



Statutory Review of the Noxious Weeds Act 1993

Submission by:

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1. Summary

The environment groups making this submission consider weed invasion a major and escalating threat to NSW's environment. Weeds represent one of the biggest gaps in environmental laws and policies, and ENGOS regard this review as an important opportunity to partially rectify this.

We evaluate the *Noxious Weeds Act 1993* as an environmental law, comparing it with other environment laws and assessing it in terms of its ability to reduce the environmental threat of weeds. Our overall evaluation is that the Noxious Weeds Act lacks important elements of best practice environmental law and needs more tools and accountability to achieve the desired reduction in weed impacts.

We urge the NSW Government to equip the Noxious Weeds Act with best practice legal tools found in other environmental legislation and embrace reform to the extent needed to achieve the State goal of a reduction in impacts of invasive species.

We support most of the reforms proposed in the Issues Paper and recommend further reforms in addition, as listed below.

STRENGTHENING OBJECTIVES

ESD: Include ESD in the objects of the Act, requiring that ESD principles be applied. Define ESD in the Act as it is defined in s 6(2) of the *Protection of the Environment Administration Act 1997* (see Appendix 1) to include standard ESD principles (precautionary principle, intergenerational equity, conservation of biodiversity and ecological integrity and improved valuation, pricing and incentive mechanisms). Develop policy to explicate how ESD and its principles should be applied under the Act.

Cooperation and public participation: Include an object of promoting cooperation and participation by the various governments and public bodies with responsibility for weed management and for public involvement in implementation along the lines of: 'To promote local, regional and national transborder cooperation between all levels and agencies of government and their constituencies; and provide for public participation in decision-making and implementation.'

Impacts of existing weeds, including cumulative impacts: Change the goal in Object 3(a)(iii) to 'reduce the adverse impacts including cumulative impacts' of 'harmful' weeds.

Harmful weeds as the focus: Change the focus of the Act from 'significant' weeds to 'harmful or potentially harmful' weeds. Define 'harmful' as it applies to the environment, economy and community, with regard to ESD.

Mechanisms under the Act: Change the objects of the Act to allow for a wide array of mechanisms by deleting 'control' from the existing object ('...by establishing control mechanisms to:...').

IMPLEMENTING PREVENTION

White list approach: Adopt a permitted list approach – requiring risk assessment of all non-indigenous species and varieties (cultivars and hybrids) not on a permitted list that are proposed for introduction and allowing the sale and movement only of low-risk plants – with options to be

subject to consultation in the proposed future review.

Containment: Prevent weed introductions and spread into uninvaded areas of NSW through a comprehensive containment strategy operating in conjunction with the permitted list approach that bans sale and movement of weed species meeting a certain threshold of risk or threat into uninvaded regions/local government areas and requires control to prevent spread beyond containment zones.

Importation restrictions: Amend the Act to include provision for the Minister to prohibit importation into NSW of declared weeds and new harmful or potentially harmful weeds.

INCULCATING RESPONSIBILITY

Gaps & tools: Conduct a gap analysis and review of the effectiveness of different tools to motivate weed responsibility amongst different categories of actors responsible for weed introductions and spread.

Duty of care: Include a wide and enforceable duty of care (or obligation) within the Act that requires anyone undertaking any activity with potential to increase adverse weed impacts to take all reasonable and practical measures to prevent or minimise harmful or potentially harmful impacts (on the environment, economy and community). Define and exemplify what a duty of care requires and specify penalties for breaches.

Codes of practice and regulations: Provide for approved codes of practice under the Act as one way of demonstrating compliance with the proposed duty of care obligation. Develop criteria to determine when activities are best subject to regulation or codes of practice, with high-risk activities to be subject to regulation.

Managed 'conflict' species: Adopt a category of 'managed species' with criteria to define which species are amenable to management. Establish an expert body to advise on declarations and management requirements and review their effectiveness. Subject declarations and management requirements to public consultation. Ensure that the proposed mechanisms of codes of practice or management plans are enforceable, including by the community. Include the potential to require a bond and/or levy to cover costs of independent monitoring or control.

Mandatory labelling: Introduce mandatory labelling requirements for garden and aquarium plants at point of sale.

PROMOTING ECONOMIC MOTIVATIONS

Polluter pays principle: Implement the 'polluter pays' principle, with the most effective and fair regime to be determined in a subsequent review, with options including bonds and levies for practices with a risk of weed spread. Use economic incentives such as lower bonds to promote best practice.

Sale of properties: Require disclosure about the weed status of properties for sale on s149 certificates (Environmental Planning and Assessment Act) so that buyers are aware of their legal liabilities for weed control, and other weed issues, and to promote linkages between valuation and weed status. Disclosure could take the form of a rating certification.

