



Listing Yellow Mimosa  
(*Vachellia farnesiana*)  
as a feral native species

Recommendations

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## List of acronyms

CMA	Catchment Management Authority
DPI	NSW Department of Primary Industries
FNS	Feral native species
INS	Invasive native species
NRC	Natural Resources Commission
NSW	New South Wales
OEH	NSW Office of Environment and Heritage

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# 1 Executive Summary

The Minister for the Environment has asked the Natural Resources Commission (NRC) to provide advice on the proposed listing of Yellow Mimosa (*Vachellia farnesiana*) as a feral native species in the Border Rivers Gwydir, Namoi and Central West Catchment Management Authorities (CMA) regions, as well as across all of NSW.

This report explains the NRC's recommendations for listing Yellow Mimosa as a feral native species, and advice on other issues that were raised by stakeholders during the NRC's review.

## Recommendations

### Listing Yellow Mimosa as a feral native plant species

In accordance with the provisions of Clause 17(2)(b) of the *Native Vegetation Regulation 2005*, the NRC recommends Yellow Mimosa be listed as a feral native species in the:

- Border Rivers Gwydir, Namoi and Central West CMA regions; and
- remaining CMA regions across the state.

Reasons to list Yellow Mimosa include:

- it is found outside of its 'natural range' as defined in the *Native Vegetation Regulation 2005*
- it is likely impacting both environmental and economic values in a negative way, for example, potentially reducing habitat quality, increasing soil erosion and causing economic loss to agricultural production
- it needs to be contained before it can establish in new areas and becomes widespread
- improved control will likely deliver environmental and economic benefits to landholders and NSW.

The NRC's recommendation supports the NSW Office of Environment and Heritage's *Invasive Native Species – Feral Native Species Change Control Panel's* recommendation to list Yellow Mimosa as a feral native species state-wide.

Feedback from community and stakeholders, for example the Nature Conservation Council of NSW and National Parks Association, also supports the listing.

### Opportunities to improve other regulatory issues

During its review, stakeholders raised other issues and made suggestions that could promote better weed management in NSW and support communities' environmental, social and economic values.

The NRC recommends:

- the NSW Office of Environment and Heritage expand or replace the current decision rule to define native vegetation in the *Native Vegetation Act 2003* with a more rigorous scientific assessment.

Section 3.1 outlines a potential approach to define native and alien vegetation in NSW.

- the NSW Office of Environment and Heritage and Department of Primary Industries ensure current and future regulation and strategies for both native and non-native weeds contribute to agreed outcomes for weed management.

Section 3.2 suggests:

- enabling regional Local Land Services to provide a strategic and coordinated whole-of-landscape approach to weed management in their regions in collaboration with their communities and Local Control Authorities
  - exploring how any new NSW biosecurity legislation and associated strategies could provide an overarching policy framework to harmonise native and non-native weed management across the *Noxious Weeds Act 1993* and the *Native Vegetation Act 2003*.
- the NSW Department of Primary Industries further explore whether Yellow Mimosa should be listed as a noxious weed under the *Noxious Weeds Act 1993* after it is listed as a feral native species under the *Native Vegetation Act 2003*.

Section 3.3 suggests a staged approach to this recommendation to avoid unnecessary regulatory burden on landholders and to ensure the NSW Government's goals of reducing red tape and devolving more decision making to local communities can be achieved.

## 2 Listing Yellow Mimosa as a feral native species

The *Native Vegetation Regulation 2005* provides for a species of native vegetation to be listed as a feral native species. The *Native Vegetation Regulation 2005* defines feral native plant species as a native plant species that invades an area outside of its natural range.<sup>1</sup>

All NSW CMAs have recommended that Yellow Mimosa (*Vachellia farnesiana*) be listed as a feral native species in their regions. Yellow Mimosa is a spreading shrub that can range in height from one and half to four meters.<sup>2</sup> It grows in open woodland, shrubland and grassland, on alluvial clay soils and sandy loams, on open plains and near watercourses.<sup>3</sup>

### 2.1 Regulatory context

Under Clause 17(2) of the *Native Vegetation Regulation 2005*, a native vegetation species can only be listed as a feral native plant species for specified land if:

- the Minister is satisfied that the species is outside of its natural range on the land or in the area for which it is to be listed; and
- the Minister has consulted the NRC and the Minister for the Environment<sup>4</sup> on the proposed listing; and
- the CMA in whose area of operations the land or area is located has recommended the listing of the species as a feral species for that land or area.

Landholders do not need approval to clear feral native species. Instead, they can be cleared as *routine agricultural management activities* (subject to any conditions specified).<sup>5</sup> This provides landholders with a more efficient management pathway than currently exists, and potentially removes a barrier for landholders to treat Yellow Mimosa before it becomes widespread.

#### 2.1.1 CMA recommendations

All NSW CMAs have recommended to the NSW Office of Environment and Heritage (OEH) that Yellow Mimosa be listed as a feral native species in their regions.

Yellow Mimosa is already listed as an invasive native species in the Border Rivers-Gwydir, Namoi, Central West and Western CMA regions under the *Native Vegetation Regulations 2005*. Invasive native species are native plant species that are found within their natural range and are either invading plant communities to which they do not normally belong or regenerating densely following natural or artificial disturbances.<sup>6</sup>

#### 2.1.2 OEH recommendations

OEH's *Invasive Native Species – Feral Native Species Change Control Panel* (OEH Control Panel) is chaired and coordinated under OEH's Scientific Services Division, with panel members drawn from the division or other external experts. The OEH Control Panel is tasked to consider CMA

<sup>1</sup> As defined under the *Native Vegetation Regulation 2005* – Clause 17(2)(a)

<sup>2</sup> Kodela, P.G. (2006) *Vachellia farnesiana*, in PlantNET - The Plant Information Network System of The Royal Botanic Gardens and Domain Trust, Sydney, Australia (version 2.0). <http://plantnet.rbgsyd.nsw.gov.au>.

