



Landholder Guide:
Guidelines for Clearing of Invasive Native Species
under the NSW Native Vegetation Regulation 2013

DRAFT FOR DISCUSSION

About this guide

This guide is for NSW landholders who are managing invasive native species (INS), sometimes called 'woody weeds' on their property. In conjunction with the Ministerial Order it forms a self-assessable code of practice that helps landholders meet the legal requirements of the Native Vegetation Regulation 2013. If your situation does not fit within the code, then you may need to discuss other options with your Local Land Services (LLS) office.

If you have a private native forestry (PNF) property vegetation plan (PVP) that applies to the area you intend to clear this code does not apply.

How to use the guide

This step-by-step guide takes you through the process of identifying and planning to clear INS on your property.

This guide will help you understand how to meet the requirements under the self-assessable code that relate to:

- the **specific INS** that can be cleared
- **conditions for clearing INS**
- **clearing types/methods**
- **notifying** your LLS Office.

If you would like assistance using the code to clear INS, contact your LLS.

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Clearing INS – at a glance

The table below outlines some of the questions you may have about clearing INS on your property and where to go for more information.

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5. Clear

- Fourteen days after you've notified the LLS, you can clear INS in accordance with the requirements specified in the Order and explained in this guide.

Step 1: Identify

What does INS mean and what is meant by 'acting invasively'?

INS (also called invasive native scrub or woody weeds) are native plants that have been declared as invasive in NSW. See Appendices 1 and 2.

Acting invasively means the species is:

- invading plant communities where it has not been known to occur previously or
- regenerating densely following a disturbance and this dense regeneration is changing the structure and/or composition of the vegetation community.

The species must also meet a size requirement where the diameter at breast height over bark (DBHOB) of the individual plant to be cleared is equal to or less than the 'maximum DBHOB allowed to be cleared'. See Appendix 1 for the DBHOB size listed for the corresponding species.

All INS are native plants and are managed according to the *Native Vegetation Act 2003*.

Clearing INS can help re-establish native vegetation and allow for the natural regeneration of more desirable native vegetation.

What is a self-assessable code?

The NSW Minister for the Environment has declared clearing of INS a Routine Agricultural Management Activity (RAMA), which means you do not need permission to clear if vegetation is cleared according to the conditions set out in this guide.

In some cases, management decisions for clearing INS can be made using a self-assessable code rather than a PVP. This is part of a more balanced, practical and streamlined approach to native vegetation regulation. The code supports landholders' pursuit of practical approaches to INS control and explains the best INS clearing type for different conditions.

Why clear INS under the self-assessable code?

The aim of clearing INS is to:

- restore a diverse and productive natural environment
- reduce soil and water degradation
- maintain the quality of wetlands and watercourses.

Clearing INS under the Order must not result in a change of land use, for example, from grazing land to cropping land.

Treatments need to be matched to the situation, the particular species of INS, and should form part of a broader land management program, rather than a single treatment.

1: Identify

2: Check

3: Plan

4: Notify

5: Clear



NOTE TO READER:

Additional diagram/schematic to be included in final draft showing vegetation structure and biodiversity before and after removal of INS



1: Identify

2: Check

3: Plan

4: Notify

5: Clear

Step 2: Check

1: Identify

2: Check

3: Plan

4: Notify

5: Clear

What if there are native plants that are non-invasive?

Native vegetation that is not invasive often occurs within or between INS areas. In some cases unintentional or incidental clearing of these non-invasive species may occur when clearing the surrounding INS. This guide helps landholders choose clearing types that minimise loss of non-invasive native vegetation and outlines the acceptable limits for incidental clearing.

What if the INS is part of an threatened ecological community?

Landholders can clear patches of INS that are part of a threatened ecological community (TEC), provided the right clearing type is selected. This guide explains how to choose clearing types to treat INS while protecting native species and threatened ecological communities.

How can I work around a watercourse?