DEVELOPING OPTIMAL GOVERNANCE ARRANGEMENTS

Legislative responsibility: Establish joint administrative arrangements between environmental and primary industries agencies that reflect the high environmental and agricultural priority of

weed management. Accord the Environment Minister and the Primary Industries Ministers equivalent or relevant powers under the Act, including for the declaration of weeds. Otherwise, transfer lead agency status to DECCW.

Weed declarations: Develop criteria consistent with ESD under the Act to guide declaration decisions, and identify triggers/thresholds for environmental weed declaration assessments (eg. when weeds are identified in key threatening processes, as threats in listing advices for threatened species and ecological communities, or above a threshold score in the Downey et al. ranking of environmental weeds). Delegate responsibility for declarations to those with the most relevant portfolio responsibilities and institutional capacities, including Local Control Authorities (for class 4 weeds), regional weed committees (for class 3 weeds), the Minister for Environment and Minister for Primary Industries (for class 1-3 weeds, with recommendations from the NSW Scientific Committee and regional weed committees).

Public land managers: Require government agencies and public authorities with land holdings or responsibility for land management to report on weed status and weed management using standardised weed mapping and reporting systems. Require government agencies and authorities to demonstrate compliance with their duty of care through compliance with approved codes of practice and weed management plans. Treat public authorities in the same way as other landowners for control of class 1, 2 and 3 weeds.

Regional weed committees: Provide regional weed committees with legislative authority (and funding) necessary to implement regional weed plans, including powers for declaration and to require reporting on weed status.

ENFORCING THE ACT

Review enforcement: Review the effectiveness of enforcement under the Act and sample compliance levels.

Jurisdiction: Shift jurisdiction to the Land and Environment Court.

Open standing: Provide open standing under the Noxious Weeds Act for community enforcement, with the relevant provisions and thresholds to be the subject of consultation.

Exemptions for authorities: Remove the exemption in s 70(2) of the Act and require all people and authorities to be liable to proceedings brought under the Act for breaches of the Act.

Penalties: Increase maximum penalties under the Act to reflect the potential for serious and ongoing environmental harm from breaches, to provide a commercial incentive for compliance and to be consistent with other environmental legislation. Increase the range of penalties, for example to include the potential for remediation orders.

FUNDING

Funding needs: In conjunction with legislative reform, determine funding needs based on a 'standards of cover' approach and develop a funding model to determine a fair level of contribution from governments, landholders and businesses/industries.

2. Introduction

This is a joint submission from 8 environment groups (ENGOS) with an interest in environmental protection and biodiversity conservation in NSW. The submitting ENGOS represent many dozens of community groups and thousands of individual members, many involved in weed control.

Many of the recommendations in this submission are also in the attached report *Stopping NSW's Creeping Peril*, which was endorsed by 40 organisations, including regional weed committees, environment groups, and professional societies.

The ENGOS consider weed invasion a major and escalating threat to NSW's environment. It is aptly described as an environmental crisis, with weeds a threat to at least 341 vulnerable and endangered species (40% of those listed under NSW legislation in 2006) and 64 endangered ecological communities (89% of the total list).¹ As is well recognised, weed invasion is also a major economic threat, costing NSW farmers an estimated \$1.2 billion² (their most expensive NRM problem) and NSW taxpayers more than \$50 million annually in public control programs.

Weeds represent one of the biggest gaps in environmental laws and policies, and ENGOS regard this review as an important opportunity to partially rectify this.

The ENGOS support NSW's State Plan goal to reduce the impact of invasive species and the framework in NSW's Invasive Species Plan. Legislative reform is essential to implement the Invasive Species Plan and achieve the State Plan goal.

The ENGOS are concerned about weed impacts on the economy (eg. agriculture) and community (eg. health and amenity) as well as on the natural environment. Although there are major overlaps in weed impacts, our focus here is the environment. We evaluate the *Noxious Weeds Act 1993* as an environmental law, comparing it with other environment laws and assessing it in terms of its ability to reduce the environmental threat of weeds. Our overall evaluation is that the Noxious Weeds Act lacks important elements of best practice environmental law and needs more tools and accountability to achieve the desired reduction in weed impacts.

Environmental law has evolved rapidly over the past 2-3 decades, in response to public concern about increasing degradation and biodiversity loss. In contrast to other fields of law, where reform tends to occur incrementally because of a longer history, environmental laws are mostly young and subject to 'growth spurts'. But recognition of the environmental impacts of weed invasion has lagged behind that of other environmental issues. There have been some substantial reforms in weed law and policy – such as risk assessment, regional weed planning and more flexible weed classes – but the focus is still mostly limited to restrictions on and control of a small subset of environmentally harmful weeds (those declared noxious), important risks are neglected and best practice elements of other environmental laws are missing.