<sup>3</sup> Kodela, P.G. and Tindale, M.D. (2001) *Acacia* subg. *Acacia*. Flora of Australia Vol. 11A: 196–207.

<sup>4</sup> This is a historical anomaly, as the (then) Minister for Natural Resources previously administered the Native Vegetation Act 2003 and its Regulation

<sup>5</sup> Clause 17 (1) and (3) *Native Vegetation Regulation 2005*

<sup>6</sup> *Native Vegetation Regulation 2005* – Environmental Outcomes Assessment Methodology

nominations for invasive native species and feral native species in their CMA regions, and recommend to OEH whether these species should be listed.<sup>7</sup>

The OEH Control Panel recommended that Yellow Mimosa be listed as a feral native species for all of NSW, including the Border Rivers-Gwydir, Namoi and Central West CMA regions.

Following the OEH Control Panel's review and recommendation, OEH sought views of the remaining CMAs as to whether they support listing Yellow Mimosa in their regions. Since then, all remaining NSW CMAs have recommended listing Yellow Mimosa in their regions to OEH.

These recommendations have not been formally considered by the OEH Control Panel. However, in effect, the subsequent CMA recommendations support the OEH Control Panel's recommendation to list Yellow Mimosa for all of NSW.

## 2.2 Stakeholder and community feedback

The NRC received three formal submissions from stakeholders<sup>8</sup>, all highlighting the impact Yellow Mimosa is having on environmental and economic values. Stakeholders also raised other issues in their submissions, for example:

- the Macquarie Valley Weeds Advisory Committee suggested the uncertainty surrounding whether Yellow Mimosa is a native or alien species, has prevented their previous nominations to have the species declared as a noxious weed in their region from succeeding
- the Country Women's Association of NSW also suggested the 'native' status prevents practical management outcomes, and believes the species should be declared as a noxious weed across the state
- the Nature Conservation Council of NSW and National Parks Association (joint submission):
  - suggested active control measures to prevent Yellow Mimosa's impacts on threatened flora species and the expected spread of it into arid and semi-arid regions
  - argued that any code of practice for clearing should emphasise and promote restoring and managing native vegetation after clearing (rather than replacing with exotic species)
  - suggested developing a single, clear nation-wide approach to defining the status of anomalous species like Yellow Mimosa, as varying terminology and status across Australia is confusing and could lead to perverse environmental outcomes.

## 2.3 Rationale for listing

### 2.3.1 Yellow Mimosa is outside its 'natural range'

Native vegetation species in NSW can only be listed as a feral native species for specified land if it is outside of its natural range on the land or in the area for which it is to be listed.<sup>9</sup>

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<sup>7</sup> As set out under Terms of Reference in OEH (2012) *Listing Invasive Native Scrub Species and Feral Native Plant Species under the Native Vegetation Act 2003 – Guidelines for Catchment Management Authorities, INS-FNS Change Control Panel and Landscape and Ecosystem Conservation Branch – July 2012*

<sup>8</sup> Available at <http://www.nrc.nsw.gov.au/Workwedo/NativeVegetation.aspx>

<sup>9</sup> Clause 17(2) of the *Native Vegetation Regulations 2005*

Yellow Mimosa is native to Central America.<sup>10</sup> The species now occurs in Africa, Asia and Australia, and probably arrived here before European settlement.<sup>11</sup> In Australia, Yellow Mimosa is now widespread throughout the Northern Territory, Queensland and northern NSW.

Despite its native origin in Central America, Yellow Mimosa is regarded as native (or *indigenous*) vegetation under the NSW *Native Vegetation Act 2003* because it is considered to have existed in NSW before European settlement (see section 3.1 for further discussion on this issue). However:

- evidence suggests that Yellow Mimosa was first naturalised in northern Australia through a series of human migrations<sup>12</sup>
- it is difficult, if not impossible, to determine the exact timing of entry and original range in Australia and NSW.<sup>13</sup>

### 2.3.2 Yellow Mimosa is likely impacting environmental and economic values in a negative way

Using the best available information, the NRC has estimated that Yellow Mimosa covers over 26 million hectares of land in NSW, ranging from either being abundant to only occasionally found (Table 1 and Figure 1).

It is found on over:

- 22 million hectares of land used for agriculture
- 3 million hectares of wetlands and land set aside for conservation.