With the right technique INS growing near a watercourse or wetland can be treated. Clearing types that disturb groundcover or soil are unsuitable near streams, rivers, estuaries and wetlands because of increased erosion and sedimentation risk. This guide sets out the minimum distance required to protect watercourses from the impacts of clearing INS.

What is the land degradation risk?

The land degradation risk class gives an indication of the clearing types that can be applied to a parcel of land without risk of erosion. Appendix 3 outlines land degradation risks and assessment methods.

This guide explains how the clearing types apply to land degradation risk categories.

How much INS do I need to retain?

Effective INS management produces a mosaic landscape with native pastures, open woodlands and denser areas providing multiple benefits including shade and shelter for livestock, and can provide a variety of habitat for native plants and animals.

Patches of dense native scrub are a natural part of the landscape. Retaining at least 20% of the INS extent on a property preserves the benefits of dense native vegetation while allowing the majority of the area to be restored to a more open productive state.

To provide the best outcomes for fauna, the retained INS areas should provide stepping stones or corridors between remnant vegetation that is not INS. Your LLS can provide advice on the best solutions.

Can I sow a temporary cover crop?

When paddock-scale treatments have been used, a temporary cover crop such as winter cereals can help the site to recover. For example, by stabilising the soil, adding organic matter and adding fuel for burning that may be necessary to keep an area in an open and productive condition.

The code allows for sowing annual non-persistent exotic vegetation where paddock-scale clearing treatments are used.

Do I need to stage the clearing?

Depending on the clearing type, clearing may need to be staged. When clearing using paddock-scale treatments such as chaining, blade ploughing or temporary cropping, 40% of the area can be cleared in the first stage and 40% in the second stage.

The second 40% may be cleared once the first area has grown adequate groundcover to minimise erosion risk. The first area must have:

- more than 50% groundcover, and
- three quarters of that groundcover is native species.

When clearing using management burning and individual plant techniques 80% can be cleared immediately.

1: Identify

2: Check

3: Plan

4: Notify

5: Clear

Step 3: Plan

What is the most appropriate type of clearing?

There are four different clearing types that can be used to clear INS on your property. Depending on your site, the distribution of INS and the land degradation risk of your property you can choose the clearing type that is most useful for your situation.

There are two minimum conditions common to all clearing types. They are:

1. clearing activity must not result in a change in land use
2. at least 20% of pre-treatment INS must be retained on the property.

The table below compares the other minimum requirements for each clearing type. These are also presented in detail in the following pages.

Site characteristics	Clearing Type			
	Management burning	Individual plants	Paddock scale with low soil disturbance	Paddock scale with high soil disturbance
Total percentage of INS allowed to be cleared	80%	80%	40% + 40%	40% + 40%
Non-INS trees and shrubs represent more than 50% of the total trees and shrubs to be cleared	✓	✓	✗	✗
INS is within a threatened ecological community	✓	✓	✗	✗
Area to be cleared is of low land degradation risk	✓	✓	✓	✓
Area to be cleared is of moderate land degradation risk	✓	✓	✓	✗
Area to be cleared is of high land degradation risk	✓	✓	✗	✗
Area to be cleared is within 30 m of a watercourse	✓	✓	✗	✗
Area to be cleared is between 30 and 100 m from a watercourse	✓	✓	✓	✗
Non-native species may be sown to help stabilise soil	✗	✗	✓ By direct drilling only	✓ 3 times in 15 years

Clearing type A: Management burning

Description

The use of controlled burning of a section of property to achieve environmental and management outcomes.

When planning to use management burning, contact the Rural Fire Service (RFS) to check whether it has additional requirements.

When to use this clearing type



NOTE TO READER:
Additional illustrative examples to be included in final draft.



This method can be used for all land degradation risk categories.

