

REPORT UNDER THE NATIVE VEGETATION ACT 2003 IN RELATION TO:

**ACCREDITED EXPERT'S ASSESSMENT IN ACCORDANCE WITH CLAUSE 19
OF THE NATIVE VEGETATION REGULATION 2013 FOR PVP REFERENCE
NUMBER 20649**

Report prepared by: Accredited Expert 30609

PVP reference number: 20649

1. EXECUTIVE SUMMARY

This Accredited Expert report relates to the assessment of the clearing proposed by Property Vegetation Plan (PVP) number 20649.

Under s. 29(2) of the *Native Vegetation Act 2003* a PVP cannot be approved unless the clearing concerned will improve or maintain environmental outcomes.

Clause 18 of the *Native Vegetation Regulation 2013* prescribes the circumstances in which approval of a PVP that proposes broadscale clearing can be granted. In most cases an assessment and determination of whether the clearing will improve or maintain environmental outcomes is conducted in accordance with the Environmental Outcomes Assessment Methodology (EOAM).

In some circumstances the EOAM does not adequately account for specific or unique circumstances which have been encountered during the assessment of a clearing proposal. In these circumstances the assessment may use Special Provisions for Minor Variation (Clause 19 of the *Native Vegetation Regulations 2013*).

In this instance the Special Provisions for Minor Variation have been used to replace chapter 7 of the EOAM (including table 7.1 but excluding point 16 and table 7.2) with the Clearing of Invasive Native Species Ministerial Order made under clause 38 of the *Native Vegetation Regulation 2013*. The replacement of this Chapter of the EOAM, with the relevant parts of the Ministerial Order as a minor variation will improve or maintain environmental outcomes and strict adherence to the Assessment Methodology is unreasonable and unnecessary.

Figure 1: A conceptual outline of the assessment process for PVP 20649

	Invasive Native Species Tool
Assessment using EAOM	FAIL
Assessment using Minor Variation to the Chapter 7 of the EOAM	PASS

This report details the accredited expert's opinions formed in relation to the replacement of chapter 7 of the Assessment Methodology and cl. 19 of the *Native Vegetation Regulation 2013* when assessing PVP reference number 20649.

The minor variation is a replacement of Chapter 7 of the EOAM with Schedule A of the Ministerial Order for the Clearing of Invasive Native Species (including appendix 1 & 2) made under clause 38 of the *Native Vegetation Regulation 2013*.

The accredited expert is of the opinion that a minor variation to the EOAM will result in a determination that the proposed clearing will improve or maintain environmental outcomes and strict adherence to the Assessment Methodology is in this particular case unreasonable and unnecessary because:

- The current EOAM omits several species of INS which are otherwise listed as INS in the Ministerial Order for the Clearing of Invasive native Species; and
- The current EOAM has smaller Diameter at Breast Height Over Bark (DBHOB) limits than the limits which apply to some species in the Ministerial Order for the Clearing of Invasive native Species; and
- The current EOAM has unnecessary restrictions on the extent of clearing which can be undertaken (e.g. 20% for Paddock scale treatment with long term disturbance to soil and groundcover); and

- The *Native Vegetation Regulation 2013*, through the Ministerial Order released in 2014, has made the clearing of invasive native species (INS) a Routine Agricultural Management Activity (RAMA).

2. Background

Legislative background

Property vegetation plan (PVP), reference number 20649 proposes broadscale clearing within the definition of the *Native Vegetation Act 2003*.

Under s. 29(2) of the *Native Vegetation Act 2003*, the Minister is not to approve a PVP that proposes broadscale clearing unless the clearing concerned will improve or maintain environmental outcomes.

Clause 18 of the *Native Vegetation Regulation 2013* prescribes the circumstances in which approval of a PVP that proposes broadscale clearing can be granted. Normally such a PVP can only be granted where there has been an assessment and determination in accordance with the Assessment Methodology that the proposed clearing will improve or maintain environmental outcomes. However, a PVP can also be granted where an accredited expert has assessed and certified in accordance with clause 19 of the *Native Vegetation Regulation 2013* that the accredited expert is of the opinion that the proposed clearing will improve or maintain environmental outcomes.

This report details the accredited expert's opinions formed in relation to the replacement of chapter 7 of the EOAM (including table 7.1 but excluding point 16 and table 7.2) with Schedule A of the Clearing of Invasive Native Species Order (including appendix 1 & 2) made under clause 38 of the *Native Vegetation Regulation 2013* and cl. 19 of the *Native Vegetation Regulation 2013* when assessing PVP reference number 20649

Initial assessment of broadscale clearing proposed by PVP 20649

When the broadscale clearing proposed by this PVP was initially assessed in accordance with the EOAM using the criteria defined by Chapter 7, it resulted in a determination that the proposed clearing did not improve or maintain environmental outcomes. This was because the clearing of INS under chapter 7 of the EOAM excluded species, limited the DBHOB and has greater restrictions on the area of clearing that can be initially undertaken.

Final assessment of broadscale clearing proposed by PVP 20649 by an accredited expert

The broadscale clearing proposed by PVP 20649 was then assessed and certified by an accredited expert in accordance with clause 19 of the *Native Vegetation Regulation 2013*. In the accredited expert's opinion, the proposed clearing will improve or maintain environmental outcomes.

Sections 3 and 4 of this document provides detail of the accredited expert's assessment and certification in accordance with clause 19 of the *Native Vegetation Regulation 2013*.

3. MINOR VARIATION:

3.1 Legal provision for minor variation

The legal provision for this minor variation is in Clause 19 'Special provisions for minor variation' of the *Native Vegetation Regulation 2013* which states:

- (1) An accredited expert may make an assessment that proposed clearing will improve or maintain environmental outcomes only if there has been an assessment in accordance with the Assessment Methodology of whether the proposed clearing will improve or maintain environmental outcomes (not resulting in a determination that the proposed clearing will improve or maintain environmental outcomes) and the accredited expert is of the opinion that:
- (a) a minor variation to the Assessment Methodology would result in a determination that the proposed clearing will improve or maintain environmental outcomes (other than a variation that is not allowable under this clause); and
 - (b) strict adherence to the Assessment Methodology is in the particular case unreasonable and unnecessary.

3.2 How the Assessment Methodology was varied

The EOAM was varied by the replacement of chapter 7 of the EOAM (including table 7.1 but excluding point 16 and table 7.2) with Schedule A of the Clearing of Invasive Native Species Ministerial Order made under clause 38 of the *Native Vegetation Regulation 2013* (see attachment 1 for full details/context).

i) In correctly applying Schedule A of the Clearing of Invasive Native Species Ministerial Order the following points/parts have been excluded;

- a) "Purpose of these conditions" section (removed to avoid confusion with regards to Ministerial Order and EOAM).
- b) Table 1, Point 7 – "The area to be cleared is within 30 metres of an estuary, wetland, or incised water course" (Removed as a minor variation is not permitted for riparian buffer distances).
- c) Table 1, Point 8 – "The area to be cleared is within 100 metres of an estuary, wetland, or incised water course" (Removed as a minor variation is not permitted for riparian buffer distances).
- d) Section – "5.5 Clearing using this order is not permitted in areas where either the Thinning of native vegetation order or the Clearing of paddock trees in a cultivation area order have been used". (removed to ensure consistency with *Native Vegetation Act 2003* and *Native Vegetation Regulations 2013*).
- e) Section – "7.7 Within 30 metres of an estuary, wetland or incised watercourse the clearing must only be undertaken by removing individual trees and woody shrubs with no disturbance to soil, groundcover". (Removed as a minor variation is not permitted for riparian buffer distances).
- f) The following definitions from Section 11 (removed as a minor variation is not permitted for riparian buffer distances).
 - **Estuary** means:
 - any part of a river whose level is periodically or intermittently affected by coastal tides; or
 - any lake or other partially enclosed body of water that is periodically or intermittently open to the sea.
 - **Strahler stream** order means the stream order of a stream determined by the Strahler system as defined in Schedule 2, Part 1 of the Water Management (General) Regulation 2011.

- **Visible channel** means a visible path where water flows, regardless of flow regime, which shows some degree of incision or erosion.
- **Watercourse** means a stream of Strahler stream order 3 or larger with a visible channel.
- **Wetland** means any type of shallow body of water, other than a floodplain (such as a marsh, billabong, swamp or sedgeland) that is:
 - inundated cyclically, intermittently or permanently with water; and
 - vegetated with wetland plant communities.

ii) In retaining Point 16 of Section 7.2 and Table 7.2 of the EOAM the following details are retained in the varied assessment;

- a) For methods of clearing plants at a paddock scale with temporary disturbance to soil and groundcover (now referred to as Clearing type d), and clearing of plants at a paddock scale with longer terms disturbance to soil and ground cover (now referred to as Clearing type e), the clearing does not result in the introduction into the cleared area of any non-native perennial vegetation other than the species listed in Table 7.2 (where judgement of the Catchment Management Authority (now referred to as the Local Land Services) the species listed in Table 7.2 is non-persistent in the area the species proposed to be introduced).
- b) Table 7.2 Non-Persistent and Non-Native Perennial Species Database

Non-persistent non-native perennial vegetation species
<i>Medicago sativa</i> (Lucerne)

3.3 Description of the proposed clearing

This variation relates to the proposed clearing of listed Invasive Native Species (Listed under Appendix 1 “invasive native species database listing” of the Clearing of Invasive Native Species Order) including INS with stems of up to 30cm DBHOB. The clearing proposal also includes the aim of treating up to 80% of the INS extent/ less than 200 hectares in one event by the landholder for operational efficiency

3.4 Reasons for recommending the proposed minor variation

Prior to this minor variation the determination was that the proposed clearing did not improve or maintain environmental outcomes because the clearing does not meet the requirements of the assessment under chapter 7 of the current EOAM.

In considering the replacement of Chapter 7 of the EOAM with the conditions of Schedule A of the Ministerial Order for the Clearing of Invasive Native Species (including appendixes 1 & 2) the following criteria where assessed;

i) Intent of Chapter 7 of the EOAM and of the Ministerial Order for the Clearing of Invasive Native Species.

- The purpose of clearing under Chapter 7 of the EOAM is the “re-establishing of native vegetation or allowing natural regeneration of native species”, whilst the assessment process is “designed to maintain or create a mosaic of vegetation states across the landscape”.
- The objective of INS clearing under the Ministerial Order is to create a mosaic of native vegetation states across the landscape by allowing the clearing of some of the INS and encouraging the re-establishment of and/or natural regeneration of more desirable native vegetation.

Whilst the wording used in each of these documents differs slightly I am of the opinion that the intent of each document is largely the same

ii) Consideration of species listings and DBHOB limits

- For listing in Table 7.1 of the EOAM a species must meet the following criteria:
 - a) the species invades plant communities where it has not been known to occur previously, or the species regenerates densely following natural or artificial disturbance; and
 - b) the invasion and/ or dense regeneration of the species results in change of structure and/ or composition of a vegetation community; and
 - c) the species is within its natural geographic range.
- For listing in Appendix 1 of the Ministerial Order for the Clearing of Invasive Native Species the species must be:
 - a) within its natural range in the area specified; and
 - b) densely regenerating or is invading plant communities in which the species does not generally occur, which is causing decline in the structure or composition of the vegetation community.