Yellow Mimosa can readily colonise native grasslands, riparian vegetation communities, grassy open woodlands and shrublands in dense stands.<sup>14</sup> As an invasive native species, dense stands can reduce habitat quality for native animals. It can also decrease groundcover, impacting biodiversity and potentially increasing soil erosion.<sup>15</sup>

Indicative estimates suggest the average loss of production from Yellow Mimosa on cropping and grazing enterprises in north western NSW could be around \$120 per hectare/annually.<sup>16</sup>

Clearing Yellow Mimosa could cost landholders between \$200-\$400 per hectare depending on its density.<sup>17</sup> At a state scale, indicative estimates suggest the economic loss to production (cropping and grazing) from Yellow Mimosa is around \$183 million per annum.<sup>18</sup>

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<sup>10</sup> Clarke, H. D., Seigler, D.S. and Ebinger, J.E. (1989) *Acacia farnesiana* (Fabaceae: Mimosoideae) and Related Species from Mexico, the Southwestern U.S., and the Caribbean. *Systematic Botany* 14 (4) 549-564

<sup>11</sup> CABI (2013) *Vachellia farnesiana*. In *Invasive Species Compendium*. Wallingford, UK: CAB International. Online at [www.cabi.org/isc](http://www.cabi.org/isc); Kodela, P.G. and Tindale, M.D. (2001) *Acacia* subg. *Acacia*. Flora of Australia Vol. 11A: 196-207; Mabberly, D.J. (1997) *The Plant Book* (Second edition). Cambridge University Press. Cambridge.

<sup>12</sup> After Beadle (1981) cited in EcoLogical Australia (2013) *Listing of Yellow Mimosa (Vachellia farnesiana) as a feral native species in New South Wales – Findings and Recommendations*.

<sup>13</sup> EcoLogical Australia (2013) *Listing of Yellow Mimosa (Vachellia farnesiana) as a feral native species in New South Wales – Findings and Recommendations*.

<sup>14</sup> *Ibid.*

<sup>15</sup> NSW Government – *Managing invasive native scrub*. Information sheet (No. 9) on native vegetation management in NSW – Native Vegetation Act 2003. Available at <http://www.environment.nsw.gov.au/resources/vegetation/nvinfosheet9.pdf>

<sup>16</sup> Estimate provided by Dr. C Kalisch Gordon (B AgEc (Hons) USyd/PhD UNE) at the request of the NRC.

### 2.3.3 Yellow Mimosa needs to be contained

The NRC has estimated that Yellow Mimosa is found only occasionally or in small areas on just over 23 million hectares in NSW, including on land used for conservation and agriculture (Figure 1). It is estimated to be absent (or unknown to occur) on just over 45 million hectares (Table 1).

Best practice strategies for weed management suggest the most effective way to minimise the impacts of weeds is to either prevent their initial incursion, or their ability to establish in new areas<sup>19</sup>.

In CMA regions where Yellow Mimosa is only occasionally found or is still absent, it will be important for landholders and managers to identify and manage new and emerging outbreaks. This will help prevent it establishing or spreading into new areas (see next section for further discussion on this issue).

**Table 1: Estimated amount of Yellow Mimosa distributed across landuse types**

Land-use <sup>20</sup>	Yellow Mimosa distribution (ha/000) <sup>21</sup>						
	Abundant (Widespread & localised)	Common	Occasional	Present (Unknown density)	Total	Unknown or absent	
<b>Agriculture</b>	Cropping	661	167	1,392	1,748	3,968	4,527
	Grazing	1,891	331	5,031	11,676	18,929	34,578
	Horticulture	0	0	4	65	69	85
	Intensive animal production	0	0	2	5	7	17
	<b>Sub total</b>	<b>2,552</b>	<b>498</b>	<b>6,429</b>	<b>13,494</b>	<b>22,973</b>	<b>39,207</b>
<b>Environment</b>	Conservation area	94	33	437	2,562	3,126	6,059
	Wetlands	7	1	27	110	145	107
	<b>Sub total</b>	<b>101</b>	<b>34</b>	<b>464</b>	<b>2,672</b>	<b>3,271</b>	<b>6,166</b>
<b>Total</b>	<b>2,653</b>	<b>532</b>	<b>6,893</b>	<b>16,166</b>	<b>26,244</b>	<b>45,373</b>	

<sup>17</sup> *Ibid.*

<sup>18</sup> *Ibid.*

<sup>19</sup> For example, see the NSW Department of Primary Industries and NSW Office of Environment and Heritage *Understanding weed management in New South Wales*. Available at [http://www.dpi.nsw.gov.au/\\_data/assets/pdf\\_file/0005/272093/weed-management-web.pdf](http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/272093/weed-management-web.pdf)

<sup>20</sup> Source: Australian Department of Agriculture, Fisheries and Forestry (2000-2007)

<sup>21</sup> Source: NSW DPI - Yellow Mimosa distribution (2007-2008)