1: Identify

2: Check

3: Plan

4: Notify

5: Clear

Deciding to use this clearing type

Advantages	Disadvantages
Cost effective over large areas	Infrequent opportunities due to seasonal/fuel condition requirements
Most species are susceptible when young	Response depends on shrub species and size
Kills some mature shrubs and improves visibility	Area may need destocking before and after fire
Pasture response may be rapid	Risk of erosion after fire

CASE STUDY: Illustrative example/story from the field from a landholder who has used this treatment to be included.

1: Identify

2: Check

3: Plan

4: Notify

5: Clear

Clearing type B: Individual plants

Description

The clearing of individual plants with nil to minimal disturbance to groundcover.

Examples

Chemical spot treatment, ringbarking or grubbing.

When to use this clearing type



NOTE TO READER:

Additional illustrative examples to be included in final draft.



- if there are TECs present
- low, medium and high land degradation risk categories
- close to watercourse or wetland
- non-INS present.

1: Identify

2: Check

3: Plan

4: Notify

5: Clear

Other considerations

- all native groundcover to be retained (incidental exceptions)
- all non-INS to be retained
- INS must be individually cleared
- there are 12 declared INS that cannot be cleared if they are greater than 20 centimetres or 30 centimetres diameter breast height over bark (DBHOB), see Appendix 1
- if clearing these 12 species, in addition to retaining larger plants (20cm or 30cm DBHOB) at least 20 smaller stems per hectare must be retained
- if there is more than one of these species present, a total of 20 smaller stems per hectare are to be retained and each species should be in the same proportion as they occurred prior to clearing.

Deciding to use this clearing type

Advantages	Disadvantages
Plant specific	Chemical treatment may be high cost and labour intensive
Useful for areas of scattered shrubs	Chemical treatment may cause loss of non-target and pasture species.
Minimal erosion risk	Effectiveness of chemical treatment depends on shrub species and size
Effective on all species	Grubbing may be slow and can only treat plants under about 50cm
Timber/dead standing shrubs may protect pasture regeneration	

CASE STUDY: Illustrative example/story from the field from a landholder who has used this treatment to be included.

Clearing type C: Paddock-scale treatment with lower soil disturbance

Description

Clearing plants at paddock scale with minimal disturbance to soil and groundcover.

Examples

Chaining, slashing or roping.

When to use this clearing type



NOTE TO READER:

Additional illustrative examples to be included in final draft.



- no TECs present
- low and medium land degradation risk categories
- more than 30 metres from a watercourse or wetland
- non-invasive trees and shrubs make up less than 50% of the total trees and shrubs in the area.

1: Identify

2: Check

3: Plan

4: Notify

5: Clear

Other considerations

- disturbance and clearing of groundcover is limited to the minimum extent necessary to clear the INS
- non-INS cleared should not exceed 10% of the total individual trees and shrubs cleared
- following clearing, landholders can sow non-persistent annual exotic vegetation by direct drill (zero till)
- at least 20% of native vegetation in each 500 hectares cleared is retained to create a mosaic pattern in vegetation.
- Clearing is done in two phases:
 - In the first phase, 40% of the total INS area can be cleared
 - In the second, 40% may be cleared once the first area has grown adequate groundcover to minimise erosion risk. The first area must have:
 - more than 50% groundcover for a 12 month period, and
 - three quarters of that groundcover is native species.
- Landholders can repeatedly clear land affected in Phase 1 when land treated in Phase 2 maintains a ground cover of at least 50% (of which 75% is native species) for a 12 month period.

Deciding to use this treatment:

Advantages	Disadvantages
Large shrubs are removed	Relatively high cost
Pasture response may be rapid	Can be non-selective
Can be done at any time	Risk of erosion
Timber left on ground may protect pasture regeneration	Soil disturbance may stimulate INS seedling germination and regrowth

CASE STUDY: Illustrative example/story from the field from a landholder who has used this treatment to be included.

Clearing type D: Paddock scale treatment with higher soil disturbance

Description

Clearing plants at paddock scale with temporary or longer term disturbance to soil and groundcover.