In each instance the listing of species and DBHOB limits have been set by a team of experts, and whilst the species list and DBHOB does differ it is considered reasonable, given the listing criteria is so similar, to use the list provided by the Ministerial Order as this list was compiled and approved in 2014 whilst the EOAM was last amended in 2011. Furthermore the listing used by the ministerial order is currently available for use by landholders as a permitted activity (RAMA).

iii) Consideration of Riparian Buffer distances

Clause 19(2)(a) of the *Native Vegetation Regulation 2013* states that a variation to the assessment methodology is not allowable for the variation of “riparian buffer distances or associated offset requirements”.

A review of the EOAM however, notes that the current chapter 7 does not require assessment under the water quality tool (Notes section of 7.2). However under point 14 of section 7.2 it is noted that an assessment must be undertaken to determine the riparian buffer distances using Table 3.1 of the EOAM which defines the riparian buffer distance. It is my opinion that given the replacement of Chapter 7 with the Ministerial Order would result in a change to the riparian buffer distances defined by table 3.1 of the EOAM that the conditions of the Ministerial Order which affect this change cannot be applied.

This minor variation therefore imposes the use of the Water Quality tool (Ch. 3 of the EOAM) and limits clearing within these buffer distances to clearing to management burning (clearing type a) and the clearing of individual plants with no disturbance to soil and ground cover (Clearing type b).

iv) Retention of the consideration of Non-Persistent and Non-Native Perennial Species in the varied assessment methodology

Point 16 of Section 7.2 of the current EOAM had been developed to allow the introduction of a deep rooted perennial species to ensure longer term soil stability/ground cover, whilst also acknowledging that the species has limited viability in parts of New South Wales. Given that the inclusion of this species in current PVPs is a common occurrence, and that the inclusion still relies upon the experience and judgement of an accredited assessing officer it is my opinion that the continued inclusion of this point is reasonable.

4. Certification by the accredited expert

As an accredited expert I am of the opinion that minor variation to the Assessment Methodology will result in a determination that the proposed clearing will improve or maintain environmental outcomes and strict adherence to the Assessment Methodology is in this case unreasonable and unnecessary because:

1. The Intent of Chapter 7 of the EOAM and of the Ministerial Order for the Clearing of Invasive Native Species are largely the same.
2. The species and maximum DBHOB applied under appendix 1 of the Ministerial Order reflect the most up to date, expert reviewed species listing and this list is currently available for use (self-assessment) by landholders.
3. There is no impact upon Riparian buffer distances.
4. The retention of the ability for assessing officers to consider the inclusion of Non-Persistent and Non-Native Perennial species does not impact or vary the environmental outcomes that would be achieved if the standard EOAM was used.
5. The clearing proposed under this PVP, using the conditions of the Ministerial Order for the Clearing of Invasive Native, will align with the clearing outcomes which can currently occur without consent due to the Ministerial Codes being considered as permitted clearing (RAMAs) under the *Native Vegetation Act 2003*.

ATTACHMENT 1:

Note: All items highlighted in **RED** are not included in the replacement of Chapter 7 with the Ministerial Order for the Clearing of Invasive Native Species.

Schedule A:

CONDITIONS FOR THE CLEARING OF INVASIVE NATIVE SCRUB

Purpose of these conditions

For the purposes of this Ministerial Order, 'invasive native scrub' (INS) refers to plants:

- a) for which the species is declared an invasive native species (that is listed in Appendix 1) for the relevant Local Land Services Region; and
- b) are regenerating densely or are invading plant communities, causing decline in the structure or composition of the vegetation community.

Clearing of INS will be a routine agricultural management activity if it is carried out in accordance with this Ministerial Order and the conditions of the order set out in this schedule.

The intent is to allow for self-assessment to control and manage INS. The objective of INS clearing is to create a mosaic of native vegetation states across the landscape by allowing the clearing of some of the INS and encouraging the re-establishment of and/or natural regeneration of more desirable native vegetation.

A stream-lined Property Vegetation Plan (PVP) assessment is available for clearing proposals that cannot be cleared in accordance with this order, or where the preferred clearing types or species are not permitted under this order. A stream-lined PVP is also available where a landholder would prefer a PVP rather than clearing under this order.

1. What can be cleared?

1.1 INS can be cleared if:

- a) the plants to be cleared are of a species that is a declared invasive native species (as listed in Appendix 1) for the relevant Local Land Services Region; and
- b) the plants to be cleared are regenerating densely or are invading plant communities, causing decline in the structure or composition of the vegetation community.

2. How can the vegetation be cleared?

2.1 Subject to the site characteristics outlined in Section 3, clearing may only be undertaken using one or more of the following clearing types:

- a) management burning;
- b) clearing individual plants with nil to minimal disturbance to soil and groundcover;
- c) clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover;
- d) clearing plants at paddock scale with temporary disturbance to soil and groundcover;
- e) clearing plants at paddock scale with longer-term disturbance to soil and groundcover.

3. Where can the clearing types be used?

3.1 The clearing types identified in Section 2.1 **can only** be used according to the site characteristic of the land where the clearing is to take place. In Table 1, a '✓' indicates the availability of a clearing type for use on land with the corresponding site characteristic. A clearing type **cannot** be used on land where a '✗' occurs against the relevant site characteristic.

Table 1: Clearing type availability for different site characteristics

	Clearing type				
	Management burning	Clearing individual plants with nil to minimal disturbance to soil and groundcover	Clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover	Clearing plants at paddock scale with temporary disturbance to soil and groundcover	Clearing plants at paddock scale with longer-term disturbance to soil and groundcover
Site characteristic	a)	b)	c)	d)	e)
1. Non-INS trees and shrubs represent >50% of the total number of trees and shrubs	✓	✓	✗	✗	✗
2. The vegetation is a threatened ecological community	✓	✓	✗	✗	✗
3. The INS to be cleared is <i>Duma florulenta</i> (syns.: <i>Muehlenbeckia cunninghamii</i> & <i>Muehlenbeckia florulenta</i> (Lignum)) and/or <i>Casuarina cristata</i> (Belah)	✓	✓	✗	✗	✗
4. The area to be cleared is of low land degradation risk	✓	✓	✓	✓	✓
5. The area to be cleared is of moderate land degradation risk	✓	✓	✓	✓	✗
6. The area to be cleared is of high land degradation risk	✓	✓	✗	✗	✗
7. The area to be cleared is within 30 metres of an estuary, wetland, or incised watercourse	✓	✓	✗	✗	✗
8. The area to be cleared is within 100 metres of an estuary, wetland, or incised watercourse	✓	✓	✓	✗	✗

4. How much can be cleared?

4.1 No more than 80% of the INS extent on the landholding may be cleared; that is, 20% of the INS extent must be retained and not cleared by any clearing type.

4.2 If clearing greater than 200 hectares on a landholding using clearing types c) and/or d) and/or e) (as listed in Section 2.1) the initial clearing increment must not exceed 40% of the INS extent on the landholding, except as set out in condition 4.3 below.

4.3 A further 40% of the INS extent may be cleared using clearing type c) and/or d) and/or e) (as listed in Section 2.1) if the area cleared in the initial clearing increment by these clearing types has achieved and maintained for a period of at least 12 months the following minimum groundcover recovery levels:

- a) a groundcover of greater than 50%; and
- b) the groundcover consists of greater than 75% native groundcover.

4.4 The initial 40% cleared (referred to in condition 4.2 above) may be re-cleared using clearing type c) and/or d) and/or e) (as listed in Section 2.1) if:

- a) all additional areas cleared have achieved the groundcover recovery levels as defined in condition 4.3 above; and
- b) no more than 40% of the INS extent is cleared at any one time.

Table 2: Proportion of INS extent able to be cleared by each clearing type

Clearing type a) Management burning	80%		20%
Clearing type b) Clearing individual plants with nil to minimal disturbance to soil and groundcover	80%		20%
Clearing type c) Clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover	40%	40%	20%
Clearing type d) Clearing plants at paddock scale with temporary disturbance to soil and groundcover	40%	40%	20%
Clearing type e) Clearing plants at paddock scale with longer-term disturbance to soil and groundcover	40%	40%	20%

Key to shading:

	This proportion of INS on the landholding can be cleared in accordance with the conditions
	This proportion is a second increment for each clearing type
	This proportion must remain uncleared by any clearing type

Note: 80% may be cleared by clearing types c), d) and e) if the area to be cleared is less than 200 hectares per landholding.

5. Conditions applying to all clearing types:

5.1 Clearing carried out under this Ministerial Order must not result in a change of land use from a grazing system to a cropping system.

5.2 All native groundcover, retained individuals of the INS and all non-INS must be retained following clearing.

5.3 Clearing carried out under this Ministerial Order must be for the purpose of re-establishing native vegetation or allowing natural regeneration of native vegetation in order to maintain or create a mosaic of native vegetation states across the landscape.

5.4 Clearing of non-INS must be limited to the minimum extent necessary to clear the INS.

5.5 Clearing using this order is not permitted in areas where either the Thinning of native vegetation order or the Clearing of paddock trees in a cultivation area order have been used.

Note: The limitation on change of land use in clause 5.1 does not prevent the use of short-term cropping in accordance with clearing type e) (clearing type as listed in Section 2.1).

6. If clearing by clearing type a) *Management burning:*

6.1 Clearing must not result in soil surface disturbance.

6.2 Clearing must not result in the intentional introduction into the cleared area of any non-native vegetation.

7. If clearing by clearing type b) *Clearing individual plants with nil to minimal disturbance to soil and groundcover:*

7.1 Clearing must only be undertaken by clearing of individual INS plants, with minimal disturbance to soil and groundcover.

7.2 Plants of the species listed in Appendix 1 as requiring retention (see column 14) are to be retained at the densities specified in Appendix 1, except where more than one species of INS is present in the area to be cleared.

7.3 Where more than one species of INS is present on the area to be cleared, the total stems required to be retained does not exceed 20 stems per hectare for stems under the maximum diameter at breast height over bark (DBHOB) allowed to be cleared.

7.4 Stems retained as set out in Section 7.3 must reflect the proportion of total individuals for each species present.

7.5 Where an individual tree or shrub retained in accordance with Sections 7.2, 7.3 and/or 7.4 above has multiple stems, then that tree or shrub is counted as one stem for the purposes of calculating the retention requirements.

7.6 Individual plants of INS with a DBHOB greater than the 'maximum DBHOB allowed to be cleared' listed for the corresponding species in Appendix 1 must not be cleared.

7.7 Within 30 metres of an estuary, wetland or incised watercourse the clearing must only be undertaken by removing individual trees and woody shrubs with no disturbance to soil, groundcover.

7.8 The clearing must not result in the intentional introduction into the cleared area of any non-native vegetation.

Note: Examples of clearing type b) *Clearing individual plants with nil to minimal disturbance to soil and groundcover* include but are not limited to chemical spot treatment, ringbarking or grubbing.

8. If clearing by clearing type c) *Clearing plants at a paddock scale with nil to minimal disturbance to soil and groundcover:*

8.1 The clearing of groundcover and disturbance to soil surface must be limited to the minimum extent necessary.

8.2 Non-INS must comprise less than 10% of the total number of individual trees and shrubs cleared.

8.3 Non-INS with a stem or trunk greater than 20 cm DBHOB and INS with a stem or trunk greater than the 'maximum DBHOB allowed to be cleared' must not be cleared.

8.4 The clearing must not result in the intentional introduction into the cleared area of any non-native vegetation except the sowing of non-persistent annual non-native vegetation by zero till.

8.5 If more than 500 hectares are to be cleared, a minimum of 20% of the native vegetation on that area must be retained on each 500 hectare area within or between cleared areas and must be part of the INS extent. The native vegetation retained for the purposes of this provision may be included in the calculation of the 20% uncleared area of INS extent on the landholding.