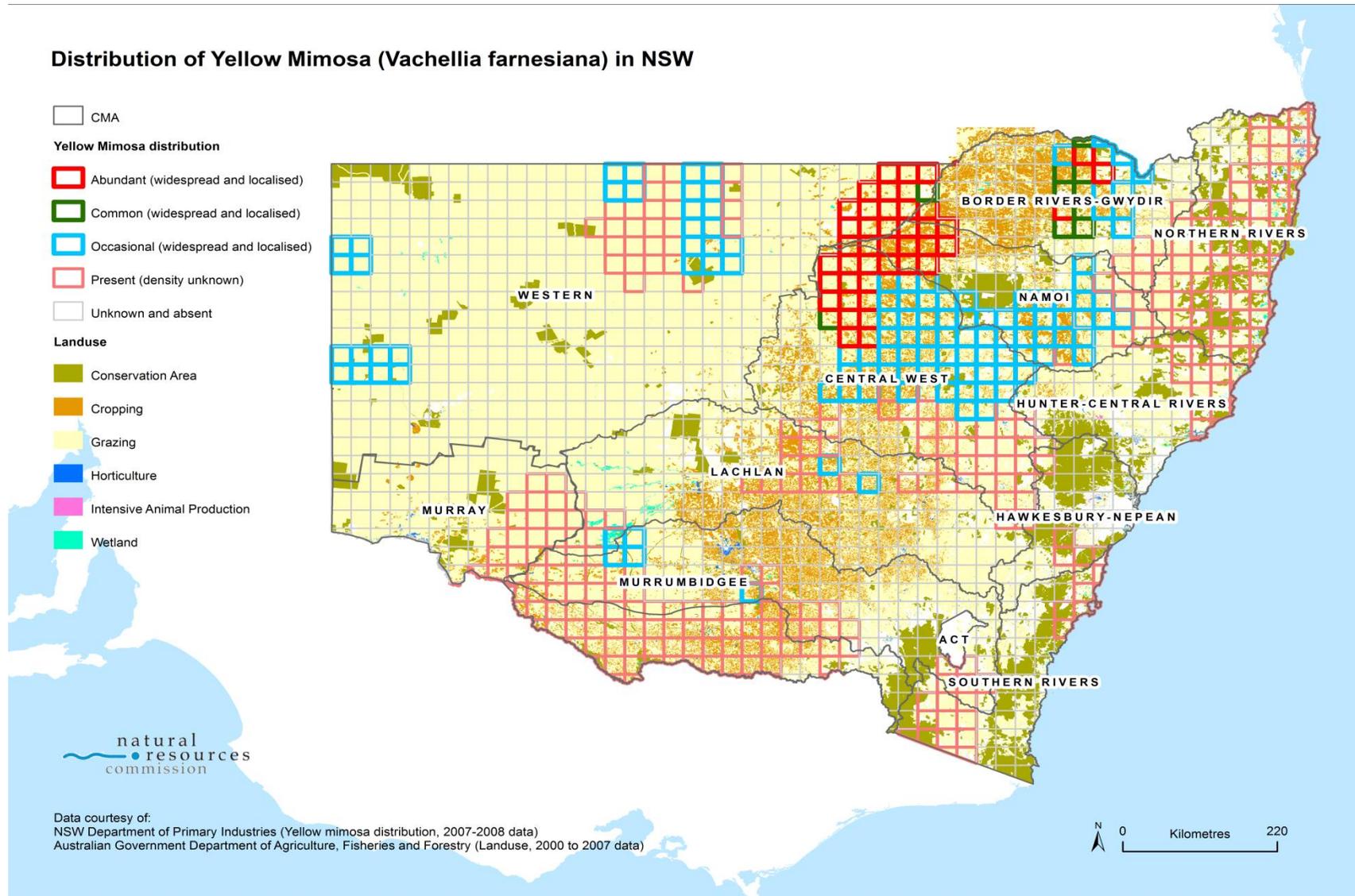


Figure 1: Distribution of Yellow Mimosa in NSW

### 2.3.4 Controlling Yellow Mimosa will likely deliver environment and economic benefits

#### Environmental benefits

The NRC found no specific information on the environmental benefits in controlling Yellow Mimosa.

However, the broad environmental impacts of invasive native species (such as Yellow Mimosa) are relatively well documented.<sup>22</sup> Thinning or clearing native invasive species under the *Native Vegetation Act 2003* aims to maintain or improve environmental outcomes by re-creating vegetation mosaics which has been found to maintain broad landscape health, including promoting species richness, ground cover and stable soils.<sup>23</sup>

#### Economic benefits

Based on indicative estimates, the net benefit for landholders to clear and control Yellow Mimosa is an average \$813 per hectare over 15 years.<sup>24</sup>

In areas with average clearing and control costs for Yellow Mimosa and average returns on crops, the estimated net private benefit could be around \$2,800 per hectare over 15 years.<sup>25</sup> For high value crops such as irrigated cotton, the net private benefit is likely to be much greater.<sup>26</sup>

#### More efficient management opportunity to gain benefits

Landholders currently need approval from their relevant CMA to clear Yellow Mimosa under the *Native Vegetation Act 2003*, either through:

- an invasive native species Property Vegetation Plan in CMA regions where it is listed as an invasive native species; or
- a clearing Property Vegetation Plan in CMA regions where it is not listed as an invasive native species (i.e. considered like any other remnant native vegetation).

If Yellow Mimosa is listed as a feral native species in any CMA region, clearing would be allowed as *routine agricultural management activities* under the *Native Vegetation Regulation 2005*.

This means landholders would not need approval to clear Yellow Mimosa, provided they comply with any conditions for the listing such as the time of year clearing can occur, methods allowed and limits on the total area that can be cleared. These conditions recognise that in some cases Yellow Mimosa may still provide important environmental benefits such as habitat for native animals and promoting soil health.

This provides landholders and managers with more efficient management opportunities and a potentially less confusing regulatory pathway than currently exists. This could help prevent Yellow Mimosa increasing its density in existing areas, or spreading into new areas.<sup>27</sup>

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<sup>22</sup> See for example, NSW Science and Information Board (2005) *Clearing/thinning of native vegetation known as invasive native scrub under the Native Vegetation Act 2003*. Department of Natural Resources.

<sup>23</sup> Doerr, V.A.J. et al. (2009) *Managing Invasive Native Scrublands for Improved Biodiversity Outcomes in Agricultural Landscapes – Final Scientific Report, June 2009*. CSIRO, Canberra; Droulers, P. and Kneipp, K. (2010) Demonstrating implementation of invasive native scrub property vegetation plans. Available at [http://www.austrangesoc.com.au/userfiles/file/2010\\_ARC\\_conf/Peter%20Droulers%20new.pdf](http://www.austrangesoc.com.au/userfiles/file/2010_ARC_conf/Peter%20Droulers%20new.pdf)

<sup>24</sup> Estimate provided by Dr. C Kalisch Gordon (B AgEc (Hons) USyd/PhD UNE) at the request of the NRC.