Examples

Blade ploughing, short-term cropping and stick raking.

When to use this clearing type



NOTE TO READER:

Additional illustrative examples to be included in final draft.



1: Identify

2: Check

3: Plan

4: Notify

5: Clear

- no TECs present
- low land degradation risk category only
- more than 100 metres from a watercourse
- non-invasive trees and shrubs make up less than 50% of the total trees and shrubs in the area.

Other considerations

- disturbance and clearing of groundcover is limited to the minimum extent necessary
- non-INS cleared should not exceed 10% of the total individual trees and shrubs cleared
- following clearing, landholders can sow non-persistent annual exotic vegetation up to three times in 15 years
- at least 20% of native vegetation in each 500 hectares cleared must be retained to create a mosaic pattern in vegetation
- Clearing is done in two phases:
 - In the first phase, 40% of the total INS area can be cleared.
 - In the second phase, 40% may be cleared once the first area has grown adequate groundcover to minimise erosion risk. The first area must have:
 - more than 50% groundcover for a 12 month period, and
 - three quarters of that groundcover is native species.
- Landholders can repeatedly clear land affected in Phase 1 when land treated in Phase 2 maintains a ground cover of at least 50% (of which 75% is native species) for a 12 month period.

Deciding to use this treatment

Advantages	Disadvantages
Shrubs are removed	Very high cost
Pasture response may be rapid	Can be non-selective
Can be done at any time	Risk of erosion
Pasture can be sown at the same time	Soil disturbance may stimulate INS seedling germination and regrowth
Ploughing destroys INS roots	

CASE STUDY: Illustrative example/story from the field from a landholder who has used this treatment to be included.

Step 4: Notify

What information will the LLS require?

Once you have considered conditions on your property and decided to clear, you'll need to notify the LLS of your plans at least 14 calendar days before starting.

Here is the type of information the LLS may need from you.

- ☐ name of property owner (or agent)
- ☐ name of the person who is to carry out the intended clearing
- ☐ property location
- ☐ extent of INS
- ☐ clearing type(s) selected
- ☐ expected start date
- ☐ expected end date
- ☐ assessment of groundcover regrowth
- ☐ method of clearing
- ☐ is the area of clearing subject to a private native forestry property vegetation plan?

How do I notify the LLS?

You can notify by:

1. using the online Native Vegetation Notification System (link to be included)
2. downloading the notification form (link and form to be included) and sending it to the LLS
3. visiting the LLS office, they will complete the notification for you.

Why should you notify?

Notifying your LLS:

1. provides a safety net for you in case members of the community mistakenly report your clearing as illegal
2. provides an opportunity for LLS to offer extension services
3. provides a way to distinguish between lawful clearing under the self-assessable codes and unexplained and potentially unlawful clearing
4. enables government and the community to understand the overall amount of clearing occurring under the self-assessable codes.

Can I modify a notification?

Yes, you can modify your notification even after your notification is submitted. To modify the notification using the online system, all you need to do is log back into the system, make the modifications and re-submit. Alternatively, you can contact your LLS and they can modify the notification on your behalf.

1: Identify

2: Check

3: Plan

4: Notify

5: Clear

What happens to my notification if I sell my property or my property details change?

If you sell, subdivide or your property details change, you need to update those details by using the online system or contacting the LLS.

Can I withdraw my notification?

Even after your notification is submitted, if you change your mind you can come back and withdraw your notification. This can only be done if you haven't commenced the clearing. An LLS officer may contact you to discuss why you are withdrawing your notification.

Sticker space to be left here so LLS can insert individual contact details

What records do I need to keep?

Once you have submitted your notification you will be given a copy of the notification details including a map of the area to be cleared. You should also keep before and after photos of the clearing for your records along with the information collected in Step 2: Check.

Useful terms

DBHOB Diameter at breast height over bark. The diameter of trees is measured in centimetres at 1.3 metres (roughly breast height) above the ground. The measurement is taken over the bark on the tree trunk.

