category e7: Extremely erodible soils on sedimentary (late Devonian) parent material, mapped to include slopes greater than 120.
- Category e9: Extremely erodible soils on sedimentary

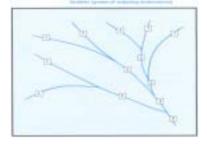
(Ordovician and Silurian) parent material, mapped to slopes greater than 100.

Regionally Protected Lands - Streamsides are defined in the RVMP as all lands within 20m of the bank of all 3rd order (and larger) streams. Stream ordering is based on Strahler's system, and is represented in the following diagram.

Stream ordering starts at the top of the catchment. A watercourse (shown as blue on a 1:25, 000 topo-graphic map) which has no other watercourses flowing into it is classed as a first-order stream (See 1 on Figure 1).

Where two first-order streams join, the stream becomes a second order stream (see 2 on Figure 1). Where a second-order stream is joined by a first order stream, it remains as a second-order stream. Where two second-order streams join, they form a third-order stream (See 3 on Figure 1). A third-order stream does not become a fourth-order stream until it is joined by another third-order stream, and so on.

Figure 1: Stream ordering



Details are available from DLWC

Selective logging on a sustainable basis is taken to be felling and removal of part of a forest for the purpose of selective timber production which, at a minimum, maintains:

- habitat value.
- an uneven age forest structure,

- more than 50% retention of trees greater than 40 cm DBHOB on a broad area basis in each logging cycle; and
- the forest in a state from which it can recover to a similar structure before next logging cycle.

Slash is the tree debris left following the felling, processing and extraction of logs.

Snig is to pull logs, either wholly or partly supported on the ground, from the felling point to the log dump.

Snig track is a track along which snigging equipment travels.

Spoil is material such as soil, rock, gravel, subsoil and excess material from road construction.

Threatened species are those species of plants and animals that have been recognised as endangered or vulnerable or otherwise in danger of extinction. In NSW these species have been listed on Schedules 1 and 2 of the Threatened Species Conservation Act (1995).

Uneven age structure is where two or more age/size classes of trees are present.

Walkover is a technique where timber extraction or snigging is conducted without removing or unduly disturbing the existing natural groundcover, that is, where no snig track construction or blading is required.

Further Information

Department of Land and Water Conservation

Murrumbidgee Region

Wagga Wagga Regional Office PO Box 10 WAGGA WAGGA NSW 2650 (02) 69 230400

Tumut District Office PO Box 71 TUMUT NSW 2720 (02) 69 470200

Murray Region

Albury District Office PO Box 829 ALBURY NSW 2640 (02) 60 416777

NSW National Parks and Wildlife Service

Southern Zone

Threatened Species Unit PO Box 2115 QUEANBEYAN NSW 2620 (02) 62 989700

NSW State Forests

Hume Regional Office PO Box 291 TUMUT NSW 2720 (02) 69473911

The following publications are available from the above offices:

Conservation Protocols for Timber Harvesting on State Forests for the duration of the IFA decision (November 1996).

Definitions and Exemptions, Amendment No 2. (1997). Department of Land and Water Conservation.

Forest Practices Code: Timber Harvesting in State Forests Plantations – Part One. (1995). Forest Planning and Environment Division, State Forests of NSW.

Growth Habits of the Eucalypts. MR Jacobs, 1955.

Native Vegetation Conservation Act 1997. NSW Government. (Contact DLWC).

Production and Conservation on the NSW South West Slopes. (1999). Eric Schwarz and Lorraine Oliver, NPWS, Queanbeyan.

Setting the Scene: The Native Vegetation of New South Wales. (1999). Native Vegetation Advisory Council NSW. A background paper of the Native Vegetation Advisory Council of New South Wales. Author John Benson.

South West Slopes Revegetation Guide. (1998). Murray Catchment Management Committee & Department of Land and Water Conservation, Albury NSW. Ed Fleur Stelling.

Threatened Species Conservation Act (1995). NSW Government. (Contact NPWS).

Threatened Species of South-eastern New South Wales – Riverina Highlands. (1999). NSW NPWS, Southern Region. Ed Lorraine Oliver.