Under the existing regime, people are entitled to sell and plant hundreds of different species

¹ Coutts-Smith AJ and Downey PO. 2006. *The impact of weeds on threatened biodiversity in NSW*. CRC for Australian Weed Management Systems, Adelaide.
www.weedscrc.org.au/documents/tech_series.html.

² NSW Farmers Association. nd. *Weed management in NSW*.
www.nswfarmers.org.au/_data/assets/pdf_file/0003/42609/WeedManagementInNSW.pdf

that will spread into bushland and manage land in a way that guarantees weed invasion and the exacerbation of already severe problems. The public interest – in environmental, economic and community spheres – is not given sufficient weight in the current regime.

The ENGOs congratulate DI&I for its preparedness to consider and promote substantial reforms, in particular the proposal for a permitted list approach to weed declarations. We urge the NSW Government to equip the Noxious Weeds Act with best practice legal tools found in other environmental legislation and embrace reform to the extent needed to achieve the State goal of a reduction in impacts.

3. Strengthening objectives

As the Noxious Weeds Act is the main legal instrument for managing one of NSW's most serious environmental problems, the ENGOs recommend it should be situated clearly as environmental law, including by its objects. We recommend five changes to the objects: including ecologically sustainable development (ESD) as an object, recognising the value of cooperation (including interstate and national cooperation) and public participation, changing the goal to reduce the 'area' of existing weeds to reduce their 'adverse impacts', changing the focus to harmful and potentially harmful weeds, and ensuring the Act can establish a wide variety of mechanisms to achieve the objects. These proposed changes are shown in the box below (we don't propose that the wording should be exactly as written here; this wording is meant to be indicative only).

Current objects

(a) to reduce the negative impact of weeds on the economy, community and environment of this State by establishing control mechanisms to:

- (i) prevent the establishment in this State of significant new weeds, and
- (ii) restrict the spread in this State of existing significant weeds, and
- (iii) reduce the area in this State of existing significant weeds,

(b) to provide for the monitoring of and reporting on the effectiveness of the management of weeds in this State.

Recommended objects

(a) to reduce the negative impact of weeds on the economy, community and environment of this State [by applying the principles of ecologically sustainable development and] establishing [mechanisms] to:

- (i) prevent the establishment in this State of [potentially harmful] new weeds, and
- (ii) restrict the spread in this State of [harmful or potentially harmful] weeds, and
- (iii) reduce the adverse impacts [including cumulative impacts] in this State of [harmful] weeds,

(b) to provide for the monitoring of and reporting on the effectiveness of the management of weeds in this State, and

(c) [To promote local, regional and national transborder cooperation between all levels and agencies of government and their constituencies; and provide for public participation in decision-making and implementation.]

3.1 ESD

As law academic Doug Fisher points out, sustainability “in one form or another is the fulcrum around which environmental law is evolving and it is the nature of sustainability that is forcing environmental law to adopt new approaches and new mechanisms.”³ The ENGOS recommend that the Noxious Weeds Act be made consistent with most other State environmental legislation⁴ by including ESD in its objects, with ESD defined to include its four well-recognised elements: the precautionary principle, intergenerational equity, conservation of biodiversity and ecological integrity, and improved valuation, pricing and incentive mechanisms. These principles are integral to sound decision-making about the environment and highly pertinent to weeds: eg. there is typically a lack of scientific certainty about the likely impacts of weeds, the impacts are often not suffered until generations after a plant is introduced and they add substantially to the costs to be borne by future generations. The Australian Weeds Committee recommended that weed legislation should include a precautionary approach.⁵

This proposal should not be controversial. The NSW Government formally committed to incorporating ESD principles in the 1992 Intergovernmental Agreement on the Environment, as defined in the National Strategy on Ecologically Sustainable Development 1992. Many pieces of NSW legislation include ESD in the objects, and it has a considerable history of case law in NSW and elsewhere.

Of course, there is often a large gap between the rhetoric of ESD and its application. Simply adding ESD to the objects won't improve practices unless it is made explicit how it is to be applied by incorporating it into provisions of the Act and policy, and ensuring it is enforceable. ESD and its principles should be clearly defined in the Act and reference made to them where they are applicable in specific provisions. Their application under the Act should be defined and exemplified in a policy paper. Here are some examples of where ESD principles are applicable.

The precautionary principle should be applied to risk assessments and decisions about declarations, as there is often little information about the potential invasiveness of a plant and the potential for harm, particularly if it is new to cultivation. An effective permitted list approach is inherently precautionary in preventing plant introductions unless assessed as low risk. The looming threat of climate change increases uncertainty about future weed impacts and should be an explicit consideration in decisions under the Act.

Intergenerational equity is a highly pertinent consideration for declaration decisions, with deficiencies of present control programs and regulatory restrictions leading to a much greater weed burden in the future. Governments tend to be loathe to ban or restrict use of invasive plants with current commercial value but typically discount future economic interests. Most plants with commercial value in the present will have no or little commercial value in future and/or the costs of control will outweigh their commercial value. It is an important consideration in managing the cultivation of invasive species as the full impacts of

³ Fisher D. 2003. *Australian Environmental Law*. Lawbook Co, Sydney, page 6.