Density The number of plants per hectare.

Direct drilling A minimum tillage practice in which a crop or pasture is sown directly into untilled soil. Stubble or pasture may be reduced by burning or grazing, or retained. Weed control and the reduction of competition from pastures may be achieved by grazing or burning. It is most commonly practiced in mixed farming areas with reliable rainfall.

Groundcover Any type of herbaceous vegetation, native and non-native, living or dead.

Land degradation risk This indicates the level of risk that land degradation could cause as a result of INS clearing. There are three risk levels: low, moderate and high. The level of risk is determined by applying either the state-wide land degradation map or assessment methodology, which are available in Appendix 3.

Mosaic In an ecosystem, the pattern of different plant communities. It can also refer to different stages of growth within the plant community.

Soil disturbance Alteration to the natural surface of the ground (the soil) usually caused by the use of equipment (farm machinery, construction equipment etc).

Watercourse A stream or river of a Strahler stream order 3 or above. The Strahler Stream Classification system assigns waterways an 'order' according to the number of its tributaries.

Wetland means any type of shallow body of water (such as a marsh, billabong, swamp or sedgeland) that is: (a) inundated cyclically, intermittently or permanently with water, or (b) vegetated with wetland plant communities.

Appendix 1: Declared invasive native species list

Invasive native species	Maximum DBHOB allowed to be cleared (cm)	Retention requirements when clearing by clearing type b) clearing of individual plants with nil to minimal disturbance to soil and groundcover (Number of plants per hectare to be retained)
<i>Acacia aneura</i> (mulga)	20	20 stems under 20cm DBHOB
<i>Acacia deanei</i> (Deane's wattle) ¹	n/a	Nil
<i>Acacia homalophylla</i> (yarran)	20	20 stems under 20cm DBHOB
<i>Acacia mearnsii</i> (black wattle)	n/a	Nil
<i>Acacia paradoxa</i> (kangaroo thorn)	n/a	Nil
<i>Acacia salicina</i> (cooba or native willow)	20	Nil
<i>Acacia stenophylla</i> (black wattle or river cooba)	20	20 stems under 20cm DBHOB
<i>Bursaria spinosa</i> (blackthorn) ²	n/a	Nil
<i>Callitris endlicheri</i> (black cypress)	30	20 stems under 30cm DBHOB
<i>Callitris glaucophylla</i> (white cypress)	30	20 stems under 30cm DBHOB
<i>Cassinia arcuata</i> (Sifton bush)	n/a	Nil
<i>Cassinia laevis</i> (cough bush)	n/a	Nil
<i>Cassinia quinquefaria</i>	n/a	Nil
<i>Casuarina cristata</i> (Belah)	20	20 stems under 20cm DBHOB
<i>Dodonaea viscosa</i> subsp. <i>angustissima</i> (narrow-leaf hopbush)	n/a	Nil
<i>Dodonaea viscosa</i> subsp. <i>mucronata</i>	n/a	Nil
<i>Dodonaea viscosa</i> subsp. <i>spatulata</i> (broad-leaf hopbush)	n/a	Nil
<i>Eremophila bignoniiflora</i> (eurah)	n/a	Nil
<i>Eremophila bowmanii</i> subsp. <i>bowmanii</i> (silver turkey bush)	n/a	Nil
<i>Eremophila duttonii</i> (harlequin fuchsia Bush)	n/a	Nil
<i>Eremophila gilesii</i> (green turkey-bush)	n/a	Nil
<i>Eremophila longifolia</i> (emu bush)	n/a	Nil
<i>Eremophila maculata</i> (spotted fuchsia)	n/a	Nil
<i>Eremophila mitchellii</i> (budda, false sandalwood)	n/a	Nil
<i>Eremophila sturtii</i> (turpentine)	n/a	Nil
<i>Eucalyptus camaldulensis</i> (river red gum)	30	20 stems under 30cm DBHOB
<i>Eucalyptus coolabah</i> (coolibah)	20	20 stems under 20cm DBHOB
<i>Eucalyptus intertexta</i> (red box)	30	20 stems under 30cm DBHOB
<i>Eucalyptus largiflorens</i> (black box)	20	20 stems under 20cm DBHOB
<i>Eucalyptus populnea</i> subsp. <i>bimbil</i> (bimble box, poplar box)	30	20 stems under 30cm DBHOB