Noxious Weed Control Exemption Guidelines for Riverina Highlands

Guidelines for landholders in the

Riverina Highlands

Guidelines: How to minimise the environmental impacts of Clearing

Beneficial Conservation Management Exemption Guidelines for Riverina Highlands

Guidelines for Sustainable harvesting of dry to moist open sclerophyll forest within the Riverina Highlands

Noxious Weed Control Exemption Guidelines for Riverina Highlands

For more information contact the consent authority:

DLWC Albury 512 Dean Street PO Box 829 ALBURY NSW 2641 PH: (02) 6041 6777 FAX: (02) 6021 8405 www.dlwc.nsw.gov.au

Summary

Noxious weeds can pose a threat to farming activities, to the integrity of native vegetation and to other land values. Their control is an integral part of farming activities and in most cases, required by law. These guidelines have been produced to assist landholders in the use of the Noxious Weed Eradication exemption in the Riverina Highlands Regional Vegetation Management Plan. They explain what the exemption is, where it applies and the noxious weed control activities it applies to.

Why have a Noxious Weed Eradication Exemption?

The clearing of weeds declared noxious within the Region, under the Noxious Weeds Act 1993 is excluded from the Native Vegetation Conservation Act 1997 and from this Plan. In ensuring that noxious weeds are controlled before larger areas are affected, some damage to non-target vegetation is unavoidable. It is the clearing of that non-target vegetation that is the subject of the exemption. It is important to note however that legally, an exemption must entail only minimal environmental risk.

The exemption was developed to allow, <u>without the need to obtain consent</u>, the unavoidable clearing of non-target vegetation that occurs during the use of some methods of noxious weed control. The exemption applies to all Management Areas in the Riverina Highlands region including all Regional Protected Land.

The Noxious Weed Eradication Exemption

- 1. The clearing of vegetation declared to be a noxious weed under the Noxious Weeds Act 1993
- 2. The clearing of other vegetation in the course of destroying noxious weeds but only:
 - (a) to the minimum extent necessary to destroy noxious weeds, and
 - (b) in accordance with the Noxious Weed Control Exemption Guidelines obtainable from the Department of Land and Water Conservation

Note: This document is the Noxious Weed Control Exemption Guidelines referred to in the exemption above. It is subject to review arising from research, experience and legal changes.

"Clearing" for noxious weed control

Under the definition of "clearing" in the *Native Vegetation Conservation Act 1997* all activities involved in any form of weed control are "clearing". Clearing is defined as including: cutting, felling, removing, killing, destroying, poisoning, ringbarking, uprooting, burning, lopping and "substantially damaging or injuring native vegetation in any other way". So all weed control activities can involve "clearing" under the Act.

What is a noxious weed?

A noxious weed is any plant, at any stage of growth, native or not, that is declared a noxious weed under the *Noxious Weeds Act 1993*. Noxious weeds can be declared on a state-wide basis and on a local government area basis. Under that Act, Noxious Weeds are listed in categories W1 to W4. For the purpose of this exemption, control activities for all such noxious weeds are covered for all W1, W2, W3 and W4 weeds but only to the extent that clearing is a requirement of their listing under that Act. The exemptions only covers control of these noxious weeds where they are declared noxious within the Local Government area covering the area to be treated.

Do I need to be directed to control noxious weeds by the local council in order to use the exemption?

No. The exemption applies both to noxious weed control activities undertaken at the direction of your local council (a section 18 or section 22 notice) and to noxious weed control undertaken by the landholder during normal operations as part of landholder obligations under *the Noxious Weeds Act 1993*.

GENERAL CONDITIONS

All plants, which despite all reasonable efforts, are unavoidably cleared (see "What is Unavoidable Clearing" below) as part of noxious weed control activities, are covered by the exemption. All the following conditions apply to the use of the exemption:

- 1. The exemption applies only to noxious weed control undertaken using one or more of the following methods (all described in "Approved Control Techniques" below) a) hand removal, b) cut and paint, c) various forms of spot spraying, d) various forms of stem injection, e) ringbarking, f) wick-wiping in pasture, g) small-scale slashing, h) small-scale boom spraying and i) broad-scale boom spraying with selective herbicides in native pasture.
- 2. Where the noxious weed control is part of an activity for which consents or approvals are required under any other environmental planning instrument, the exemption cannot be used. (For example, as a requirement under a development consent).
- 3. Clearing under the exemption is limited to slopes of 30 degrees or less.
- 4. Native vegetation greater than 3 metres height may not be cleared under this exemption, other than those native plants that are declared noxious weeds.
- 5. Noxious weed clearing must be undertaken in such a way as to minimise damage to other vegetation, as detailed in the "Approved Control Techniques" section below.
- 6. The exemption does not include the construction of any track that involves earthworks, or other disturbance of the soil, except to the minimum extent in the course of hand removal.
- 7. Clearing of noxious weeds from the bed and/or banks of a stream is exempt for up to 500 metres total length of stream treated per calendar year, provided significant impacts do not occur to stream-bank stability, channel stability, water quality or soil erosion levels. (For clearing larger areas, development consent under the NVC Act will be required). Clearing of noxious weeds that is consistent with an approved river management plan, such as a

Rivercare Plan, or a certified Property Plan can occur over the whole area specified for such works in that plan.

Note: Under the *Protection of the Environment Operations Act 1997* it is an offence to allow herbicide not registered for use over waterways to enter any waterway. If a risk of contamination exists, a licence must be obtained from the appropriate authority before work commences.

- 8. When undertaking noxious weed control in wetlands by spot-spraying, extreme caution must be undertaken to limit spraying to the noxious plants only. See also the Note above.
- 9. Where practical, large debris from noxious weed control operations, such as felled trees, should be removed from flood-prone areas to ensure that the debris is not swept into the watercourse during a flood. Where this is done by burning, material must not be stacked and burned within 20 metres of remaining native trees or shrubs.

Note: A permit under the Rural Fires Act, 1997 may be required for such burning.

10. Clearing under the exemption must not affect any known Aboriginal site (as identified in the National Parks and Wildlife Service (NPWS) Aboriginal Heritage Information Management System) or a tree which is identifiable as an Aboriginal canoe, carved or scarred tree, or cause damage to, or destruction of, a tree with significant heritage or historical value identified in any local environmental plan or development control plan.

Note: Contact the local NPWS office for information on Aboriginal sites. In the event that any Aboriginal site is found in an area affected by noxious weed clearing, work will cease immediately and the opperator will contact the National Parks & Wildlife Service.

11. Nothing in this exemption removes any responsibilities under other Acts or Regulations that control the use of herbicides. In the carrying out of noxious weed control activities, all use of herbicide must comply with the directions on the herbicide labelling. Only herbicides which are registered for the particular application, or for which a permit is held from the National Registration Authority, may be used and only herbicides registered for use in waterways may be used in waterways.

What about methods of noxious weed control not covered by the exemption?

The methods of noxious weed control approved under this exemption (see "Approved Control Techniques" below) are those that are generally less damaging to non-target plants. By comparison, hand, noxious weed control using aerial spraying, broad-scale boom spraying with non-selective herbicides, ground injection, spreading herbicide granules, broad-area slashing or pushing with tractor or dozer can involve clearing of significant areas of vegetation other than the target noxious weeds. Some can also cause significant soil disturbance. As any exemption under the *Native Vegetation Conservation Act 1997* must, legally, involve only minimal risk of environmental damage, these other methods of clearing are not approved for use under this exemption. Note that clearing the noxious weeds themselves is excluded from the Plan but whether consent is required to clear the non-target vegetation using methods other than those approved in this exemption, depends on the circumstances, as follows:

- a. Where that other vegetation is not native, <u>and</u> it is not in a Regional Protected Land Management Area (refer to the Plan), the weed control activities are not subject to the Plan.
- b. Where the other vegetation is native or where that vegetation, native or not, occurs in a Regional Protected Land Management Area, consent will be required to clear the other vegetation, except that:
- c. In b. above, where the non-native vegetation in Regional Protected Land is "groundcover" (essentially grasses and herbs), consent to clear vegetation is not needed.

What is "Unavoidable Clearing"?