⁴ Including Environmental Planning and Assessment Act 1979, Protection of the Environment Administration Act 1997.

⁵ Australian Weeds Committee. 2002. Principles of Weeds legislation Discussion Paper. www.weeds.org.au/docs/weeds_leg_dd.pdf

escaped weeds are unlikely to be observed for generations. Potential impacts on future generations should be reflected in penalties for breaches of the Act.

Conservation of biodiversity and ecological integrity requires according appropriate priority to weeds that threaten these values (currently most weeds threatening biodiversity are not regulated at all); taking a landscape approach (eg. through regional weed plans); considering ecosystem processes, cumulative impacts and interactions with other threats (including climate change); regulating land management that exacerbates weed-mediated threats; and ensuring that weed control and particular control methods do not themselves threaten biodiversity or exacerbate ecological harm.

Improved valuation, pricing and incentive mechanisms are vital for weed management, as currently most weed costs are externalised (borne by the public or the environment) and there are few economic incentives requiring people to take responsibility for other than a small proportion of harmful weeds. ESD warrants application of the polluter pays principle, eg. in the form of levies or bonds for plants with invasive risk. It requires that both long-term and short-term economic outcomes be considered in declaration decisions.

Recommendations: Include ESD in the objects of the Act, requiring that ESD principles be applied. Define ESD in the Act as it is defined in s 6(2) of the *Protection of the Environment Administration Act 1997* (see Appendix 1) to include standard ESD principles (precautionary principle, intergenerational equity, conservation of biodiversity and ecological integrity and improved valuation, pricing and incentive mechanisms). Develop policy to explicate how ESD and its principles should be applied under the Act.

3.2 Cooperation & public participation

Essential to effective weed management is cooperation and participation by many different institutions – from local governments, state government agencies, public authorities and other state governments. The ENGOs consider it worthy of inclusion as an object to guide governance arrangements (on which we make recommendations). Because weeds do not respect borders and responses to many weed problems benefit from a national approach or interstate cooperation, we consider it important to include interstate cooperation as an object. With regard to specific provisions this could include, for example, declarations in NSW that assist bordering states to achieve their weed management goals and, where possible, use of consistent definitions and mechanisms to increase harmonisation of laws between states. For example, it would be ideal to implement a consistent permitted list approach across the eastern states and have a national mandatory labeling scheme.

Australia's Biodiversity Conservation Strategy 2010–2030 states that “It is everyone’s responsibility to conserve biodiversity. Governments will play a critical role, but unless the whole community works together to take up the challenge, then we are unlikely to stop the decline in biodiversity.” The environment is a public good and the public has both a strong interest and responsibility in protecting the environment (and the economy and community) from weed invasion. Implementation of the Act should be strengthened by providing for public participation in decision-making and, as argued in Section 8.2, enforcement. This is a standard element of many environmental laws and a necessary part of enlisting the efforts of individuals and community groups.

Recommendation: Include an object of promoting cooperation and participation by the various governments and public bodies with responsibility for weed management and for public involvement in implementation along the lines of: ‘To promote local, regional and national transborder cooperation between all levels and agencies of government and their constituencies; and provide for public participation in decision-making and implementation.’

3.3 *Impacts of existing weeds, including cumulative impacts*

The Issues Paper points out that Object 3(a)(iii) – “reduce the area in this State of existing significant weeds” - is unrealistic, and recommends that the object instead be to reduce the ‘impact’ of existing significant weeds. The ENGOs agree with this recommendation. Reducing impacts is a more appropriate environmental goal, for, as the Issues Paper points out, reducing the area of a weed may not reduce its impacts (if the threats are in locations other than where the area is reduced) and reducing impacts may not require reducing the area (eg. if reducing the density achieves that outcome). However, for the sake of clarity, we recommend that ‘impacts’ be qualified as ‘adverse impacts’.

Environmental protection requires a focus on preventing and reducing cumulative impacts of weeds, not just on reducing the adverse impacts of a small subset of the most severe weeds. Weed threats to biodiversity often involve multiple weed species, some of which on their own may not be regarded as a significant threat, and effective control to protect an asset requires a focus on multiple species, some of which may not be declared. As more species naturalise and spread, cumulative impacts will increase. Managers are often tempted to focus on particular weed targets rather than on what is needed to reduce the overall weed threat to environmental assets.

We recommend specific inclusion of cumulative impacts in the objects of the Act to recognise this feature of weed threats and to ensure the focus of weed programs is on protection of the environment rather than just on control of particular weed species.