Note: Examples of clearing type c) *Clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover* include but are not limited to chaining, slashing, roping or stick raking applied with minimal disturbance to soil and groundcover.

9. If clearing by clearing type d) *Clearing plants at paddock scale with temporary disturbance to soil and groundcover:*

9.1 The clearing of groundcover and disturbance to soil surface must be limited to the minimum extent necessary.

9.2 Non-INS must comprise less than 10% of the total number of individual trees and shrubs cleared.

9.3 Non-INS with a stem or trunk greater than 20 cm DBHOB and INS with a stem or trunk greater than the 'maximum DBHOB allowed to be cleared' must not be cleared except where the clearing is not intentional and does not exceed 20 stems per hectare.

9.4 The clearing must not result in the intentional introduction into the cleared area of any non-native vegetation except the sowing of non-persistent annual non-native vegetation as part of the clearing operation and is limited to **three occasions in 15 years** from the date of notification of the intention to use this Ministerial Order, and the non-native vegetation is not harvested.

9.5 If more than 500 hectares are to be cleared, a minimum of 20% of the native vegetation on that area must be retained on each 500 hectare area within or between cleared areas and must be part of the INS extent. The native vegetation retained for the purposes of this provision may be included in the calculation of the 20% uncleared area of INS extent on the landholding.

Note: Examples of clearing type d) *Clearing plants at paddock scale with temporary disturbance to soil and groundcover* include but are not limited to blade ploughing or crocodiling.

10. If clearing by clearing type e) *clearing plants at a paddock scale with longer-term disturbance to soil and groundcover:*

10.1 The clearing of groundcover and disturbance to soil surface must be limited to the minimum extent necessary.

10.2 Non-INS must comprise less than 10% of the total number of individual trees and shrubs cleared.

10.3 Non-INS with a stem or trunk greater than 20 cm DBHOB and INS with a stem or trunk greater than the 'maximum DBHOB allowed to be cleared' must not be cleared except where the clearing is not intentional and does not exceed 20 stems per hectare.

10.4 The clearing must not result in the intentional introduction into the cleared area of any non-native vegetation except the preparation and sowing of non-persistent annual non-native vegetation limited to **three occasions in 15 years** from the date of first notification of the intention to use this Ministerial Order.

10.5 If more than 500 hectares are to be cleared, a minimum of 20% of the native vegetation on that area must be retained on each 500 hectare area within or between cleared areas and must be part of the INS extent. The native vegetation retained for the purposes of this provision may be included in the calculation of the 20% uncleared area of INS extent on the landholding.

Note: An example of clearing type e) *Clearing plants at paddock scale with longer-term disturbance to soil and groundcover* includes but is not limited to short-term cropping.

11. Definitions

In this order terms have the same meaning as in the *Native Vegetation Act 2003*, and the *Native Vegetation Regulation 2013*, unless otherwise defined below.

Annual non-native vegetation means a plant that is not native vegetation and which completes its life cycle, from germination to the production of seed, within one year, and then dies.

Clearing type a) means clearing by management burning.

Clearing type b) means clearing individual plants with nil to minimal disturbance to soil and groundcover.

Clearing type c) means clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover.

Clearing type d) means clearing plants at paddock scale with temporary disturbance to soil and groundcover.

Clearing type e) means clearing plants at paddock scale with longer-term disturbance to soil and groundcover.

Density or densities means the number of plants per hectare.

Diameter at breast height over bark (DBHOB) means the diameter over the bark of the stem at 1.3 metres above the ground. If there are multiple stems on a tree then the diameter is measured on the largest stem.

Estuary means:

- a) any part of a river whose level is periodically or intermittently affected by coastal tides; or
- b) any lake or other partially enclosed body of water that is periodically or intermittently open to the sea.

INS extent means the extent of the areas on the landholding where:

- a) INS is currently present; and
- b) areas on the landholding where INS may not presently occur but where INS management is required to prevent their spread or recurrence.

Areas of non-native vegetation and areas of native vegetation not impacted by INS are not included in the INS extent on the landholding.

Invasive Native Scrub (INS) means plants that satisfy the following criteria:

- a) the plants to be cleared are of a species listed in the INS database (Appendix 1); and
- b) the plants to be cleared are regenerating densely or are invading plant communities, causing decline in the structure or composition of the vegetation community on the land to be cleared.

Land degradation risk is an indication of the level of risk of land degradation that could occur as a result of INS clearing. There are three risk levels: Low, Moderate and High. The risk level for the land to be cleared is determined in accordance with the land degradation risk assessment method at Appendix 2.

Landholding has the same meaning as it has in the *Native Vegetation Regulation 2013*.

Local Land Services (LLS) has the same meaning as it has in the *Local Land Services Act 2013*.

Management burning is planned and controlled use of fire for the purpose of managing INS.

Minimal disturbance means there has been no greater than 30% of the soil surface and existing groundcover disturbed (total area) as a result of the clearing.

No disturbance means there has been no greater than 5% of the soil surface and existing groundcover disturbed (total area) as a result of the clearing.

Non-native vegetation means vegetation that is not native vegetation, as defined by section 6 of the *Native Vegetation Act 2003*.

Non-INS means any plants that are not INS, as defined in Section 1 of this order.

Paddock scale means the clearing of multiple trees or shrubs at one time, usually by methods including but not limited to chaining, roping, bladeploughing and stickraking.

Routine agricultural management activities (RAMA) has the same meaning as it has in section 11 of the *Native Vegetation Act 2003*.

Soil disturbance means the turning, digging or disrupting of the soil surface, usually by an implement or machinery or by the pushing or pulling of trees or shrubs.

Strahler stream order means the stream order of a stream determined by the Strahler system as defined in Schedule 2, Part 1 of the *Water Management (General) Regulation 2011*.

Temporary disturbance means the application of a clearing method that causes significant soil disturbance, generally as a single pass, such as (but not limited to) bladeploughing or crocodiling.

Threatened ecological community means a threatened ecological community within the meaning of the *Threatened Species Conservation Act 1995* and listed in Part 3 of Schedule 1, Part 2 of Schedule 1A or Part 2 of Schedule 2 of that Act.

Visible channel means a visible path where water flows, regardless of flow regime, which shows some degree of incision or erosion.

Watercourse means a stream of Strahler stream order 3 or larger with a visible channel.

Wetland means any type of shallow body of water, other than a floodplain (such as a marsh, billabong, swamp or sedgeland) that is:

- a) inundated cyclically, intermittently or permanently with water; and
- b) vegetated with wetland plant communities.

Zero till means drilling of seed with minimal disturbance (less than 30%) to topsoil and no application of herbicide.

Appendix 1 – Remains unchanged

Appendix 2 – All references to the “the clearing of INS Ministerial Order” including “the INS Ministerial Order” are to be read as “the assessment methodology for this minor variation”

The following conditions of the current Chapter 7 of the EOAM are included for assessment of Environmental outcomes when using this minor variation.

- a) For methods of clearing plants at a paddock scale with temporary disturbance to soil and groundcover (now referred to as Clearing type d), and clearing of plants at a paddock scale with longer terms disturbance to soil and ground cover (now referred to as Clearing type e), the clearing does not result in the introduction into the cleared area of any non-native perennial vegetation other than the species listed in Table 7.2 (where judgement of the Catchment Management Authority (now referred to as the Local Land Services) the species listed in Table 7.2 is non-persistent in the area the species proposed to be introduced).
- b) Table 7.2 Non-Persistent and Non-Native Perennial Species Database

Non-persistent non-native perennial vegetation species
<i>Medicago sativa</i> (Lucerne)

REPORT UNDER THE NATIVE VEGETATION ACT 2003 IN RELATION TO:

**ACCREDITED EXPERT'S ASSESSMENT IN ACCORDANCE WITH CLAUSE 19
OF THE NATIVE VEGETATION REGULATION 2013 FOR PVP REFERENCE
NUMBER 20649**

Report prepared by: Accredited Expert 30609

PVP reference number: 20649

1. EXECUTIVE SUMMARY

This Accredited Expert report relates to the assessment of the clearing proposed by Property Vegetation Plan (PVP) number 20649.

Under s. 29(2) of the *Native Vegetation Act 2003* a PVP cannot be approved unless the clearing concerned will improve or maintain environmental outcomes.

Clause 18 of the *Native Vegetation Regulation 2013* prescribes the circumstances in which approval of a PVP that proposes broadscale clearing can be granted. In most cases an assessment and determination of whether the clearing will improve or maintain environmental outcomes is conducted in accordance with the Environmental Outcomes Assessment Methodology (EOAM).

In some circumstances the EOAM does not adequately account for specific or unique circumstances which have been encountered during the assessment of a clearing proposal. In these circumstances the assessment may use Special Provisions for Minor Variation (Clause 19 of the *Native Vegetation Regulations 2013*).

In this instance the Special Provisions for Minor Variation have been used to replace chapter 7 of the EOAM (including table 7.1 but excluding point 16 and table 7.2) with the Clearing of Invasive Native Species Ministerial Order made under clause 38 of the *Native Vegetation Regulation 2013*. The replacement of this Chapter of the EOAM, with the relevant parts of the Ministerial Order as a minor variation will improve or maintain environmental outcomes and strict adherence to the Assessment Methodology is unreasonable and unnecessary.

Figure 1: A conceptual outline of the assessment process for PVP 20649

	Invasive Native Species Tool
Assessment using EAOM	FAIL
Assessment using Minor Variation to the Chapter 7 of the EOAM	PASS

This report details the accredited expert's opinions formed in relation to the replacement of chapter 7 of the Assessment Methodology and cl. 19 of the *Native Vegetation Regulation 2013* when assessing PVP reference number 20649.

The minor variation is a replacement of Chapter 7 of the EOAM with Schedule A of the Ministerial Order for the Clearing of Invasive Native Species (including appendix 1 & 2) made under clause 38 of the *Native Vegetation Regulation 2013*.

The accredited expert is of the opinion that a minor variation to the EOAM will result in a determination that the proposed clearing will improve or maintain environmental outcomes and strict adherence to the Assessment Methodology is in this particular case unreasonable and unnecessary because:

- The current EOAM omits several species of INS which are otherwise listed as INS in the Ministerial Order for the Clearing of Invasive native Species; and
- The current EOAM has smaller Diameter at Breast Height Over Bark (DBHOB) limits than the limits which apply to some species in the Ministerial Order for the Clearing of Invasive native Species; and
- The current EOAM has unnecessary restrictions on the extent of clearing which can be undertaken (e.g. 20% for Paddock scale treatment with long term disturbance to soil and groundcover); and

- The *Native Vegetation Regulation 2013*, through the Ministerial Order released in 2014, has made the clearing of invasive native species (INS) a Routine Agricultural Management Activity (RAMA).

2. Background

Legislative background

Property vegetation plan (PVP), reference number 20649 proposes broadscale clearing within the definition of the *Native Vegetation Act 2003*.

Under s. 29(2) of the *Native Vegetation Act 2003*, the Minister is not to approve a PVP that proposes broadscale clearing unless the clearing concerned will improve or maintain environmental outcomes.

Clause 18 of the *Native Vegetation Regulation 2013* prescribes the circumstances in which approval of a PVP that proposes broadscale clearing can be granted. Normally such a PVP can only be granted where there has been an assessment and determination in accordance with the Assessment Methodology that the proposed clearing will improve or maintain environmental outcomes. However, a PVP can also be granted where an accredited expert has assessed and certified in accordance with clause 19 of the *Native Vegetation Regulation 2013* that the accredited expert is of the opinion that the proposed clearing will improve or maintain environmental outcomes.