Unavoidable clearing is the clearing of non-target vegetation that despite all reasonable efforts, will inevitably occur during noxious weed control activities. It includes for example:

- grasses and shrubs growing in, around and under blackberry clumps that are sprayed,
- plants broken down by trees, that fall after poisoning,
- plants that come out with noxious weeds when they are dug out,
- the slashing of regrowth (under 3 metres high) in amongst dense infestations of noxious weeds

Put simply, the vegetation covered by the Plan is:

- On Regional Protected Land, all vegetation whether native or not and including dead standing and fallen trees but not including non-native groundcover.
- On other areas, all native vegetation, including groundcover but only where at least 50% of the groundcover that exists is native.

The section below titled "Approved Control Techniques" details techniques involved in the forms of noxious weed control that are covered by this exemption. In using these techniques, "unavoidable clearing" is minimised.

APPROVED CONTROL TECHNIQUES

The following is the full list noxious weed control techniques approved for use under the noxious weed control exemption. Other techniques are not covered by the exemption.

Hand removal

Hand removal of noxious weeds includes pulling the whole stem of each plant from the ground by hand; digging ("grubbing") plants, generally with a mattock, and the cutting larger trees with a chainsaw or axe.

Hand removal of noxious weed vine species:

- where the vines are on the ground, hand removal means rolling the aerial parts of the vine (stems and leaves) into heaps and either, cutting rooted stems as near as practicable to ground level followed by immediate application of a herbicide to the cut surface of the stems, or pulling rooted stems from the ground by hand;
- where the vines are hanging from trees, hand removal means either cutting stems followed by immediate application of a herbicide to the cut surface of the stems, or pulling rooted stems from the ground by hand.

When noxious weeds are "grubbed" out using mattocks or similar tools, care should be taken that unnecessary soil disturbance does not occur.

When removing any noxious weed tree species with saw or axe, the stump and roots must be left in place to prevent destabilisation of the soil, especially on riverbanks and steep land.

Cut and paint

The cut and paint method means cutting each noxious weed trunk or stem off completely, at a level below the first branches or as near as practical to ground level, followed by immediate application of a herbicide to the cut surface of the cut trunk or stems. This is usually done with a brush, dropper or small back-pack gun. With some plants, care needs to be taken not to allow the cut surface of the stem to come in contact with the ground or it will take root.

Spot spraying

Spot spraying means the following forms of hand spraying:

- spraying the foliage of individual noxious weeds or clumps with a herbicide using a hand-held spray or micro-jet wand.
- spraying of the basal stems of noxious weed with herbicide using a hand-held spray wand.

The exemption does not include the use of fixed wands or nozzles mounted in fixed position on vehicles (ie not hand-held) for either of the above techniques. Note however that some forms of boom spraying are approved for use, as detailed below.

Wherever they are approved for the purpose, selective herbicides should be utilised by landholders in order to minimise the effects of spray drift on non-target vegetation.

Spot spraying must only be carried out in accordance with label directions relating to weather and other matters, and spray always directed away from any nearby waterway other than when controlling aquatic noxious weeds.

Stem injection and ringbarking

Ringbarking is done with an axe or chainsaw while stem injection means making one or more drill-holes or cuts ("frills") around the trunk below the branches of noxious weed tree species, followed by immediate injection of herbicide into each hole or cut. Holes and cuts are angled downwards into the trunk to prevent herbicide escape. The herbicide can be applied with injection axes or with vaccinating type guns. Stem injection must only be undertaken in accordance with label directions.

As neither of these techniques involves plants other than the target species there are no other particular precautions needed.

Wick-wiping in native pasture

Wick wiping means weed control undertaken using tractor-mounted wick-wipers designed to control weeds that stand up above pasture. To improve the result and minimise impacts on native (and other) pastures, native pasture must be grazed low prior to treatment. The exemption may not be used for wick-wiping in other circumstances such as blackberries amongst native regrowth.

Small-scale slashing and small-scale boom spraying

Small-scale slashing and small-scale boom spraying means the treatment of individual plants or clumps or dense infestations of noxious weeds where the clearing is limited to those areas and does not extend to significant areas of other vegetation between the plants or clumps. Small-scale slashing or boom spraying therefore refers to the manner of treatment, not to the size of the area treated.