A requirement to consider cumulative impacts is contained in s 228 of the Environmental Planning and Assessment Regulation 2000 (as a factor that must be taken into account concerning the impact of an activity on the environment) and s 10 of the Protection of the Environment Operations Act 1997 as a purpose of ‘protection of the environment policies’.

Recommendation: Change the goal in Object 3(a)(iii) to ‘reduce the adverse impacts including cumulative impacts’ of [‘harmful’] (see section 3.4) weeds.

3.4 *‘Harmful’ weeds as the focus*

The ENGOs question the use of the term ‘significant’ to describe the weeds of focus under the Act. We agree that the Noxious Weeds Act should not focus on all weeds – some are benign and resources should be allocated to higher priority environmental threats – but we consider that ‘significant’ is ambiguous (it is inherently so, and not defined in the Act) and can be construed to limit the focus too narrowly. For example, the term is applied in ‘Weeds of National Significance’, a program that focuses on just 20 or so weeds.

Many weeds that warrant control may not be considered ‘significant’ – for example, a weed whose impacts are unknown but that can be easily eradicated. The second goal in existing object (a) – “to restrict the spread in this State of existing significant weeds” – seems to preclude restricting the spread of weeds unless they are already significant, which would not include new and emerging weeds of potential harm or those that contribute to cumulative harm.

‘Harmful’ and ‘potentially harmful’ more accurately describe the type of weeds that warrant control. ‘Harm’ is a descriptor well recognised in environmental law (eg. it is used in the precautionary principle) and also applicable to weeds that affect the economy and the community (health or amenity). Any concern that this term requires a focus on too many weeds because harm can be minimal can be addressed by recognising in the Act that

prioritisation of control is essential, including by the degree of harm or potential harm.

We think it is important to include ‘potentially harmful’ weeds as a focus because there is often limited information by which to assess the likely impacts of a new or emerging weed, many weeds warranting control have not yet caused harm (let alone had a ‘significant’ impact) and ‘potential’ is consistent with the precautionary principle.

Recommendation: Change the focus of the Act from ‘significant’ weeds to ‘harmful or potentially harmful’ weeds. Define ‘harmful’ as it applies to the environment, economy and community, with regard to ESD.

3.5 Mechanisms under the Act

Currently, the objects limit the Act to ‘establishing control mechanisms’ as the means to reducing the negative impacts of weeds. This could be construed to exclude mechanisms such as mandatory labeling, bonds and levies, and limiting levels of disturbance. We recommend that the mechanisms by which the Act achieves impact reduction be left open to allow use of diverse tools.

Recommendation: Change the objects of the Act to allow for a wide array of mechanisms by deleting ‘control’ from the existing object (‘...by establishing control mechanisms to:...’).

4. Implementing prevention

With the existing weed burden far exceeding the control effort, strong measures should be employed to prevent further weed problems by prohibiting further introductions unless they pass a risk assessment and prohibiting sale and movement of species other than those on a permitted list, by implementing a containment strategy to prevent deliberate spread of invasive plants into uninvaded areas of NSW and by ensuring there are legislative means by which to restrict the importation of weeds into NSW.

4.1 White list approach

The groups strongly recommend adoption of a permitted (white) list approach in NSW – for both species (whether native to other countries or other Australian states) and new varieties of existing introductions – as a top priority weed reform in NSW. Limiting introductions to low-risk species and varieties is the only feasible way to reduce the rate of naturalisations and invasion. Adopting a white list approach will save NSW taxpayers and landholders many millions of dollars in future and the environment from many new weed impacts.

The introduction of plant species and varieties to NSW continues at a high rate and naturalisation rates have increased during the past couple of decades (in part due to greater searching effort). With the Federal Government requiring risk assessment of new species proposed for importation to Australia the majority of new weed threats for NSW will arise from species already in Australia or new varieties of permitted species (and introductions to new areas in NSW). With about 30,000 species already introduced to Australia, 3000 of which have naturalised (more than half in NSW), there is a very large pool of future weed risks for NSW. Almost all can be legally traded in NSW.

While there needs to be considerable consultation to develop the details of the system and consider costs, we recommend that the outcome of this review is a recommendation to adopt a permitted list approach, with the proposed review to focus on options for

implementation. There is more than sufficient rationale to support a commitment now.⁶

There is strong support for a white list approach by environment NGOs, bush regeneration groups, regional weed committees and local governments, as exemplified by the more than 40 groups (encompassing more than a third of NSW local governments) who have endorsed the 'Stopping NSW's Creeping Peril' report attached to this submission.