This report details the accredited expert's opinions formed in relation to the replacement of chapter 7 of the EOAM (including table 7.1 but excluding point 16 and table 7.2) with Schedule A of the Clearing of Invasive Native Species Order (including appendix 1 & 2) made under clause 38 of the *Native Vegetation Regulation 2013* and cl. 19 of the *Native Vegetation Regulation 2013* when assessing PVP reference number 20649

Initial assessment of broadscale clearing proposed by PVP 20649

When the broadscale clearing proposed by this PVP was initially assessed in accordance with the EOAM using the criteria defined by Chapter 7, it resulted in a determination that the proposed clearing did not improve or maintain environmental outcomes. This was because the clearing of INS under chapter 7 of the EOAM excluded species, limited the DBHOB and has greater restrictions on the area of clearing that can be initially undertaken.

Final assessment of broadscale clearing proposed by PVP 20649 by an accredited expert

The broadscale clearing proposed by PVP 20649 was then assessed and certified by an accredited expert in accordance with clause 19 of the *Native Vegetation Regulation 2013*. In the accredited expert's opinion, the proposed clearing will improve or maintain environmental outcomes.

Sections 3 and 4 of this document provides detail of the accredited expert's assessment and certification in accordance with clause 19 of the *Native Vegetation Regulation 2013*.

3. MINOR VARIATION:

3.1 Legal provision for minor variation

The legal provision for this minor variation is in Clause 19 'Special provisions for minor variation' of the *Native Vegetation Regulation 2013* which states:

- (1) An accredited expert may make an assessment that proposed clearing will improve or maintain environmental outcomes only if there has been an assessment in accordance with the Assessment Methodology of whether the proposed clearing will improve or maintain environmental outcomes (not resulting in a determination that the proposed clearing will improve or maintain environmental outcomes) and the accredited expert is of the opinion that:
- (a) a minor variation to the Assessment Methodology would result in a determination that the proposed clearing will improve or maintain environmental outcomes (other than a variation that is not allowable under this clause); and
 - (b) strict adherence to the Assessment Methodology is in the particular case unreasonable and unnecessary.

3.2 How the Assessment Methodology was varied

The EOAM was varied by the replacement of chapter 7 of the EOAM (including table 7.1 but excluding point 16 and table 7.2) with Schedule A of the Clearing of Invasive Native Species Ministerial Order made under clause 38 of the *Native Vegetation Regulation 2013* (see attachment 1 for full details/context).

i) In correctly applying Schedule A of the Clearing of Invasive Native Species Ministerial Order the following points/parts have been excluded;

- a) "Purpose of these conditions" section (removed to avoid confusion with regards to Ministerial Order and EOAM).
- b) Table 1, Point 7 – "The area to be cleared is within 30 metres of an estuary, wetland, or incised water course" (Removed as a minor variation is not permitted for riparian buffer distances).
- c) Table 1, Point 8 – "The area to be cleared is within 100 metres of an estuary, wetland, or incised water course" (Removed as a minor variation is not permitted for riparian buffer distances).
- d) Section – "5.5 Clearing using this order is not permitted in areas where either the Thinning of native vegetation order or the Clearing of paddock trees in a cultivation area order have been used". (removed to ensure consistency with *Native Vegetation Act 2003* and *Native Vegetation Regulations 2013*).
- e) Section – "7.7 Within 30 metres of an estuary, wetland or incised watercourse the clearing must only be undertaken by removing individual trees and woody shrubs with no disturbance to soil, groundcover". (Removed as a minor variation is not permitted for riparian buffer distances).
- f) The following definitions from Section 11 (removed as a minor variation is not permitted for riparian buffer distances).
 - **Estuary** means:
 - any part of a river whose level is periodically or intermittently affected by coastal tides; or
 - any lake or other partially enclosed body of water that is periodically or intermittently open to the sea.
 - **Strahler stream** order means the stream order of a stream determined by the Strahler system as defined in Schedule 2, Part 1 of the Water Management (General) Regulation 2011.

- **Visible channel** means a visible path where water flows, regardless of flow regime, which shows some degree of incision or erosion.
- **Watercourse** means a stream of Strahler stream order 3 or larger with a visible channel.
- **Wetland** means any type of shallow body of water, other than a floodplain (such as a marsh, billabong, swamp or sedgeland) that is:
 - inundated cyclically, intermittently or permanently with water; and
 - vegetated with wetland plant communities.

ii) In retaining Point 16 of Section 7.2 and Table 7.2 of the EOAM the following details are retained in the varied assessment;

- a) For methods of clearing plants at a paddock scale with temporary disturbance to soil and groundcover (now referred to as Clearing type d), and clearing of plants at a paddock scale with longer terms disturbance to soil and ground cover (now referred to as Clearing type e), the clearing does not result in the introduction into the cleared area of any non-native perennial vegetation other than the species listed in Table 7.2 (where judgement of the Catchment Management Authority (now referred to as the Local Land Services) the species listed in Table 7.2 is non-persistent in the area the species proposed to be introduced).
- b) Table 7.2 Non-Persistent and Non-Native Perennial Species Database

Non-persistent non-native perennial vegetation species
<i>Medicago sativa</i> (Lucerne)

3.3 Description of the proposed clearing

This variation relates to the proposed clearing of listed Invasive Native Species (Listed under Appendix 1 “invasive native species database listing” of the Clearing of Invasive Native Species Order) including INS with stems of up to 30cm DBHOB. The clearing proposal also includes the aim of treating up to 80% of the INS extent/ less than 200 hectares in one event by the landholder for operational efficiency

3.4 Reasons for recommending the proposed minor variation

Prior to this minor variation the determination was that the proposed clearing did not improve or maintain environmental outcomes because the clearing does not meet the requirements of the assessment under chapter 7 of the current EOAM.

In considering the replacement of Chapter 7 of the EOAM with the conditions of Schedule A of the Ministerial Order for the Clearing of Invasive Native Species (including appendixes 1 & 2) the following criteria where assessed;

i) Intent of Chapter 7 of the EOAM and of the Ministerial Order for the Clearing of Invasive Native Species.

- The purpose of clearing under Chapter 7 of the EOAM is the “re-establishing of native vegetation or allowing natural regeneration of native species”, whilst the assessment process is “designed to maintain or create a mosaic of vegetation states across the landscape”.
- The objective of INS clearing under the Ministerial Order is to create a mosaic of native vegetation states across the landscape by allowing the clearing of some of the INS and encouraging the re-establishment of and/or natural regeneration of more desirable native vegetation.

Whilst the wording used in each of these documents differs slightly I am of the opinion that the intent of each document is largely the same

ii) Consideration of species listings and DBHOB limits

- For listing in Table 7.1 of the EOAM a species must meet the following criteria:
 - a) the species invades plant communities where it has not been known to occur previously, or the species regenerates densely following natural or artificial disturbance; and
 - b) the invasion and/ or dense regeneration of the species results in change of structure and/ or composition of a vegetation community; and
 - c) the species is within its natural geographic range.
- For listing in Appendix 1 of the Ministerial Order for the Clearing of Invasive Native Species the species must be:
 - a) within its natural range in the area specified; and
 - b) densely regenerating or is invading plant communities in which the species does not generally occur, which is causing decline in the structure or composition of the vegetation community.

In each instance the listing of species and DBHOB limits have been set by a team of experts, and whilst the species list and DBHOB does differ it is considered reasonable, given the listing criteria is so similar, to use the list provided by the Ministerial Order as this list was compiled and approved in 2014 whilst the EOAM was last amended in 2011. Furthermore the listing used by the ministerial order is currently available for use by landholders as a permitted activity (RAMA).

iii) Consideration of Riparian Buffer distances

Clause 19(2)(a) of the *Native Vegetation Regulation 2013* states that a variation to the assessment methodology is not allowable for the variation of “riparian buffer distances or associated offset requirements”.

A review of the EOAM however, notes that the current chapter 7 does not require assessment under the water quality tool (Notes section of 7.2). However under point 14 of section 7.2 it is noted that an assessment must be undertaken to determine the riparian buffer distances using Table 3.1 of the EOAM which defines the riparian buffer distance. It is my opinion that given the replacement of Chapter 7 with the Ministerial Order would result in a change to the riparian buffer distances defined by table 3.1 of the EOAM that the conditions of the Ministerial Order which affect this change cannot be applied.

This minor variation therefore imposes the use of the Water Quality tool (Ch. 3 of the EOAM) and limits clearing within these buffer distances to clearing to management burning (clearing type a) and the clearing of individual plants with no disturbance to soil and ground cover (Clearing type b).

iv) Retention of the consideration of Non-Persistent and Non-Native Perennial Species in the varied assessment methodology

Point 16 of Section 7.2 of the current EOAM had been developed to allow the introduction of a deep rooted perennial species to ensure longer term soil stability/ground cover, whilst also acknowledging that the species has limited viability in parts of New South Wales. Given that the inclusion of this species in current PVPs is a common occurrence, and that the inclusion still relies upon the experience and judgement of an accredited assessing officer it is my opinion that the continued inclusion of this point is reasonable.

4. Certification by the accredited expert

As an accredited expert I am of the opinion that minor variation to the Assessment Methodology will result in a determination that the proposed clearing will improve or maintain environmental outcomes and strict adherence to the Assessment Methodology is in this case unreasonable and unnecessary because:

1. The Intent of Chapter 7 of the EOAM and of the Ministerial Order for the Clearing of Invasive Native Species are largely the same.
2. The species and maximum DBHOB applied under appendix 1 of the Ministerial Order reflect the most up to date, expert reviewed species listing and this list is currently available for use (self-assessment) by landholders.
3. There is no impact upon Riparian buffer distances.
4. The retention of the ability for assessing officers to consider the inclusion of Non-Persistent and Non-Native Perennial species does not impact or vary the environmental outcomes that would be achieved if the standard EOAM was used.
5. The clearing proposed under this PVP, using the conditions of the Ministerial Order for the Clearing of Invasive Native, will align with the clearing outcomes which can currently occur without consent due to the Ministerial Codes being considered as permitted clearing (RAMAs) under the *Native Vegetation Act 2003*.

ATTACHMENT 1:

Note: All items highlighted in **RED** are not included in the replacement of Chapter 7 with the Ministerial Order for the Clearing of Invasive Native Species.

Schedule A:

CONDITIONS FOR THE CLEARING OF INVASIVE NATIVE SCRUB

Purpose of these conditions

For the purposes of this Ministerial Order, 'invasive native scrub' (INS) refers to plants:

- a) for which the species is declared an invasive native species (that is listed in Appendix 1) for the relevant Local Land Services Region; and
- b) are regenerating densely or are invading plant communities, causing decline in the structure or composition of the vegetation community.

Clearing of INS will be a routine agricultural management activity if it is carried out in accordance with this Ministerial Order and the conditions of the order set out in this schedule.

The intent is to allow for self-assessment to control and manage INS. The objective of INS clearing is to create a mosaic of native vegetation states across the landscape by allowing the clearing of some of the INS and encouraging the re-establishment of and/or natural regeneration of more desirable native vegetation.

A stream-lined Property Vegetation Plan (PVP) assessment is available for clearing proposals that cannot be cleared in accordance with this order, or where the preferred clearing types or species are not permitted under this order. A stream-lined PVP is also available where a landholder would prefer a PVP rather than clearing under this order.