<sup>25</sup> *Ibid.*

<sup>26</sup> *Ibid.*

The NRC notes that under the proposed new *Native Vegetation Regulations 2012*, some methods of clearing invasive and feral native species are treated as *routine agricultural management activities* and would therefore not require approval to clear (subject to any conditions set out for that species).<sup>28</sup>

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<sup>27</sup> Under the *Native Vegetation Act 2003*, native vegetation defined as regrowth can be cleared without approval.

<sup>28</sup> Part 6, Cl. 33. Available at <http://www.environment.nsw.gov.au/resources/nativeveg/NativeVegetationRegulation2012.pdf>

### 3 Opportunity to improve other regulatory issues

During its review the NRC identified other issues that are likely to impact effective approaches to weed management in NSW and the community's environmental, social and economic values.

#### 3.1 Increase scientific rigour to define native vegetation

The *Native Vegetation Act 2003* defines native vegetation as vegetation that existed in NSW before European settlement.<sup>29</sup> This means any vegetation existing:

- before 1770, is considered native vegetation
- only after 1770, can be considered non-native vegetation.

Despite its native origin in Central America, Yellow Mimosa is regarded as native (or *indigenous*) as there is a reasonable weight of scientific consensus that it existed in NSW before 1770. For example, the NSW Royal Botanical Gardens advised OEH's Control Panel that, in its opinion, Yellow Mimosa was introduced to Australia prior to 1770.<sup>30</sup>

However, during its review the NRC has noted that Yellow Mimosa:

- is listed as 'alien' under relevant native vegetation or environmental legislation in Queensland, Western Australia, South Australia<sup>31</sup> and the Northern Territory
- has been classified as an 'alien' species in scientific literature (see Box 1).<sup>32</sup>

More generally, the NRC notes there is a broader national and world-wide scientific debate on how 'native' vegetation is assessed and defined.<sup>33</sup>

The current 1770 threshold is a simple rule-of-thumb to define native vegetation. However, the NRC believes this simple decision rule may not provide the necessary scientific rigour to define native vegetation.

The NRC suggests the current decision rule to define 'native' under the *Native Vegetation Act 2003* could be expanded, or replaced with an assessment process that provides more scientific rigour to determine whether a species is native or not. **Box 1** provides an example of an approach that could be used to define native and alien vegetation species in NSW. This example is provided to initiate further discussion.

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<sup>29</sup> Section 6 (2) *Native Vegetation Act 2003*

<sup>30</sup> Others in agreement include Pedley, L. (1983) *Acacia farnesiana*; in Stanley, T.D. and Ross, E.M. Flora of South-eastern Queensland Volume 1: 382-383.; Maberly, D.J. (1997) *The Plant Book* (Second edition). Cambridge University Press. Cambridge; Kodala, P.G. and Tindale, M.D. (2001) *Acacia* subg. *Acacia*. Flora of Australia Vol. 11A: 196-207.

<sup>31</sup> In South Australia, the technical status of Yellow Mimosa is 'naturalised' (i.e. from an alien species)

<sup>32</sup> Bean A.R. (2007) A new system for determining which plant species are indigenous in Australia. *Australian Systematic Botany* 20, 1-43.

<sup>33</sup> For example see Hosking, J.R., Conn, B.J. & Lepschi, B.J. (2003) Plant species first recognised as naturalised for New South Wales over the period 2000-2001. *Cunninghamia* 8(2): 175-187; Mills, K. (2010) Defining indigenous plants: some problematic species from Norfolk Island. *Cunninghamia* 11(4):409-414; Pyšek P, Richardson, D.M., Rejmanek, M., Webster, G.L., Williamson, M., and Kirschner, J. (2004) Alien plants in checklists and floras: towards better communication between taxonomists and ecologists. *Taxon* 53: 131-143.

### Box 1 A potential approach to define native and alien vegetation species in NSW

Bean<sup>34</sup> has proposed a method to define vegetation as native or alien in Australia by assessing a range of criteria using ecological, phytogeographical and historical data.

The criteria include whether a species:

1. consistently occurs in intact unmodified habitat (conversely, a species that is known only from croplands, roadsides and other frequently disturbed sites is likely to be alien)
2. is not persistently invasive in its area of occurrence (conversely, a species that persistently invades or encroaches upon natural communities is likely to be alien)
3. is attended by a range of pests and diseases (conversely, a species that is pest- and disease-free is probably alien)
4. displays a range of phenotypic or genetic diversity (conversely, phenotypically or genetically uniform populations are probably derived from a single introduction)
5. does not display any post-settlement expansion of geographical range within the region (conversely, a species that has a known or inferred expansion in its range over the past 100–150 years is likely to be alien)
6. any discontinuities of distribution of the species within the region are related to climatic and edaphic factors (conversely, a species with a patchy distribution correlated with human settlement patterns is probably alien).