The ENGOs encourage NSW to work with other state governments, particularly NSW and Queensland, to promote the adoption of a permitted list approach in all states, with consistent mechanisms. This would reduce confusion for plant industries and increase efficiency (potentially by allowing states to share resources). The proposal could be adopted by the Council of Australian Governments, as part of implementing recommendation 23(1) of the Hawke review of the EPBC Act: "the Council of Australian Governments (COAG) develop criteria and management protocols for the movement of potentially damaging exotic species between State and Territories, working towards a list of 'controlled' species for which cost-effective risk-mitigation measures may be implemented." However, we strongly caution that this should not delay NSW's development and implementation of a white list approach. It is more likely that other states will follow NSW in adopting the approach.

Recommendation: Adopt a permitted list approach – requiring risk assessment of all non-indigenous species and varieties (cultivars and hybrids) not on a permitted list that are proposed for introduction and allowing the sale and movement only of low-risk plants – with options to be subject to consultation in the proposed future review.

4.2 Containment

As well as prohibiting the introduction of new potential weeds into the state, prevention requires stopping the introduction of species already naturalised or invasive in part of NSW into uninvaded areas at risk of invasion. Currently, this occurs only in an ad hoc way with some class 3 and class 4 declarations for weeds of potential threat. A comprehensive containment strategy should be implemented in conjunction with a permitted list approach, with containment restrictions applied to species that could invade new areas and have adverse impacts unless sale and movement is prohibited, and other containment measures applied.

Recommendation: Prevent weed introductions and spread into uninvaded areas of NSW through a comprehensive containment strategy operating in conjunction with the permitted list approach that bans sale and movement of weed species meeting a certain threshold of risk or threat into uninvaded regions or local government areas and requires control to prevent spread beyond containment zones.

4.3 Importation restrictions

The Issues Paper recommended remedying the current lack of power under the Act to prevent the entry into NSW of "high priority weeds, new weeds that may have occurred in

⁶ Invasive Species Council. 2009. Stopping weed invasions: a 'white list' approach. Backgrounder. www.invasives.org.au/documents/file/bgrounder_weedwhitelist.pdf

Csurhes S, Randall R, Goninon C, Beilby A, S. J and Weiss J. 2006. 'Turn the tap off before you mop up the spill': Exploring a permitted-list approach to regulations over the sale and interstate movement of potentially invasive plants in the States and Territories of Australia. *Proceedings of the 15th Australian Weeds Conference*. C Preston, JH Watts and ND Crossman, Weed Management Society of South Australia Inc, Adelaide: 95-98.

other States and Territories or of materials and produce that may be contaminated with propagules of these weeds.” We strongly support the recommendation to provide this power and recommend that it be a wide power. It should include the power to prohibit import of invasive native species.

Recommendation: Amend the Act to include provision for the Minister to prohibit importation into NSW of declared weeds and new harmful or potentially harmful weeds.

5. Inculcating responsibility

Many weed invasions are preventable and result from people failing to take responsibility for their actions due to thoughtlessness, ignorance, or a presumed lack of consequence for themselves. Smart regulation is based on an understanding of how people can most effectively be motivated to take responsibility (and is part of a coherent matrix of motivational tools including education and economic incentives).

Weeds are a particularly challenging area because problems arise from a large variety of activities conducted by a large variety of people and businesses for a large variety of reasons, thus requiring a variety of motivational approaches. Simplistically, people have to know what their responsibilities are and what to do to reduce risk/threats (eg. by education, codes of practice, management plans, labeling) and be motivated to comply by risk of penalty (eg. prosecution, loss of bond), positive incentive (eg. reduced levies, higher value property), social pressure (eg. to comply with a code of practice or regulation, participate in control activities) or sense of duty.

We recommend a systematic gap analysis and review of tools to motivate responsibility amongst different actors. What is effective for businesses and public agencies may not be so for individual landholders. What can be applied to retail nurseries may be difficult to apply to plant sellers at markets and on the internet.

Effective weed management requires people to take responsibility for activities involving species with invasive risk and for land management practices and activities that facilitate weed spread. Economic instruments are potentially powerful and recommended under ESD and in Australia’s Biodiversity Conservation Strategy 2010–2030; they are considered in section 6. Approaches recommended here are a duty of care requirement, enforceable codes of practice (including for ‘conflict species’) and mandatory labeling.

Recommendation: Conduct a gap analysis and review of the effectiveness of different tools to motivate weed responsibility amongst different categories of actors responsible for weed introductions and spread.

5.1 Duty of care

Currently, weed laws mostly focus on managing a small subset of invasive and potentially invasive species, those declared as noxious. However, effective weed management under ESD requires people to take responsibility for activities involving many other species with invasive risk and for land management practices and activities that facilitate weed spread. This can be facilitated by explicating a general duty of care under the Act.

The groups recommend that the Act requires everyone, including companies, government agencies and public authorities, to take responsibility for preventing and minimising harmful or potentially harmful weed impacts. The recommended duty would require everyone to “take all reasonable and practical steps” to meet their obligation. We use the term ‘duty of care’ here, but it could be called an ‘obligation’ or expressed in other more appealing terms

(‘sustainability obligation’?).