1. What can be cleared?

1.1 INS can be cleared if:

- a) the plants to be cleared are of a species that is a declared invasive native species (as listed in Appendix 1) for the relevant Local Land Services Region; and
- b) the plants to be cleared are regenerating densely or are invading plant communities, causing decline in the structure or composition of the vegetation community.

2. How can the vegetation be cleared?

2.1 Subject to the site characteristics outlined in Section 3, clearing may only be undertaken using one or more of the following clearing types:

- a) management burning;
- b) clearing individual plants with nil to minimal disturbance to soil and groundcover;
- c) clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover;
- d) clearing plants at paddock scale with temporary disturbance to soil and groundcover;
- e) clearing plants at paddock scale with longer-term disturbance to soil and groundcover.

3. Where can the clearing types be used?

3.1 The clearing types identified in Section 2.1 **can only** be used according to the site characteristic of the land where the clearing is to take place. In Table 1, a ‘✓’ indicates the availability of a clearing type for use on land with the corresponding site characteristic. A clearing type **cannot** be used on land where a ‘✗’ occurs against the relevant site characteristic.

Table 1: Clearing type availability for different site characteristics

	Clearing type				
	Management burning	Clearing individual plants with nil to minimal disturbance to soil and groundcover	Clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover	Clearing plants at paddock scale with temporary disturbance to soil and groundcover	Clearing plants at paddock scale with longer-term disturbance to soil and groundcover
Site characteristic	a)	b)	c)	d)	e)
1. Non-INS trees and shrubs represent >50% of the total number of trees and shrubs	✓	✓	✗	✗	✗
2. The vegetation is a threatened ecological community	✓	✓	✗	✗	✗
3. The INS to be cleared is <i>Duma florulenta</i> (syns.: <i>Muehlenbeckia cunninghamii</i> & <i>Muehlenbeckia florulenta</i> (Lignum)) and/or <i>Casuarina cristata</i> (Belah)	✓	✓	✗	✗	✗
4. The area to be cleared is of low land degradation risk	✓	✓	✓	✓	✓
5. The area to be cleared is of moderate land degradation risk	✓	✓	✓	✓	✗
6. The area to be cleared is of high land degradation risk	✓	✓	✗	✗	✗
7. The area to be cleared is within 30 metres of an estuary, wetland, or incised watercourse	✓	✓	✗	✗	✗
8. The area to be cleared is within 100 metres of an estuary, wetland, or incised watercourse	✓	✓	✓	✗	✗

4. How much can be cleared?

4.1 No more than 80% of the INS extent on the landholding may be cleared; that is, 20% of the INS extent must be retained and not cleared by any clearing type.

4.2 If clearing greater than 200 hectares on a landholding using clearing types c) and/or d) and/or e) (as listed in Section 2.1) the initial clearing increment must not exceed 40% of the INS extent on the landholding, except as set out in condition 4.3 below.

4.3 A further 40% of the INS extent may be cleared using clearing type c) and/or d) and/or e) (as listed in Section 2.1) if the area cleared in the initial clearing increment by these clearing types has achieved and maintained for a period of at least 12 months the following minimum groundcover recovery levels:

- a) a groundcover of greater than 50%; and
- b) the groundcover consists of greater than 75% native groundcover.

4.4 The initial 40% cleared (referred to in condition 4.2 above) may be re-cleared using clearing type c) and/or d) and/or e) (as listed in Section 2.1) if:

- a) all additional areas cleared have achieved the groundcover recovery levels as defined in condition 4.3 above; and
- b) no more than 40% of the INS extent is cleared at any one time.

Table 2: Proportion of INS extent able to be cleared by each clearing type

Clearing type a) Management burning	80%		20%
Clearing type b) Clearing individual plants with nil to minimal disturbance to soil and groundcover	80%		20%
Clearing type c) Clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover	40%	40%	20%
Clearing type d) Clearing plants at paddock scale with temporary disturbance to soil and groundcover	40%	40%	20%
Clearing type e) Clearing plants at paddock scale with longer-term disturbance to soil and groundcover	40%	40%	20%

Key to shading:

	This proportion of INS on the landholding can be cleared in accordance with the conditions
	This proportion is a second increment for each clearing type
	This proportion must remain uncleared by any clearing type

Note: 80% may be cleared by clearing types c), d) and e) if the area to be cleared is less than 200 hectares per landholding.

5. Conditions applying to all clearing types:

5.1 Clearing carried out under this Ministerial Order must not result in a change of land use from a grazing system to a cropping system.

5.2 All native groundcover, retained individuals of the INS and all non-INS must be retained following clearing.

5.3 Clearing carried out under this Ministerial Order must be for the purpose of re-establishing native vegetation or allowing natural regeneration of native vegetation in order to maintain or create a mosaic of native vegetation states across the landscape.

5.4 Clearing of non-INS must be limited to the minimum extent necessary to clear the INS.

5.5 Clearing using this order is not permitted in areas where either the Thinning of native vegetation order or the Clearing of paddock trees in a cultivation area order have been used.

Note: The limitation on change of land use in clause 5.1 does not prevent the use of short-term cropping in accordance with clearing type e) (clearing type as listed in Section 2.1).

6. If clearing by clearing type a) *Management burning:*

6.1 Clearing must not result in soil surface disturbance.

6.2 Clearing must not result in the intentional introduction into the cleared area of any non-native vegetation.

7. If clearing by clearing type b) *Clearing individual plants with nil to minimal disturbance to soil and groundcover:*

7.1 Clearing must only be undertaken by clearing of individual INS plants, with minimal disturbance to soil and groundcover.

7.2 Plants of the species listed in Appendix 1 as requiring retention (see column 14) are to be retained at the densities specified in Appendix 1, except where more than one species of INS is present in the area to be cleared.

7.3 Where more than one species of INS is present on the area to be cleared, the total stems required to be retained does not exceed 20 stems per hectare for stems under the maximum diameter at breast height over bark (DBHOB) allowed to be cleared.

7.4 Stems retained as set out in Section 7.3 must reflect the proportion of total individuals for each species present.

7.5 Where an individual tree or shrub retained in accordance with Sections 7.2, 7.3 and/or 7.4 above has multiple stems, then that tree or shrub is counted as one stem for the purposes of calculating the retention requirements.

7.6 Individual plants of INS with a DBHOB greater than the 'maximum DBHOB allowed to be cleared' listed for the corresponding species in Appendix 1 must not be cleared.

7.7 Within 30 metres of an estuary, wetland or incised watercourse the clearing must only be undertaken by removing individual trees and woody shrubs with no disturbance to soil, groundcover.

7.8 The clearing must not result in the intentional introduction into the cleared area of any non-native vegetation.

Note: Examples of clearing type b) *Clearing individual plants with nil to minimal disturbance to soil and groundcover* include but are not limited to chemical spot treatment, ringbarking or grubbing.

8. If clearing by clearing type c) *Clearing plants at a paddock scale with nil to minimal disturbance to soil and groundcover:*

8.1 The clearing of groundcover and disturbance to soil surface must be limited to the minimum extent necessary.

8.2 Non-INS must comprise less than 10% of the total number of individual trees and shrubs cleared.

8.3 Non-INS with a stem or trunk greater than 20 cm DBHOB and INS with a stem or trunk greater than the 'maximum DBHOB allowed to be cleared' must not be cleared.

8.4 The clearing must not result in the intentional introduction into the cleared area of any non-native vegetation except the sowing of non-persistent annual non-native vegetation by zero till.

8.5 If more than 500 hectares are to be cleared, a minimum of 20% of the native vegetation on that area must be retained on each 500 hectare area within or between cleared areas and must be part of the INS extent. The native vegetation retained for the purposes of this provision may be included in the calculation of the 20% uncleared area of INS extent on the landholding.

Note: Examples of clearing type c) *Clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover* include but are not limited to chaining, slashing, roping or stick raking applied with minimal disturbance to soil and groundcover.

9. If clearing by clearing type d) *Clearing plants at paddock scale with temporary disturbance to soil and groundcover:*

9.1 The clearing of groundcover and disturbance to soil surface must be limited to the minimum extent necessary.

9.2 Non-INS must comprise less than 10% of the total number of individual trees and shrubs cleared.

9.3 Non-INS with a stem or trunk greater than 20 cm DBHOB and INS with a stem or trunk greater than the 'maximum DBHOB allowed to be cleared' must not be cleared except where the clearing is not intentional and does not exceed 20 stems per hectare.

9.4 The clearing must not result in the intentional introduction into the cleared area of any non-native vegetation except the sowing of non-persistent annual non-native vegetation as part of the clearing operation and is limited to **three occasions in 15 years** from the date of notification of the intention to use this Ministerial Order, and the non-native vegetation is not harvested.

9.5 If more than 500 hectares are to be cleared, a minimum of 20% of the native vegetation on that area must be retained on each 500 hectare area within or between cleared areas and must be part of the INS extent. The native vegetation retained for the purposes of this provision may be included in the calculation of the 20% uncleared area of INS extent on the landholding.

Note: Examples of clearing type d) *Clearing plants at paddock scale with temporary disturbance to soil and groundcover* include but are not limited to blade ploughing or crocodiling.

10. If clearing by clearing type e) *clearing plants at a paddock scale with longer-term disturbance to soil and groundcover:*

10.1 The clearing of groundcover and disturbance to soil surface must be limited to the minimum extent necessary.

10.2 Non-INS must comprise less than 10% of the total number of individual trees and shrubs cleared.

10.3 Non-INS with a stem or trunk greater than 20 cm DBHOB and INS with a stem or trunk greater than the 'maximum DBHOB allowed to be cleared' must not be cleared except where the clearing is not intentional and does not exceed 20 stems per hectare.

10.4 The clearing must not result in the intentional introduction into the cleared area of any non-native vegetation except the preparation and sowing of non-persistent annual non-native vegetation limited to **three occasions in 15 years** from the date of first notification of the intention to use this Ministerial Order.

10.5 If more than 500 hectares are to be cleared, a minimum of 20% of the native vegetation on that area must be retained on each 500 hectare area within or between cleared areas and must be part of the INS extent. The native vegetation retained for the purposes of this provision may be included in the calculation of the 20% uncleared area of INS extent on the landholding.

Note: An example of clearing type e) *Clearing plants at paddock scale with longer-term disturbance to soil and groundcover* includes but is not limited to short-term cropping.

11. Definitions

In this order terms have the same meaning as in the *Native Vegetation Act 2003*, and the *Native Vegetation Regulation 2013*, unless otherwise defined below.

Annual non-native vegetation means a plant that is not native vegetation and which completes its life cycle, from germination to the production of seed, within one year, and then dies.

Clearing type a) means clearing by management burning.

Clearing type b) means clearing individual plants with nil to minimal disturbance to soil and groundcover.

Clearing type c) means clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover.

Clearing type d) means clearing plants at paddock scale with temporary disturbance to soil and groundcover.

Clearing type e) means clearing plants at paddock scale with longer-term disturbance to soil and groundcover.

Density or densities means the number of plants per hectare.

Diameter at breast height over bark (DBHOB) means the diameter over the bark of the stem at 1.3 metres above the ground. If there are multiple stems on a tree then the diameter is measured on the largest stem.

Estuary means:

- a) any part of a river whose level is periodically or intermittently affected by coastal tides; or
- b) any lake or other partially enclosed body of water that is periodically or intermittently open to the sea.