Bean concluded that Yellow Mimosa would only meet a small number of these criteria and accordingly, would be classified as an alien species. In summary, Bean's analysis suggested that:

- historical evidence indicates that the presence of Yellow Mimosa before European settlement is equivocal (e.g. there are no known early collections, but the species may have been overlooked or occurred in an area before being identified by botanists); and
- Yellow Mimosa meets only a minority of ecological criteria, and a long-standing population exists elsewhere in the world.<sup>35</sup>

## 3.2 Ensure agreed outcomes apply to native and non-native weeds

The outcomes sought for weed management in NSW form a hierarchy reflecting the invasion process for weeds, from new arrivals through to widespread establishment.<sup>36</sup> It includes:

- **preventing** new weeds establishing in an area
- **eradicating** newly arrived and naturalised weeds in an area
- **containing** or **reducing** the spread or severity of weeds already widespread in an area
- **protecting** assets from the impact of established weeds.

Ideally, priority should be given to prevent the arrival of new weeds in the first place or eradicating new arrivals in an area. Currently, the NSW *Native Vegetation Act 2003* applies only to one of the outcomes described above – that is, protecting assets from the impact of

<sup>34</sup> Bean A.R. (2007) A new system for determining which plant species are indigenous in Australia. *Australian Systematic Botany* 20, 1-43.

<sup>35</sup> *Ibid.*

<sup>36</sup> NSW Department of Primary Industries and NSW Office of Environment and Heritage - *Understanding weed management in New South Wales*. Available at [http://www.dpi.nsw.gov.au/\\_data/assets/pdf\\_file/0005/272093/weed-management-web.pdf](http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/272093/weed-management-web.pdf)

established weeds.<sup>37</sup> In contrast, the NSW *Noxious Weeds Act 1993* applies to all outcomes described above, from preventing new weeds to protecting assets from the impact of established weeds (Attachment 2).<sup>38</sup>

In the case of Yellow Mimosa (as a listed invasive native species), there are no legislative triggers, obligations or likely incentives in the *Native Vegetation Act 2003* for landholders to reduce its impact or prevent it establishing or spreading into areas of NSW where it is currently absent.

Rather, achieving this outcome will largely rely on chance and ad-hoc decision making at the property scale. For example whether:

- sufficient individual landholders are prepared to seek assessment and approval for clearing Yellow Mimosa through a Property Vegetation Plan; and if so,
- those Property Vegetation Plans are strategically located to efficiently and effectively deal with new incursions in a meaningful manner.

There are currently over forty (40) invasive native species listed in NSW under the *Native Vegetation Act 2003*. The NRC believes the current regulatory approach, whereby landholders need to seek approval to clear invasive native species can create disincentives for landholders to act early on emerging weeds, leading to potentially perverse environmental outcomes.<sup>39</sup> In worst case scenarios, the current approach may encourage either known or inadvertent illegal clearing for activities landholders are otherwise likely to view as sensible land management practices.

The NRC believes all relevant current and new legislation and strategies should seek to contribute to all the outcomes for weed management described earlier in this section, regardless of whether the species is native or non-native vegetation. They should reduce barriers and create the appropriate incentives that encourage landholders and land managers to practice sensible and sustainable land management practices. This includes eliminating and containing emerging threats from invasive native or non-native vegetation species.

To that end, the NRC supports the current proposal under the proposed *Native Vegetation Regulations 2012* that may enable certain treatments for clearing invasive native species to be considered as *routine agricultural management activities*.<sup>40</sup>

The NRC also believes effective weed management and control will rely on a strategic, whole-of-landscape approach. This should include government and community preferences and priorities across all tenures, ensuring that the risks, impacts and benefits of managing weeds can be appropriately shared across the community.

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<sup>37</sup> As described in NSW Department of Primary Industries and NSW Office of Environment and Heritage - *Understanding weed management in New South Wales*. Available at [http://www.dpi.nsw.gov.au/\\_data/assets/pdf\\_file/0005/272093/weed-management-web.pdf](http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/272093/weed-management-web.pdf)

<sup>38</sup> *Ibid.*

<sup>39</sup> Under the *Native Vegetation Act 2003*, native vegetation defined as regrowth can be cleared without approval.

<sup>40</sup> Part 6, Cl. 33. Available at <http://www.environment.nsw.gov.au/resources/nativeveg/NativeVegetationRegulation2012.pdf>

Future opportunities for Government include:

- Ensuring the scope of any current or new reviews of legislation and strategies for weed management consider traditional pest weeds, as well as feral and invasive native species listed under the *Native Vegetation Act 2003*.

For example, considering how any new NSW biosecurity legislation and strategy could provide an overarching policy framework to harmonise native and non-native weed management across the *Noxious Weeds Act 1993* and the *Native Vegetation Act 2003*.

- Enabling regional Local Land Services to provide a strategic and coordinated whole-of-landscape approach to weed management in their regions under any revised regulations for native vegetation (see next section for further discussion).

For example, developing coordinated approaches with their communities and Local Control Authorities to control invasive and feral native species as *routine agriculture management activities* (if the *Native Vegetation Regulation 2012* is adopted).

### 3.3 Consider listing Yellow Mimosa as a noxious weed in the future

The *Noxious Weeds Act 1993* provides for the listing of native or alien vegetation species as a noxious weed. A weed is declared noxious because its control will provide benefit to the community over and above the cost of implementing control programs.<sup>41</sup>

During its review, the NRC had discussions with other stakeholders such as CMAs, OEHL and the Department of Primary Industries (DPI). These discussions revealed a general consensus that Yellow Mimosa behaves in a weed-like-manner. In its advice to the OEHL Control Panel, the NSW Royal Botanical Gardens also suggested that Yellow Mimosa behaves as a weed in both agricultural and environmental situations.