It is particularly appropriate to apply a broad duty of care requirement for weeds given the potential long-term and irreversible consequences of poor practices and the multiple pathways for weed spread. One person’s action in planting a weedy species can ultimately have adverse impacts across vast areas and on many people and species for centuries to come. It can cost future taxpayers millions of dollars in control. There is no way of explicitly regulating all actions potentially resulting in invasive impacts, so requiring that people exercise care and assisting them with information and resources to do so can fill in many of the gaps. Requiring a duty of care is essential to promote widespread attitudinal and behavioural change, and to motivate a more serious approach akin to that of hygiene and public health. Currently, littering is likely to attract more social opprobrium than weed spread.

Currently, the Act limits duties to controlling noxious weeds as required under a weed control order, with slightly different duties specified for private landholders, public authorities and control authorities in sections 12, 13 and 14. There is no explicit requirement in the Act to take reasonable care to prevent the introduction and spread of weeds not subject to a control order. For example, as the Issues Paper notes, there is no explicit onus on managers of plantations and other commercial plantings to control escapees.

A broader duty of care is consistent with the recommendation in the 1998 report by the then Industry Commission, *A full repairing lease: Inquiry into ecologically sustainable land management*, for a statutory duty of care for the environment to ‘require everyone who influences the management of the risks to the environment to take all “reasonable and practical” steps to prevent harm to the environment that could have been reasonably foreseen’.⁷ ‘Reasonable and practical’ are fair limits to the duty, preventing overly onerous demands on people and varying according to circumstances. Factors to be considered when determining what is ‘reasonable and practical’ could be specified to include the potential harm caused, state of scientific knowledge and financial implications.

The General Environmental Duty of Queensland’s Environmental Protection Act 1994 provides a good model for a broad duty of care and we understand that the Queensland Government proposes to adopt a wide duty of care in its new biosecurity legislation focused on preventing and minimising biosecurity risks. Under the NSW *Pesticides Act* 1999 (s11), it is an offence to use a pesticide in a manner that harms any non-target animal or plant.

For a duty of care to be effective, people need to be aware of what it requires (definition and examples of what is required under the duty, and information about options for compliance). There would need to be careful analysis of what constitutes ‘reasonable and practical’ (courts are likely to be conservative in interpreting a duty of care to ensure it is not overly onerous) and that it is responsive to circumstances. For example, if a plant escapes from cultivation, what is reasonable and practical would depend on the level of risk it posed and may range from notification of authorities to paying for eradication and implementing measures to prevent future escapes, and vary depending upon whether the land manager was operating a commercial enterprise.

Duties of care can be explicated through regulation, approved codes of practice and policy. Regulation is preferable where the risks or potential for harm is high. Codes of practice may be the best approach where there are multiple ways to manage risk and circumstances

⁷ The Australian Weeds Committee recommended a duty of care as one of nine key principles for weed legislation in their 2002 *Principles of Weeds Legislation Discussion Paper*.

change and where compliance is likely to be high (see section 5.2). But codes of practice should not become the soft option to avoid responsibility. They or their substitute (where a person/business complies with a duty of care in ways other than specified in a code of practice) must be enforceable. Non-compliers with a code of practice must be able to demonstrate that the measures they take are likely to achieve the same level of harm prevention or minimisation and that they are exercising due diligence.

To be effective, a duty of care must come with penalties for breaches and be subject to public enforcement, as is the case for other environmental laws (see section 8).

Recommendation: Include a wide and enforceable duty of care (or obligation) within the Act that requires anyone undertaking any activity with potential to increase adverse weed impacts to take all reasonable and practical measures to prevent or minimise harmful or potentially harmful impacts (on the environment, economy and community). Define and exemplify what a duty of care requires and specify penalties for breaches.

5.2 Codes of practice, regulations

Implementing an approved code of practice (or management plan) are recognised ways of demonstrating compliance with a duty of care. Certain activities with risks of weed spread may be amenable to management via codes of practice or regulation, including some forestry practices, cultivation of species with invasive risk (as proposed in the issues paper), field trials of potentially invasive plants, landscaping of residential developments and streetscaping, and the sale of some potentially invasive species. The code of practice/management plan approach to ‘managed species’ proposed in the issues paper could be one way for land managers to demonstrate they are exercising a duty of care (that proposal is discussed in section 5.3). Approved codes of practice can set the industry standard by which courts can determine the threshold for a duty of care.

However, there are good reasons to be sceptical about voluntary industry codes of practice, as they often seem to substitute for adequate regulation, lack adequate reporting and compliance measures. It is important to distinguish between activities best explicitly managed by regulation, particularly where there is a high risk of harm or where compliance is otherwise likely to be an issue, and those amenable to codes of practice. Effectiveness requires that codes of practice are linked to legislation to ensure the standards proposed are adequate to demonstrate compliance with a duty of care, and that they are enforceable. Accountability will be improved with wide standing for enforcement (proposed in section 8.2) and requirements for public reporting.