Invasive native species	Maximum DBHOB allowed to be cleared (cm)	Retention requirements when clearing by clearing type <i>b</i>) clearing of individual plants with nil to minimal disturbance to soil and groundcover (Number of plants per hectare to be retained)
<i>Geijera parviflora</i> (wilga)	20	20 stems under 20cm DBHOB
<i>Kunzea ericoides</i> (burgan)	n/a	Nil
<i>Kunzea parvifolia</i> (violet kunzea)	n/a	Nil
<i>Leptospermum brevipes</i> (grey tea-tree, tea-tree)	n/a	Nil
<i>Maireana microphylla</i> (eastern cotton bush)	n/a	Nil
<i>Duma florulenta</i> (syns.: <i>Muehlenbeckia cunninghamii</i> & <i>Muehlenbeckia florulenta</i> (lignum))	n/a	Nil
<i>Nitraria billardiarei</i> (Dillon Bush)	n/a	Nil
<i>Olearia elliptica</i> subsp. <i>elliptica</i> (sticky daisy bush, peach bush)	n/a	Nil
<i>Sclerolaena birchii</i> (galvanized burr)	n/a	Nil
<i>Sclerolaena muricata</i> (black roly-poly) ³	n/a	Nil
<i>Senna artemisioides</i> subsp. <i>X artemisioides</i> (syn.: <i>Senna</i> form taxon 'artemisioides' (silver cassia))	n/a	Nil
<i>Senna artemisioides</i> subsp. <i>filifolia</i> (syn.: <i>Senna</i> form taxon 'filifolia' (punky bush))	n/a	Nil
<i>Vachellia farnesiana</i> (mimosa)	n/a	Nil

Notes:

¹ *Acacia deanei* (Deane's wattle) includes both subsp. *deanei* and *paucijuga*.

² *Bursaria spinosa* (blackthorn) includes both subsp. *spinosa* and *lasiophylla*.

³ *Sclerolaena muricata* (black roly-poly)³ includes all subsp. *muricata*, *semiglabra* and *villosa*

Appendix 2: Help to identify some common invasive native species

White cypress (*Callitris glaucophylla*)

A straight-trunked, medium-sized tree growing up to 20 metres. Rough bark, needle-like aromatic green leaves and woody cones that separate into six segments at the base



Silver cassia (*Senna artemisioides* notho subsp. *Artemisioides*)

A 1–2 metre high shrub with whitish to grey-green leaves, usually with 4–6 pairs of leaflets, and yellow flowers.



Turpentine (*Eremophila sturtii*)

Also known as Narrow-leaf emu bush. Sticky, hairless shrub, 1–4 metres high, with slender branches and dark grey bark. Generally multi-stemmed and has pink, bell-shaped flowers



Narrow leaf hopbush (*Dodonaea viscosa* subsp. *angustissima*)

A spreading and slightly sticky shrub, usually 1–2 metres high, although occasionally growing to 5 metres. It is multi-stemmed and hairless except for the flowers.



Mulga (*Acacia aneura*)

Tall shrub or small tree, to 8 metres high, greyish-blue in colour. Leaves of variable size and shape covered in minute downy hairs. Bright yellow flowers may occur at any time of the year.