However, views varied on whether it should be listed under the *Noxious Weeds Act 1993* as a noxious weed, rendering landholders subject to control orders. Some argued that the private costs for landholders would be too high in areas where Yellow Mimosa is already widespread. However, others saw merit in control orders for areas where Yellow Mimosa is only just emerging.

Based on these discussions, it appears the primary:

- advantage of listing Yellow Mimosa as a noxious weed is to legally oblige occupiers of land to eradicate or contain its establishment or spread into areas where it is currently absent or occasionally found – in other words, the benefits to community could outweigh the cost of implementing control programs
- disadvantage of listing Yellow Mimosa is imposing a cost burden on occupiers of land where it is currently abundant or common – in other words, the costs to implement control programs could outweigh the benefits to the community.

The NRC believes it is important to consider this issue within the NSW Government's broader goals for the NSW economy and environment. For example, the Government is aiming to reduce red tape to increase the competitiveness of NSW businesses. It is also seeking to devolve more decision making to local communities to increase opportunities for people to look after their own communities.<sup>42</sup>

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<sup>41</sup> NSW Department of Primary Industries – Policy: Declaration of noxious weeds – Policy no. O-067. Available at [http://www.dpi.nsw.gov.au/\\_data/assets/pdf\\_file/0005/287915/o067-declaration-nox-weeds.pdf](http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/287915/o067-declaration-nox-weeds.pdf)

<sup>42</sup> NSW Government – *NSW 2021: A Plan to Make NSW Number One*.

More recently, the NSW Government has proposed a number of changes to the *Native Vegetation Regulation 2005* that provide more opportunities for landholders to voluntarily comply with existing arrangements. For example, under the proposed regulations landholders may be able to use certain clearing treatments for invasive native species as a *routine agricultural management activity* (and likely Code of Practice), instead of seeking approval under a Property Vegetation Plan (which is attached to the title of the land).<sup>43</sup>

While listing Yellow Mimosa as a noxious weed may deliver additional benefits to the community, the NRC is concerned that adding further legislative obligations on landholders may be counter to the Government's current goals and initiatives described above. Instead, the NRC suggests exploring other opportunities that promote the Government's goals and are more likely to deliver sustainable outcomes in the longer term.

The NRC suggests a staged approach including:

- OEH monitoring the rate of increase in Yellow Mimosa clearing and control if it is listed as a feral native species and allow clearing as *routine agricultural management activities*
- CMAs (and in the future, Local Land Services) exploring opportunities for a coordinated and strategic approach between Local Control Authorities and their local community to clear and control:
  - Yellow Mimosa if it is listed a feral native species, and allow clearing as *routine agricultural management activities*
  - more broadly, invasive native species as *routine agricultural management activities* if the *Native Vegetation Regulation 2012* is adopted
- DPI in collaboration with parties above evaluating the effectiveness of these approaches, and determine whether listing Yellow Mimosa as a noxious weed is likely to deliver more benefits to community over and above the current regulatory arrangements (i.e. listed only as a feral native species under the *Native Vegetation Act 2003*).

The Australian Government's Caring for our Country program has a new set of directions and funding streams for sustainable agriculture, including a strategic approach to reducing the impact of weeds on agriculture. Regional (NRM) organisations will remain the primary vehicle to deliver the program's outcomes.

The NRC recommends the NSW Government, including existing and new regional bodies such as CMAs and Local Land Services, explore how new arrangements under the *Native Vegetation Regulation 2012* might potentially provide avenues for investment and funding through the Caring for our Country program.

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<sup>43</sup> Part 6, Cl. 33. Available at

<http://www.environment.nsw.gov.au/resources/nativeveg/NativeVegetationRegulation2012.pdf>

## **Attachment 1 – Review process**

For this review the NRC:

- published an issues paper explaining the purpose of the review, the issues on which the NRC sought feedback and how people could provide feedback
- sought and received submissions from stakeholder and community members
- used the best available knowledge, including expert ecological and economic advice on Yellow Mimosa
- tested its draft advice with relevant stakeholders.

### **List of submissions**

- Macquarie Valley Weeds Advisory Committee
- Country Women’s Association of NSW
- NSW Conservation Council and National Parks Association (joint submission)

## Attachment 2 – National and NSW policies and legislation for weed management

The outcomes sought for weed management in NSW form a hierarchy reflecting the invasion process for weeds, from new arrivals through to widespread establishment.<sup>44</sup> It includes:

- **preventing** new weeds establishing in an area
- **eradicating** newly arrived and naturalised weeds in an area
- **containing or reducing** the spread or severity of weeds already widespread in an area
- **protecting** assets from the impact of established weeds.

The NRC believes all relevant current and new legislation and strategies should seek to contribute to all the outcomes for weed management described above, regardless of whether the species is native or non-native vegetation.