INS extent means the extent of the areas on the landholding where:

- a) INS is currently present; and
- b) areas on the landholding where INS may not presently occur but where INS management is required to prevent their spread or recurrence.

Areas of non-native vegetation and areas of native vegetation not impacted by INS are not included in the INS extent on the landholding.

Invasive Native Scrub (INS) means plants that satisfy the following criteria:

- a) the plants to be cleared are of a species listed in the INS database (Appendix 1); and
- b) the plants to be cleared are regenerating densely or are invading plant communities, causing decline in the structure or composition of the vegetation community on the land to be cleared.

Land degradation risk is an indication of the level of risk of land degradation that could occur as a result of INS clearing. There are three risk levels: Low, Moderate and High. The risk level for the land to be cleared is determined in accordance with the land degradation risk assessment method at Appendix 2.

Landholding has the same meaning as it has in the *Native Vegetation Regulation 2013*.

Local Land Services (LLS) has the same meaning as it has in the *Local Land Services Act 2013*.

Management burning is planned and controlled use of fire for the purpose of managing INS.

Minimal disturbance means there has been no greater than 30% of the soil surface and existing groundcover disturbed (total area) as a result of the clearing.

No disturbance means there has been no greater than 5% of the soil surface and existing groundcover disturbed (total area) as a result of the clearing.

Non-native vegetation means vegetation that is not native vegetation, as defined by section 6 of the *Native Vegetation Act 2003*.

Non-INS means any plants that are not INS, as defined in Section 1 of this order.

Paddock scale means the clearing of multiple trees or shrubs at one time, usually by methods including but not limited to chaining, roping, bladeploughing and stickraking.

Routine agricultural management activities (RAMA) has the same meaning as it has in section 11 of the *Native Vegetation Act 2003*.

Soil disturbance means the turning, digging or disrupting of the soil surface, usually by an implement or machinery or by the pushing or pulling of trees or shrubs.

Strahler stream order means the stream order of a stream determined by the Strahler system as defined in Schedule 2, Part 1 of the *Water Management (General) Regulation 2011*.

Temporary disturbance means the application of a clearing method that causes significant soil disturbance, generally as a single pass, such as (but not limited to) bladeploughing or crocodiling.

Threatened ecological community means a threatened ecological community within the meaning of the *Threatened Species Conservation Act 1995* and listed in Part 3 of Schedule 1, Part 2 of Schedule 1A or Part 2 of Schedule 2 of that Act.

Visible channel means a visible path where water flows, regardless of flow regime, which shows some degree of incision or erosion.

Watercourse means a stream of Strahler stream order 3 or larger with a visible channel.

Wetland means any type of shallow body of water, other than a floodplain (such as a marsh, billabong, swamp or sedgeland) that is:

- a) inundated cyclically, intermittently or permanently with water; and
- b) vegetated with wetland plant communities.

Zero till means drilling of seed with minimal disturbance (less than 30%) to topsoil and no application of herbicide.

Appendix 1 – Remains unchanged

Appendix 2 – All references to the “the clearing of INS Ministerial Order” including “the INS Ministerial Order” are to be read as “the assessment methodology for this minor variation”

The following conditions of the current Chapter 7 of the EOAM are included for assessment of Environmental outcomes when using this minor variation.

- a) For methods of clearing plants at a paddock scale with temporary disturbance to soil and groundcover (now referred to as Clearing type d), and clearing of plants at a paddock scale with longer terms disturbance to soil and ground cover (now referred to as Clearing type e), the clearing does not result in the introduction into the cleared area of any non-native perennial vegetation other than the species listed in Table 7.2 (where judgement of the Catchment Management Authority (now referred to as the Local Land Services) the species listed in Table 7.2 is non-persistent in the area the species proposed to be introduced).
- b) Table 7.2 Non-Persistent and Non-Native Perennial Species Database

Non-persistent non-native perennial vegetation species
<i>Medicago sativa</i> (Lucerne)

REPORT UNDER THE NATIVE VEGETATION ACT 2003 IN RELATION TO:

**ACCREDITED EXPERT'S ASSESSMENT IN ACCORDANCE WITH CLAUSE 19
OF THE NATIVE VEGETATION REGULATION 2013 FOR PVP REFERENCE
NUMBER 20649**

Report prepared by: Accredited Expert 30609

PVP reference number: 20649

1. EXECUTIVE SUMMARY

This Accredited Expert report relates to the assessment of the clearing proposed by Property Vegetation Plan (PVP) number 20649.

Under s. 29(2) of the *Native Vegetation Act 2003* a PVP cannot be approved unless the clearing concerned will improve or maintain environmental outcomes.

Clause 18 of the *Native Vegetation Regulation 2013* prescribes the circumstances in which approval of a PVP that proposes broadscale clearing can be granted. In most cases an assessment and determination of whether the clearing will improve or maintain environmental outcomes is conducted in accordance with the Environmental Outcomes Assessment Methodology (EOAM).

In some circumstances the EOAM does not adequately account for specific or unique circumstances which have been encountered during the assessment of a clearing proposal. In these circumstances the assessment may use Special Provisions for Minor Variation (Clause 19 of the *Native Vegetation Regulations 2013*).

In this instance the Special Provisions for Minor Variation have been used to replace chapter 7 of the EOAM (including table 7.1 but excluding point 16 and table 7.2) with the Clearing of Invasive Native Species Ministerial Order made under clause 38 of the *Native Vegetation Regulation 2013*. The replacement of this Chapter of the EOAM, with the relevant parts of the Ministerial Order as a minor variation will improve or maintain environmental outcomes and strict adherence to the Assessment Methodology is unreasonable and unnecessary.

Figure 1: A conceptual outline of the assessment process for PVP 20649

	Invasive Native Species Tool
Assessment using EAOM	FAIL
Assessment using Minor Variation to the Chapter 7 of the EOAM	PASS

This report details the accredited expert's opinions formed in relation to the replacement of chapter 7 of the Assessment Methodology and cl. 19 of the *Native Vegetation Regulation 2013* when assessing PVP reference number 20649.

The minor variation is a replacement of Chapter 7 of the EOAM with Schedule A of the Ministerial Order for the Clearing of Invasive Native Species (including appendix 1 & 2) made under clause 38 of the *Native Vegetation Regulation 2013*.

The accredited expert is of the opinion that a minor variation to the EOAM will result in a determination that the proposed clearing will improve or maintain environmental outcomes and strict adherence to the Assessment Methodology is in this particular case unreasonable and unnecessary because:

- The current EOAM omits several species of INS which are otherwise listed as INS in the Ministerial Order for the Clearing of Invasive native Species; and
- The current EOAM has smaller Diameter at Breast Height Over Bark (DBHOB) limits than the limits which apply to some species in the Ministerial Order for the Clearing of Invasive native Species; and
- The current EOAM has unnecessary restrictions on the extent of clearing which can be undertaken (e.g. 20% for Paddock scale treatment with long term disturbance to soil and groundcover); and

- The *Native Vegetation Regulation 2013*, through the Ministerial Order released in 2014, has made the clearing of invasive native species (INS) a Routine Agricultural Management Activity (RAMA).

2. Background

Legislative background

Property vegetation plan (PVP), reference number 20649 proposes broadscale clearing within the definition of the *Native Vegetation Act 2003*.

Under s. 29(2) of the *Native Vegetation Act 2003*, the Minister is not to approve a PVP that proposes broadscale clearing unless the clearing concerned will improve or maintain environmental outcomes.

Clause 18 of the *Native Vegetation Regulation 2013* prescribes the circumstances in which approval of a PVP that proposes broadscale clearing can be granted. Normally such a PVP can only be granted where there has been an assessment and determination in accordance with the Assessment Methodology that the proposed clearing will improve or maintain environmental outcomes. However, a PVP can also be granted where an accredited expert has assessed and certified in accordance with clause 19 of the *Native Vegetation Regulation 2013* that the accredited expert is of the opinion that the proposed clearing will improve or maintain environmental outcomes.

This report details the accredited expert's opinions formed in relation to the replacement of chapter 7 of the EOAM (including table 7.1 but excluding point 16 and table 7.2) with Schedule A of the Clearing of Invasive Native Species Order (including appendix 1 & 2) made under clause 38 of the *Native Vegetation Regulation 2013* and cl. 19 of the *Native Vegetation Regulation 2013* when assessing PVP reference number 20649

Initial assessment of broadscale clearing proposed by PVP 20649

When the broadscale clearing proposed by this PVP was initially assessed in accordance with the EOAM using the criteria defined by Chapter 7, it resulted in a determination that the proposed clearing did not improve or maintain environmental outcomes. This was because the clearing of INS under chapter 7 of the EOAM excluded species, limited the DBHOB and has greater restrictions on the area of clearing that can be initially undertaken.

Final assessment of broadscale clearing proposed by PVP 20649 by an accredited expert

The broadscale clearing proposed by PVP 20649 was then assessed and certified by an accredited expert in accordance with clause 19 of the *Native Vegetation Regulation 2013*. In the accredited expert's opinion, the proposed clearing will improve or maintain environmental outcomes.

Sections 3 and 4 of this document provides detail of the accredited expert's assessment and certification in accordance with clause 19 of the *Native Vegetation Regulation 2013*.

3. MINOR VARIATION:

3.1 Legal provision for minor variation

The legal provision for this minor variation is in Clause 19 'Special provisions for minor variation' of the *Native Vegetation Regulation 2013* which states:

- (1) An accredited expert may make an assessment that proposed clearing will improve or maintain environmental outcomes only if there has been an assessment in accordance with the Assessment Methodology of whether the proposed clearing will improve or maintain environmental outcomes (not resulting in a determination that the proposed clearing will improve or maintain environmental outcomes) and the accredited expert is of the opinion that:
- (a) a minor variation to the Assessment Methodology would result in a determination that the proposed clearing will improve or maintain environmental outcomes (other than a variation that is not allowable under this clause); and
 - (b) strict adherence to the Assessment Methodology is in the particular case unreasonable and unnecessary.

3.2 How the Assessment Methodology was varied

The EOAM was varied by the replacement of chapter 7 of the EOAM (including table 7.1 but excluding point 16 and table 7.2) with Schedule A of the Clearing of Invasive Native Species Ministerial Order made under clause 38 of the *Native Vegetation Regulation 2013* (see attachment 1 for full details/context).

i) In correctly applying Schedule A of the Clearing of Invasive Native Species Ministerial Order the following points/parts have been excluded;

- a) "Purpose of these conditions" section (removed to avoid confusion with regards to Ministerial Order and EOAM).
- b) Table 1, Point 7 – "The area to be cleared is within 30 metres of an estuary, wetland, or incised water course" (Removed as a minor variation is not permitted for riparian buffer distances).
- c) Table 1, Point 8 – "The area to be cleared is within 100 metres of an estuary, wetland, or incised water course" (Removed as a minor variation is not permitted for riparian buffer distances).
- d) Section – "5.5 Clearing using this order is not permitted in areas where either the Thinning of native vegetation order or the Clearing of paddock trees in a cultivation area order have been used". (removed to ensure consistency with *Native Vegetation Act 2003* and *Native Vegetation Regulations 2013*).
- e) Section – "7.7 Within 30 metres of an estuary, wetland or incised watercourse the clearing must only be undertaken by removing individual trees and woody shrubs with no disturbance to soil, groundcover". (Removed as a minor variation is not permitted for riparian buffer distances).
- f) The following definitions from Section 11 (removed as a minor variation is not permitted for riparian buffer distances).
 - **Estuary** means:
 - any part of a river whose level is periodically or intermittently affected by coastal tides; or
 - any lake or other partially enclosed body of water that is periodically or intermittently open to the sea.
 - **Strahler stream** order means the stream order of a stream determined by the Strahler system as defined in Schedule 2, Part 1 of the Water Management (General) Regulation 2011.