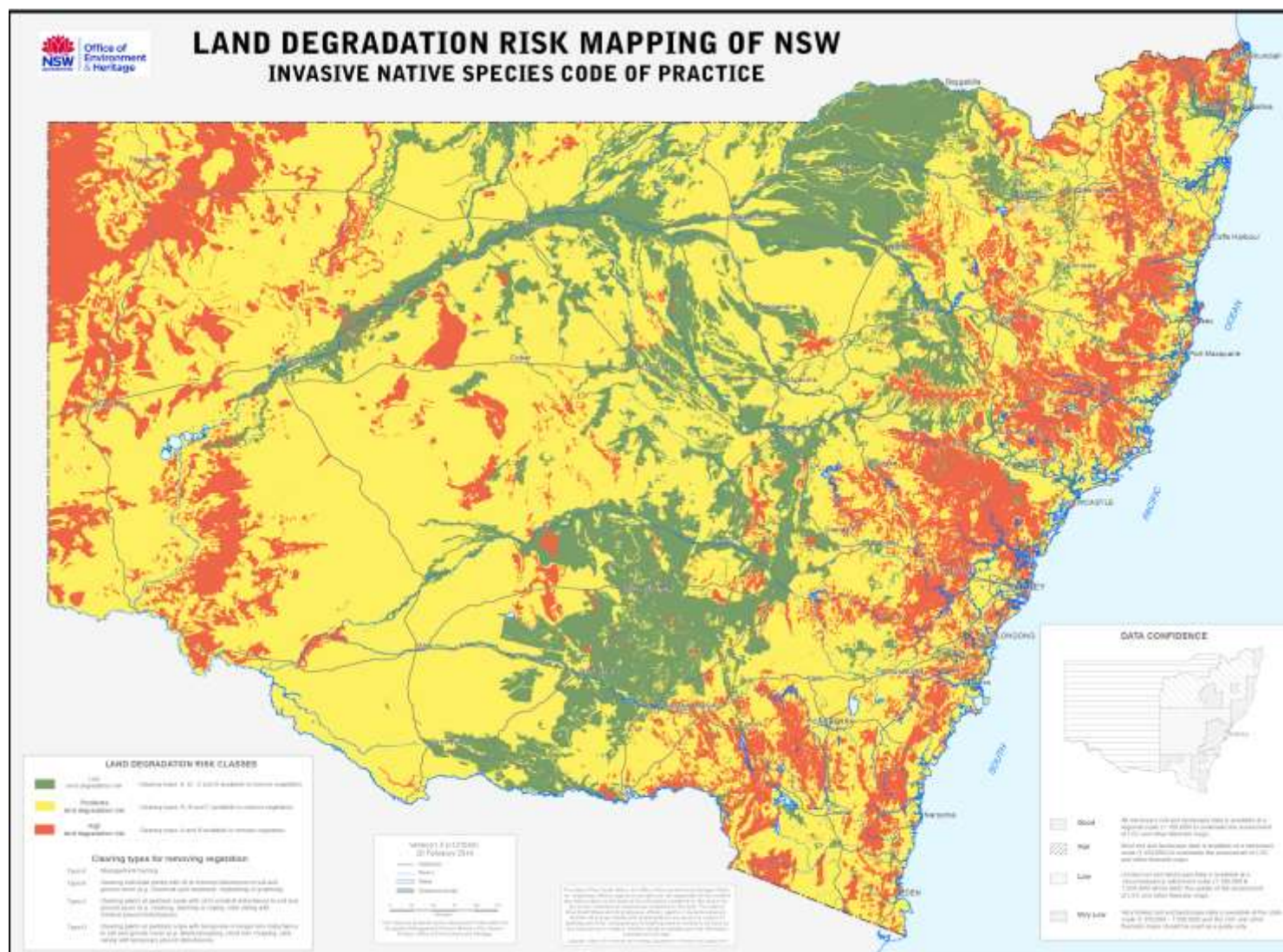
Budda (*Eremophila mitchellii*)

Budda is a shrub to about 3 metres, or a tree to 9 metres high with aromatic leaves and branchlets that are hairless at the ends. Bark is rough, dark-brown to black. White bell-shaped flowers occur mainly in spring and autumn.