Currently, the NSW *Native Vegetation Act 2003* applies only to one of the outcomes described above – that is, protecting assets from the impact of established weeds (see blue text in table below).<sup>45</sup>

In contrast, the NSW *Noxious Weeds Act 1993* applies to all outcomes described above, from preventing new weeds to protecting assets from the impact of established weeds (see red text in table below).<sup>46</sup>

Outcomes <sup>47</sup>	Examples of relevant policy or legislation <sup>48</sup>	
<b>1 Prevent</b> new weeds establishing in an area.	<ul style="list-style-type: none"> <li>▪ <b>NSW Noxious Weeds Act 1993</b></li> <li>▪ NSW <i>Fisheries Management Act 1994</i></li> <li>▪ Australian <i>Quarantine Act 1908</i></li> <li>▪ NSW New Weed Incursion Plan</li> <li>▪ National Prohibited and Permitted Lists</li> <li>▪ Australian National Eradication programs</li> <li>▪ Australian National Environmental Alert List</li> <li>▪ Australian Agricultural Sleeper Weed List</li> <li>▪ NSW Invasive Species Plan</li> </ul>	<ul style="list-style-type: none"> <li>▪ NSW Catchment Weed Management Strategies</li> <li>▪ NSW State and Regional Weed Management Plans</li> <li>▪ NSW Regional Pest Strategies</li> <li>▪ NSW National Parks and Wildlife Service Regional Pest Management Strategies</li> <li>▪ Australian Weeds Strategy</li> <li>▪ Weeds of National Significance Strategies</li> <li>▪ AusBioSec – Australian Biosecurity System for Primary Production and the Environment</li> </ul>
<b>2 Eradicate</b> newly arrived and naturalised	<ul style="list-style-type: none"> <li>▪ <b>NSW Noxious Weeds Act 1993</b></li> <li>▪ NSW <i>Fisheries Management Act</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ NSW State and Regional Weed Management Plans</li> </ul>

<sup>44</sup> NSW Department of Primary Industries and NSW Office of Environment and Heritage - *Understanding weed management in New South Wales*. Available at [http://www.dpi.nsw.gov.au/\\_data/assets/pdf\\_file/0005/272093/weed-management-web.pdf](http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/272093/weed-management-web.pdf)

<sup>45</sup> As described in NSW Department of Primary Industries and NSW Office of Environment and Heritage - *Understanding weed management in New South Wales*. Available at [http://www.dpi.nsw.gov.au/\\_data/assets/pdf\\_file/0005/272093/weed-management-web.pdf](http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/272093/weed-management-web.pdf)

<sup>46</sup> *Ibid.*

<sup>47</sup> NSW Department of Primary Industries and NSW Office of Environment and Heritage - *Understanding weed management in New South Wales*. Available at [http://www.dpi.nsw.gov.au/\\_data/assets/pdf\\_file/0005/272093/weed-management-web.pdf](http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/272093/weed-management-web.pdf)

<sup>48</sup> *Ibid.*

Outcomes <sup>47</sup>	Examples of relevant policy or legislation <sup>48</sup>	
weeds in an area.	<p>1994</p> <ul style="list-style-type: none"> <li>▪ NSW Incursion Plan for Invasive Plant Species</li> <li>▪ Australian National Eradication Programs</li> <li>▪ Australian National Environmental Alert List</li> <li>▪ Australian Agricultural Sleeper Weed List</li> <li>▪ NSW Invasive Species Plan</li> <li>▪ NSW Catchment Weed Management Strategies</li> </ul>	<ul style="list-style-type: none"> <li>▪ NSW Regional Pest Strategies</li> <li>▪ NSW National Parks and Wildlife Service Regional Pest Management Strategies</li> <li>▪ Australian Weeds Strategy</li> <li>▪ Weeds of National Significance Strategies</li> <li>▪ AusBioSec – Australian Biosecurity System for Primary Production and the Environment</li> </ul>
<p>3 <b>Contain or reduce</b> the spread or severity of weeds already widespread in an area.</p>	<ul style="list-style-type: none"> <li>▪ <b>NSW Noxious Weeds Act 1993</b></li> <li>▪ <i>NSW Fisheries Management Act 1994</i></li> <li>▪ Weeds of National Significance containment lines (e.g. Lantana in Southern NSW)</li> <li>▪ NSW Invasive Species Plan</li> <li>▪ NSW Catchment Weed Management Strategies</li> <li>▪ NSW State and Regional Weed Management Plans</li> </ul>	<ul style="list-style-type: none"> <li>▪ NSW Regional Pest Strategies</li> <li>▪ NSW National Parks and Wildlife Service Regional Pest Management Strategies</li> <li>▪ Australian Weeds Strategy</li> <li>▪ Weeds of National Significance Strategies</li> <li>▪ AusBioSec – Australian Biosecurity System for Primary Production and the Environment</li> </ul>
<p>4 <b>Protect</b> environmental, production assets and human health from the impact of established weeds.</p>	<ul style="list-style-type: none"> <li>▪ <b>NSW Noxious Weeds Act 1993</b></li> <li>▪ <b>NSW Native Vegetation Act 2003</b></li> <li>▪ <i>NSW Threatened Species Conservation Act 1995</i></li> <li>▪ NSW Threat Abatement Plans/Priority Action Statement (PAS)</li> <li>▪ <i>NSW National Parks and Wildlife Act 1974</i></li> <li>▪ <i>NSW Fisheries Management Act 1994</i></li> <li>▪ <i>Australian Environmental Protection and Biodiversity Conservation Act 1999</i></li> <li>▪ NSW Biodiversity Strategy</li> <li>▪ Biodiversity Priorities for Widespread Weeds in NSW</li> </ul>	<ul style="list-style-type: none"> <li>▪ NSW Invasive Species Plan</li> <li>▪ NSW Catchment Weed Management Strategies</li> <li>▪ NSW State and Regional Weed Management Plans</li> <li>▪ NSW Regional Pest Strategies</li> <li>▪ NSW National Parks and Wildlife Service Regional Pest Management Strategies</li> <li>▪ Australian Weeds Strategy</li> <li>▪ Weeds of National Significance Strategies</li> <li>▪ AusBioSec – Australian Biosecurity System for Primary Production and the Environment</li> </ul>