For example, slashing or spraying of all the individual clumps of old dense blackberries in a paddock to promote new growth prior to spraying where the slashing is limited to the affected area is small-scale. Slashing or spraying the whole paddock, including these clumps, is not. See however reference below to boom spraying in native pasture with selective herbicides

As in spot spraying, wherever they are available, selective herbicides should be used in small-scale boom spraying in order to limit the effects on non-target vegetation.

Broad-scale boom spraying with selective herbicides in native pasture

Broad-scale boom spraying is the spraying from the ground (not from the air), of wider areas than just those where the noxious weeds occur - usually whole paddocks or numbers of paddocks. Broad-scale boom spraying has the potential to effect significant areas of predominantly non-

target vegetation. For that reason, there is considerable onus on landholders to utilise this exemption with great caution and to fully document work undertaken.

The exemption cannot be used for broad-scale boom spraying when non-selective herbicides, such as Glyphosate, are used <u>and</u> it can only be used when the non-target species are native grasses.

The exemption is therefore only to be used for broad-scale boom spraying in native pasture when the selective herbicide used is approved for use in, and will not effect, the native pasture species present. As native pastures can include a range of both native grasses and forbs (herbs other than grasses), choice of an appropriate selective herbicide is critical. If in any doubt, contact NSW Agriculture or the local noxious weed authority.

The attached table shows some examples of noxious weed control practices in the Riverina Highlands. It indicates whether or not the exemption applies and whether or not clearing consent is needed. They should only be treated as a guide as individual sites and circumstances vary.



How can I be sure I am using the exemption correctly?

Inevitably many aspects of using this and other exemptions involve a landholder using his or her own judgement. Some of the words and phrases used are open to a degree of interpretation. In making use of the exemption, a landholder has three methods of overcoming doubt:

- Contact the local DLWC office for an explanation of how the exemption is implemented. Brochures may be available to further explain some matters. NSW Agriculture, your Local Council or Weeds County Council can provide information on herbicides and Noxious Weeds Act requirements.
- It makes obvious sense to keep records of what you have done, when and how including; what chemicals, the weather, precautions taken to avoid contact with non-target species and limit off-target damage and including photographs of the area before work commences.

Note It is also requirement of the Pesticide Act 1999 to keep such records.

• If still in doubt, contact the nearest DLWC office and submit a clearing application.

Examples of the Application of the Noxious Weed Eradication Exemption for Riverina Highlands Region

Note 1: The table shows some examples of noxious weed control practices in the Riverina Highlands. It should only be treated as a guide as individual sites and circumstances vary.

Note2: The use of the exemption does not relate to the clearing of noxious weeds themselves, only to the unavoidable clearing of other plants, as described in the guidelines.

Noxious Weed Control Activity	On Regional Protected Land	Not on Regional Protected Land
Aerial spraying of blackberries or serrated tussock amongst	Exemption cannot be used Consent required	Exemption cannot be used Consent required
native vegetation Cultivation of serrated tussock	Exemption cannot be used	Exemption cannot be used
in native pasture	Consent required	Consent required
Boom spraying of Patersons Curse or blackberries with non-selective herbicide in native pasture.	Exemption cannot be used Consent required	Exemption cannot be used Consent required
Boom spraying of Patersons Curse or blackberries with selective herbicide in native pasture.	Exemption applies	Exemption applies
Slashing or spot spraying individual clumps of blackberries in native vegetation under 3 metres high.	Exemption applies	Exemption applies
Aerial or boom spraying of Patersons Curse in areas dominated by introduced pasture species	Exemption not needed	Exemption not needed
Slashing or spraying individual clumps of blackberries in areas dominated by introduced pasture species.	Exemption not needed	Exemption not needed
Helicopter spraying of blackberries in pine plantation without native vegetation	Exemption cannot be used Consent required	Exemption not needed
Wick-wiping of St Johns wort in close-grazed native pasture with approved herbicide	Exemption applies	Exemption applies
Draining wetland to control Salvinia	Exemption cannot be used Consent required Permit required under Rivers and Foreshore Improvement Act	Exemption cannot be used Consent required Permit required under Rivers and Foreshore Improvement Act
Physical removal of Salvinia by hand	Exemption not needed as no other plants effected	Exemption not needed as no other plants effected
Spraying Salvinia in farm dams	Exemption applies	Exemption applies