NOTE TO READER: To be completed

Appendix 3: Land degradation risk assessment map and method



Note: The scale at which this map is produced means that it is indicative only. Landholders should confirm their land degradation risk before clearing.

Land Degradation Risk Assessment Method for INS Ministerial Order (DRAFT for TESTING)

The following land degradation risk assessment method may be used to determine the land degradation risk category for the purposes of the Clearing of Invasive Species Ministerial Order (the Order). The clearing types that are permitted depend on the land degradation risk category of the land to be cleared.

1. Introduction

The following land degradation hazards are assessed to determine a Land Degradation Risk Category (LD Risk Category) for use in relation to the application of the Order:

- water erosion
- wind erosion
- shallow and rocky soils.

The Land Degradation Risk Category is determined for each of these land degradation hazards. The overall risk level is determined by the highest risk level out of the three individual hazards.

2. Land Degradation Risk Category Categories

This simplified land degradation risk assessment process determines a risk category for the Order.

The method can be used to classify any site into one of the following risk categories:

- Low Land Degradation Risk Category
- Moderate Land Degradation Risk Category
- High Land Degradation Risk Category.

3. Assessing water erosion hazard

Water erosion hazard is the susceptibility of land to soil erosion by moving water.

Slope, evidence of existing gully erosion and whether the site is a high run on area are used to determine the Land Degradation Risk Category for Water Erosion according to Table 1 below.

Table 1: Water erosion hazard criteria

Slope (%)	Land is a high run on area or there is evidence of existing erosion	LD Risk Category
0-3%	No evidence of rill and/or gully erosion	Low risk
	Evidence minor rill and/or gully erosion	Moderate risk
>3-8%	Not a water run on area and no evidence of existing gully erosion	Low risk
	Land receives a lot of water run off or there is evidence of existing gully erosion on the land	High risk
>8-25%	Not a water run on area and no evidence of existing gully erosion	Moderate risk
	Land receives a lot of water run off or there is evidence of existing gully erosion on the land	High risk
>25		High risk

4. Assessing wind erosion hazard

Wind erosion hazard is the susceptibility of land to the erosion of soil particles by wind.

Wind erodibility of soil (amount of clay) and average annual rainfall are used to determine the LD Risk Category for Wind Erosion according to Table 2 below.

Table 2: Wind erosion hazard criteria

Average annual rainfall	Wind erodibility class of surface soil	LD Risk Category
>300 mm	Low erodibility (> 13% clay) (loams, clay loams, clays) And Moderate erodibility: fine sandy loams, sandy loams (clay 6 to <13%)	Low risk
	High erodibility: loam sands, loose sands (clay < 6%)	Moderate risk
<300 mm	Low erodibility (> 13% clay) (loams, clay loams, clays)	Low risk
	Moderate erodibility: fine sandy loams, sandy loams (clay 6 to <13%)	Moderate risk
	High erodibility: loam sands, loose sands (clay < 6%)	High risk

5. Assessing shallow and rocky soil hazard

Shallow soils and rockiness increases the LD Risk Category.

Average soil depth and percentage exposure of rocky outcrops are used to determine the LD Risk Category for shallow and rocky soil hazard according to Table 3 below.

Average soil depth is the depth from the soil surface to bedrock.

Table 3 Shallow and rocky soils hazard criteria

Soil depth (cm)	Rocky outcrop (% coverage)	LD Risk Category
>50	0–30	Low risk
	30-50%	Moderate risk
	>50	High risk
0-50cm		High risk

Want more information?

Contact your Local Land Services office for advice and support on choosing the right clearing type for your property

Space left for sticky label for LLS to include individual details

Contact the Office of Environment and Heritage for more information on native vegetation

Contact details for appropriate OEH office will be included in the final version of this document.

Read the full Ministerial Order at:

www.environment.nsw.gov.au/resources/vegetation/20140276DraftOrderINS.pdf