- **Visible channel** means a visible path where water flows, regardless of flow regime, which shows some degree of incision or erosion.
- **Watercourse** means a stream of Strahler stream order 3 or larger with a visible channel.
- **Wetland** means any type of shallow body of water, other than a floodplain (such as a marsh, billabong, swamp or sedgeland) that is:
 - inundated cyclically, intermittently or permanently with water; and
 - vegetated with wetland plant communities.

ii) In retaining Point 16 of Section 7.2 and Table 7.2 of the EOAM the following details are retained in the varied assessment;

- a) For methods of clearing plants at a paddock scale with temporary disturbance to soil and groundcover (now referred to as Clearing type d), and clearing of plants at a paddock scale with longer terms disturbance to soil and ground cover (now referred to as Clearing type e), the clearing does not result in the introduction into the cleared area of any non-native perennial vegetation other than the species listed in Table 7.2 (where judgement of the Catchment Management Authority (now referred to as the Local Land Services) the species listed in Table 7.2 is non-persistent in the area the species proposed to be introduced).
- b) Table 7.2 Non-Persistent and Non-Native Perennial Species Database

Non-persistent non-native perennial vegetation species
<i>Medicago sativa</i> (Lucerne)

3.3 Description of the proposed clearing

This variation relates to the proposed clearing of listed Invasive Native Species (Listed under Appendix 1 “invasive native species database listing” of the Clearing of Invasive Native Species Order) including INS with stems of up to 30cm DBHOB. The clearing proposal also includes the aim of treating up to 80% of the INS extent/ less than 200 hectares in one event by the landholder for operational efficiency

3.4 Reasons for recommending the proposed minor variation

Prior to this minor variation the determination was that the proposed clearing did not improve or maintain environmental outcomes because the clearing does not meet the requirements of the assessment under chapter 7 of the current EOAM.

In considering the replacement of Chapter 7 of the EOAM with the conditions of Schedule A of the Ministerial Order for the Clearing of Invasive Native Species (including appendixes 1 & 2) the following criteria where assessed;

i) Intent of Chapter 7 of the EOAM and of the Ministerial Order for the Clearing of Invasive Native Species.

- The purpose of clearing under Chapter 7 of the EOAM is the “re-establishing of native vegetation or allowing natural regeneration of native species”, whilst the assessment process is “designed to maintain or create a mosaic of vegetation states across the landscape”.
- The objective of INS clearing under the Ministerial Order is to create a mosaic of native vegetation states across the landscape by allowing the clearing of some of the INS and encouraging the re-establishment of and/or natural regeneration of more desirable native vegetation.

Whilst the wording used in each of these documents differs slightly I am of the opinion that the intent of each document is largely the same

ii) Consideration of species listings and DBHOB limits

- For listing in Table 7.1 of the EOAM a species must meet the following criteria:
 - a) the species invades plant communities where it has not been known to occur previously, or the species regenerates densely following natural or artificial disturbance; and
 - b) the invasion and/ or dense regeneration of the species results in change of structure and/ or composition of a vegetation community; and
 - c) the species is within its natural geographic range.
- For listing in Appendix 1 of the Ministerial Order for the Clearing of Invasive Native Species the species must be:
 - a) within its natural range in the area specified; and
 - b) densely regenerating or is invading plant communities in which the species does not generally occur, which is causing decline in the structure or composition of the vegetation community.

In each instance the listing of species and DBHOB limits have been set by a team of experts, and whilst the species list and DBHOB does differ it is considered reasonable, given the listing criteria is so similar, to use the list provided by the Ministerial Order as this list was compiled and approved in 2014 whilst the EOAM was last amended in 2011. Furthermore the listing used by the ministerial order is currently available for use by landholders as a permitted activity (RAMA).

iii) Consideration of Riparian Buffer distances

Clause 19(2)(a) of the *Native Vegetation Regulation 2013* states that a variation to the assessment methodology is not allowable for the variation of “riparian buffer distances or associated offset requirements”.

A review of the EOAM however, notes that the current chapter 7 does not require assessment under the water quality tool (Notes section of 7.2). However under point 14 of section 7.2 it is noted that an assessment must be undertaken to determine the riparian buffer distances using Table 3.1 of the EOAM which defines the riparian buffer distance. It is my opinion that given the replacement of Chapter 7 with the Ministerial Order would result in a change to the riparian buffer distances defined by table 3.1 of the EOAM that the conditions of the Ministerial Order which affect this change cannot be applied.

This minor variation therefore imposes the use of the Water Quality tool (Ch. 3 of the EOAM) and limits clearing within these buffer distances to clearing to management burning (clearing type a) and the clearing of individual plants with no disturbance to soil and ground cover (Clearing type b).

iv) Retention of the consideration of Non-Persistent and Non-Native Perennial Species in the varied assessment methodology

Point 16 of Section 7.2 of the current EOAM had been developed to allow the introduction of a deep rooted perennial species to ensure longer term soil stability/ground cover, whilst also acknowledging that the species has limited viability in parts of New South Wales. Given that the inclusion of this species in current PVPs is a common occurrence, and that the inclusion still relies upon the experience and judgement of an accredited assessing officer it is my opinion that the continued inclusion of this point is reasonable.

4. Certification by the accredited expert

As an accredited expert I am of the opinion that minor variation to the Assessment Methodology will result in a determination that the proposed clearing will improve or maintain environmental outcomes and strict adherence to the Assessment Methodology is in this case unreasonable and unnecessary because:

1. The Intent of Chapter 7 of the EOAM and of the Ministerial Order for the Clearing of Invasive Native Species are largely the same.
2. The species and maximum DBHOB applied under appendix 1 of the Ministerial Order reflect the most up to date, expert reviewed species listing and this list is currently available for use (self-assessment) by landholders.
3. There is no impact upon Riparian buffer distances.
4. The retention of the ability for assessing officers to consider the inclusion of Non-Persistent and Non-Native Perennial species does not impact or vary the environmental outcomes that would be achieved if the standard EOAM was used.
5. The clearing proposed under this PVP, using the conditions of the Ministerial Order for the Clearing of Invasive Native, will align with the clearing outcomes which can currently occur without consent due to the Ministerial Codes being considered as permitted clearing (RAMAs) under the *Native Vegetation Act 2003*.

ATTACHMENT 1:

Note: All items highlighted in **RED** are not included in the replacement of Chapter 7 with the Ministerial Order for the Clearing of Invasive Native Species.

Schedule A:

CONDITIONS FOR THE CLEARING OF INVASIVE NATIVE SCRUB

Purpose of these conditions

For the purposes of this Ministerial Order, 'invasive native scrub' (INS) refers to plants:

- a) for which the species is declared an invasive native species (that is listed in Appendix 1) for the relevant Local Land Services Region; and
- b) are regenerating densely or are invading plant communities, causing decline in the structure or composition of the vegetation community.

Clearing of INS will be a routine agricultural management activity if it is carried out in accordance with this Ministerial Order and the conditions of the order set out in this schedule.

The intent is to allow for self-assessment to control and manage INS. The objective of INS clearing is to create a mosaic of native vegetation states across the landscape by allowing the clearing of some of the INS and encouraging the re-establishment of and/or natural regeneration of more desirable native vegetation.

A stream-lined Property Vegetation Plan (PVP) assessment is available for clearing proposals that cannot be cleared in accordance with this order, or where the preferred clearing types or species are not permitted under this order. A stream-lined PVP is also available where a landholder would prefer a PVP rather than clearing under this order.

1. What can be cleared?

1.1 INS can be cleared if:

- a) the plants to be cleared are of a species that is a declared invasive native species (as listed in Appendix 1) for the relevant Local Land Services Region; and
- b) the plants to be cleared are regenerating densely or are invading plant communities, causing decline in the structure or composition of the vegetation community.

2. How can the vegetation be cleared?

2.1 Subject to the site characteristics outlined in Section 3, clearing may only be undertaken using one or more of the following clearing types:

- a) management burning;
- b) clearing individual plants with nil to minimal disturbance to soil and groundcover;
- c) clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover;
- d) clearing plants at paddock scale with temporary disturbance to soil and groundcover;
- e) clearing plants at paddock scale with longer-term disturbance to soil and groundcover.

3. Where can the clearing types be used?

3.1 The clearing types identified in Section 2.1 **can only** be used according to the site characteristic of the land where the clearing is to take place. In Table 1, a '✓' indicates the availability of a clearing type for use on land with the corresponding site characteristic. A clearing type **cannot** be used on land where a '✗' occurs against the relevant site characteristic.

Table 1: Clearing type availability for different site characteristics

	Clearing type				
	Management burning	Clearing individual plants with nil to minimal disturbance to soil and groundcover	Clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover	Clearing plants at paddock scale with temporary disturbance to soil and groundcover	Clearing plants at paddock scale with longer-term disturbance to soil and groundcover
Site characteristic	a)	b)	c)	d)	e)
1. Non-INS trees and shrubs represent >50% of the total number of trees and shrubs	✓	✓	✗	✗	✗
2. The vegetation is a threatened ecological community	✓	✓	✗	✗	✗
3. The INS to be cleared is <i>Duma florulenta</i> (syns.: <i>Muehlenbeckia cunninghamii</i> & <i>Muehlenbeckia florulenta</i> (Lignum)) and/or <i>Casuarina cristata</i> (Belah)	✓	✓	✗	✗	✗
4. The area to be cleared is of low land degradation risk	✓	✓	✓	✓	✓
5. The area to be cleared is of moderate land degradation risk	✓	✓	✓	✓	✗
6. The area to be cleared is of high land degradation risk	✓	✓	✗	✗	✗
7. The area to be cleared is within 30 metres of an estuary, wetland, or incised watercourse	✓	✓	✗	✗	✗
8. The area to be cleared is within 100 metres of an estuary, wetland, or incised watercourse	✓	✓	✓	✗	✗

4. How much can be cleared?

4.1 No more than 80% of the INS extent on the landholding may be cleared; that is, 20% of the INS extent must be retained and not cleared by any clearing type.

4.2 If clearing greater than 200 hectares on a landholding using clearing types c) and/or d) and/or e) (as listed in Section 2.1) the initial clearing increment must not exceed 40% of the INS extent on the landholding, except as set out in condition 4.3 below.

4.3 A further 40% of the INS extent may be cleared using clearing type c) and/or d) and/or e) (as listed in Section 2.1) if the area cleared in the initial clearing increment by these clearing types has achieved and maintained for a period of at least 12 months the following minimum groundcover recovery levels:

- a) a groundcover of greater than 50%; and
- b) the groundcover consists of greater than 75% native groundcover.

4.4 The initial 40% cleared (referred to in condition 4.2 above) may be re-cleared using clearing type c) and/or d) and/or e) (as listed in Section 2.1) if:

- a) all additional areas cleared have achieved the groundcover recovery levels as defined in condition 4.3 above; and
- b) no more than 40% of the INS extent is cleared at any one time.

Table 2: Proportion of INS extent able to be cleared by each clearing type

Clearing type a) Management burning	80%		20%
Clearing type b) Clearing individual plants with nil to minimal disturbance to soil and groundcover	80%		20%
Clearing type c) Clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover	40%	40%	20%
Clearing type d) Clearing plants at paddock scale with temporary disturbance to soil and groundcover	40%	40%	20%
Clearing type e) Clearing plants at paddock scale with longer-term disturbance to soil and groundcover	40%	40%	20%

Key to shading:

	This proportion of INS on the landholding can be cleared in accordance with the conditions
	This proportion is a second increment for each clearing type
	This proportion must remain uncleared by any clearing type

Note: 80% may be cleared by clearing types c), d) and e) if the area to be cleared is less than 200 hectares per landholding.

5. Conditions applying to all clearing types:

5.1 Clearing carried out under this Ministerial Order must not result in a change of land use from a grazing system to a cropping system.

5.2 All native groundcover, retained individuals of the INS and all non-INS must be retained following clearing.

5.3 Clearing carried out under this Ministerial Order must be for the purpose of re-establishing native vegetation or allowing natural regeneration of native vegetation in order to maintain or create a mosaic of native vegetation states across the landscape.

5.4 Clearing of non-INS must be limited to the minimum extent necessary to clear the INS.

5.5 Clearing using this order is not permitted in areas where either the Thinning of native vegetation order or the Clearing of paddock trees in a cultivation area order have been used.

Note: The limitation on change of land use in clause 5.1 does not prevent the use of short-term cropping in accordance with clearing type e) (clearing type as listed in Section 2.1).

6. If clearing by clearing type a) *Management burning:*

6.1 Clearing must not result in soil surface disturbance.

6.2 Clearing must not result in the intentional introduction into the cleared area of any non-native vegetation.

7. If clearing by clearing type b) *Clearing individual plants with nil to minimal disturbance to soil and groundcover:*

7.1 Clearing must only be undertaken by clearing of individual INS plants, with minimal disturbance to soil and groundcover.

7.2 Plants of the species listed in Appendix 1 as requiring retention (see column 14) are to be retained at the densities specified in Appendix 1, except where more than one species of INS is present in the area to be cleared.

7.3 Where more than one species of INS is present on the area to be cleared, the total stems required to be retained does not exceed 20 stems per hectare for stems under the maximum diameter at breast height over bark (DBHOB) allowed to be cleared.

7.4 Stems retained as set out in Section 7.3 must reflect the proportion of total individuals for each species present.

7.5 Where an individual tree or shrub retained in accordance with Sections 7.2, 7.3 and/or 7.4 above has multiple stems, then that tree or shrub is counted as one stem for the purposes of calculating the retention requirements.

7.6 Individual plants of INS with a DBHOB greater than the 'maximum DBHOB allowed to be cleared' listed for the corresponding species in Appendix 1 must not be cleared.

7.7 Within 30 metres of an estuary, wetland or incised watercourse the clearing must only be undertaken by removing individual trees and woody shrubs with no disturbance to soil, groundcover.

7.8 The clearing must not result in the intentional introduction into the cleared area of any non-native vegetation.

Note: Examples of clearing type b) *Clearing individual plants with nil to minimal disturbance to soil and groundcover* include but are not limited to chemical spot treatment, ringbarking or grubbing.

8. If clearing by clearing type c) *Clearing plants at a paddock scale with nil to minimal disturbance to soil and groundcover:*

8.1 The clearing of groundcover and disturbance to soil surface must be limited to the minimum extent necessary.

8.2 Non-INS must comprise less than 10% of the total number of individual trees and shrubs cleared.

8.3 Non-INS with a stem or trunk greater than 20 cm DBHOB and INS with a stem or trunk greater than the 'maximum DBHOB allowed to be cleared' must not be cleared.

8.4 The clearing must not result in the intentional introduction into the cleared area of any non-native vegetation except the sowing of non-persistent annual non-native vegetation by zero till.

8.5 If more than 500 hectares are to be cleared, a minimum of 20% of the native vegetation on that area must be retained on each 500 hectare area within or between cleared areas and must be part of the INS extent. The native vegetation retained for the purposes of this provision may be included in the calculation of the 20% uncleared area of INS extent on the landholding.

Note: Examples of clearing type c) *Clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover* include but are not limited to chaining, slashing, roping or stick raking applied with minimal disturbance to soil and groundcover.

9. If clearing by clearing type d) *Clearing plants at paddock scale with temporary disturbance to soil and groundcover:*

9.1 The clearing of groundcover and disturbance to soil surface must be limited to the minimum extent necessary.

9.2 Non-INS must comprise less than 10% of the total number of individual trees and shrubs cleared.

9.3 Non-INS with a stem or trunk greater than 20 cm DBHOB and INS with a stem or trunk greater than the 'maximum DBHOB allowed to be cleared' must not be cleared except where the clearing is not intentional and does not exceed 20 stems per hectare.

9.4 The clearing must not result in the intentional introduction into the cleared area of any non-native vegetation except the sowing of non-persistent annual non-native vegetation as part of the clearing operation and is limited to **three occasions in 15 years** from the date of notification of the intention to use this Ministerial Order, and the non-native vegetation is not harvested.

9.5 If more than 500 hectares are to be cleared, a minimum of 20% of the native vegetation on that area must be retained on each 500 hectare area within or between cleared areas and must be part of the INS extent. The native vegetation retained for the purposes of this provision may be included in the calculation of the 20% uncleared area of INS extent on the landholding.

Note: Examples of clearing type d) *Clearing plants at paddock scale with temporary disturbance to soil and groundcover* include but are not limited to blade ploughing or crocodiling.

10. If clearing by clearing type e) *clearing plants at a paddock scale with longer-term disturbance to soil and groundcover:*

10.1 The clearing of groundcover and disturbance to soil surface must be limited to the minimum extent necessary.

10.2 Non-INS must comprise less than 10% of the total number of individual trees and shrubs cleared.

10.3 Non-INS with a stem or trunk greater than 20 cm DBHOB and INS with a stem or trunk greater than the 'maximum DBHOB allowed to be cleared' must not be cleared except where the clearing is not intentional and does not exceed 20 stems per hectare.

10.4 The clearing must not result in the intentional introduction into the cleared area of any non-native vegetation except the preparation and sowing of non-persistent annual non-native vegetation limited to **three occasions in 15 years** from the date of first notification of the intention to use this Ministerial Order.

10.5 If more than 500 hectares are to be cleared, a minimum of 20% of the native vegetation on that area must be retained on each 500 hectare area within or between cleared areas and must be part of the INS extent. The native vegetation retained for the purposes of this provision may be included in the calculation of the 20% uncleared area of INS extent on the landholding.

Note: An example of clearing type e) *Clearing plants at paddock scale with longer-term disturbance to soil and groundcover* includes but is not limited to short-term cropping.

11. Definitions

In this order terms have the same meaning as in the *Native Vegetation Act 2003*, and the *Native Vegetation Regulation 2013*, unless otherwise defined below.

Annual non-native vegetation means a plant that is not native vegetation and which completes its life cycle, from germination to the production of seed, within one year, and then dies.

Clearing type a) means clearing by management burning.

Clearing type b) means clearing individual plants with nil to minimal disturbance to soil and groundcover.

Clearing type c) means clearing plants at paddock scale with nil to minimal disturbance to soil and groundcover.

Clearing type d) means clearing plants at paddock scale with temporary disturbance to soil and groundcover.

Clearing type e) means clearing plants at paddock scale with longer-term disturbance to soil and groundcover.

Density or densities means the number of plants per hectare.

Diameter at breast height over bark (DBHOB) means the diameter over the bark of the stem at 1.3 metres above the ground. If there are multiple stems on a tree then the diameter is measured on the largest stem.

Estuary means:

- a) any part of a river whose level is periodically or intermittently affected by coastal tides; or
- b) any lake or other partially enclosed body of water that is periodically or intermittently open to the sea.

INS extent means the extent of the areas on the landholding where:

- a) INS is currently present; and
- b) areas on the landholding where INS may not presently occur but where INS management is required to prevent their spread or recurrence.

Areas of non-native vegetation and areas of native vegetation not impacted by INS are not included in the INS extent on the landholding.

Invasive Native Scrub (INS) means plants that satisfy the following criteria:

- a) the plants to be cleared are of a species listed in the INS database (Appendix 1); and
- b) the plants to be cleared are regenerating densely or are invading plant communities, causing decline in the structure or composition of the vegetation community on the land to be cleared.

Land degradation risk is an indication of the level of risk of land degradation that could occur as a result of INS clearing. There are three risk levels: Low, Moderate and High. The risk level for the land to be cleared is determined in accordance with the land degradation risk assessment method at Appendix 2.

Landholding has the same meaning as it has in the *Native Vegetation Regulation 2013*.

Local Land Services (LLS) has the same meaning as it has in the *Local Land Services Act 2013*.

Management burning is planned and controlled use of fire for the purpose of managing INS.

Minimal disturbance means there has been no greater than 30% of the soil surface and existing groundcover disturbed (total area) as a result of the clearing.

No disturbance means there has been no greater than 5% of the soil surface and existing groundcover disturbed (total area) as a result of the clearing.

Non-native vegetation means vegetation that is not native vegetation, as defined by section 6 of the *Native Vegetation Act 2003*.

Non-INS means any plants that are not INS, as defined in Section 1 of this order.

Paddock scale means the clearing of multiple trees or shrubs at one time, usually by methods including but not limited to chaining, roping, bladeploughing and stickraking.

Routine agricultural management activities (RAMA) has the same meaning as it has in section 11 of the *Native Vegetation Act 2003*.

Soil disturbance means the turning, digging or disrupting of the soil surface, usually by an implement or machinery or by the pushing or pulling of trees or shrubs.

Strahler stream order means the stream order of a stream determined by the Strahler system as defined in Schedule 2, Part 1 of the *Water Management (General) Regulation 2011*.

Temporary disturbance means the application of a clearing method that causes significant soil disturbance, generally as a single pass, such as (but not limited to) bladeploughing or crocodiling.

Threatened ecological community means a threatened ecological community within the meaning of the *Threatened Species Conservation Act 1995* and listed in Part 3 of Schedule 1, Part 2 of Schedule 1A or Part 2 of Schedule 2 of that Act.

Visible channel means a visible path where water flows, regardless of flow regime, which shows some degree of incision or erosion.

Watercourse means a stream of Strahler stream order 3 or larger with a visible channel.

Wetland means any type of shallow body of water, other than a floodplain (such as a marsh, billabong, swamp or sedgeland) that is:

- a) inundated cyclically, intermittently or permanently with water; and
- b) vegetated with wetland plant communities.

Zero till means drilling of seed with minimal disturbance (less than 30%) to topsoil and no application of herbicide.

Appendix 1 – Remains unchanged

Appendix 2 – All references to the “the clearing of INS Ministerial Order” including “the INS Ministerial Order” are to be read as “the assessment methodology for this minor variation”

The following conditions of the current Chapter 7 of the EOAM are included for assessment of Environmental outcomes when using this minor variation.

- a) For methods of clearing plants at a paddock scale with temporary disturbance to soil and groundcover (now referred to as Clearing type d), and clearing of plants at a paddock scale with longer terms disturbance to soil and ground cover (now referred to as Clearing type e), the clearing does not result in the introduction into the cleared area of any non-native perennial vegetation other than the species listed in Table 7.2 (where judgement of the Catchment Management Authority (now referred to as the Local Land Services) the species listed in Table 7.2 is non-persistent in the area the species proposed to be introduced).
- b) Table 7.2 Non-Persistent and Non-Native Perennial Species Database

Non-persistent non-native perennial vegetation species
<i>Medicago sativa</i> (Lucerne)