Compliance with a code of practice could also be linked to economic incentives with businesses not demonstrating compliance with a code liable to higher ‘risk creation’ levies or bonds (discussed in section 6.1).

Recommendation: Provide for approved codes of practice under the Act as one way of demonstrating compliance with the proposed duty of care obligation. Develop criteria to determine when activities are best subject to regulation or codes of practice, with high-risk activities to be subject to regulation.

5.3 Managed ‘conflict’ species

The ENGOs commend the DI&I for proposing measures to address one of the large gaps in weed laws – management of cropped invasive or potentially invasive species to prevent weed spread. We support the creation of a special ‘managed species’ category.

Invasive species with commercial value are a particular problem not only because there is industry resistance to bans on these species but because they are often cultivated over large

areas, creating a high propagule pressure that substantially increases the risk of invasion.

However, given that methods of managing cropped invasive species are not likely to be effective for some species and are often unproven, we caution against using the proposed mechanism as the default approach to any commercial species. It shouldn't serve to justify a permissive regime permitting the cultivation of any commercially valued species, as a substitute for declaring species and prohibiting them where this warranted by the invasion risk and hazard for biodiversity, health or economy. Some risks are not amenable to management, such as when seeds are bird-dispersed or there is a high risk of floods spreading propagules, or if the crop is high volume and low value implying few resources for weed management. In other cases, such as biofuel crops, there are low-risk crop species available, which warrants banning those with invasive risks (see Appendix 2 for reasons why a strong precautionary approach is warranted for biofuels).

To inform decisions about which commercial species should be declared 'managed species', we recommend a risk assessment process that includes a realistic assessment of management options. There has been little field testing of the success of different management options to prevent weed spread, so a precautionary approach should be taken. There should be recognition of the limitations due to extreme events and human lapses, and criteria to distinguish between crops amenable to management and those that are not. As is consistent with ESD, the long-term costs of managing an invasive species versus banning it should be considered.

We recommend that an expert body be established to advise on which species are appropriate for classification as 'managed species' and methods by which they must be managed, and to regularly review the effectiveness of management. This body could be funded by contributions from industries with managed species. Recommended declarations and proposed management requirements should be subject to public consultation.

Some species or some aspects of management are best managed via regulation (particularly where the potential for harm is high and non-compliance is likely), others via a code of practice or management plan. Effectiveness will rely on transparency and enforceability – see section 8 below for recommendations to shift jurisdiction to the Land and Environment Court and to permit wide standing, which will assist. Penalties should be sufficient to factor in as commercial considerations and should include options for remediation orders. There should be provision to require a bond (for control of escaped species) and/or levy (eg. to cover the costs of independent monitoring).

Recommendation: Adopt a category of 'managed species' with criteria to define which species are amenable to management. Establish an expert body to advise on declarations and management requirements and review effectiveness. Subject declarations and management requirements to public consultation. Ensure that the proposed mechanisms of codes of practice or management plans are enforceable, including by the community. Include the potential to require a bond and/or levy to cover costs of independent monitoring or control.

5.4 Mandatory labelling

Garden plants constitute the largest proportion of weeds in NSW and aquarium plants are a high risk category of plants. Fundamental to building awareness and engendering responsibility is the ready availability of information to gardeners and aquarium keepers about weed risks and safe practices. Information is required at the point of purchase. The ENGOs recommend that the Act require mandatory labeling of all garden and aquarium plants at point of sale. Information should include taxonomy, invasion risk and

recommended practices. Ideally, this would be a national scheme but NSW may have to lead the way by initiating a state scheme. There are many precedents for mandatory labeling, of foods, chemicals, energy efficiency and water efficiency.

There needs to be consideration of what information to require on labels and how/whether to apply labeling laws to plants sold on the Internet and in the informal economy (such as at community markets and fairs).

Recommendation: Introduce mandatory labelling requirements for garden and aquarium plants at point of sale.

6. Promoting economic motivations

ESD requires the internalisation of environmental costs (by implementing the polluter pays principle) and highlights the value of using economic (valuation, pricing and incentive) instruments to promote responsibility. This is particularly appropriate when weed spread is promoted through commercial activities.

6.1 *Polluter pays principle*

Under this principle, those who generate pollution should bear the costs of containment, avoidance or abatement (as in Protection of the Environment Administration Act 1997, s 6(2)(d)). Weed invasion can be regarded as a form of biopollution, although it operates over longer time scales than most forms of pollution. However, costs of weed control are typically borne not by those responsible for weed spread but by the community (funding and participating in weed control programs) and private land managers. In other words, costs are externalised, limiting the economic incentives to prevent or contain weed spread.

The ENGOs recommend implementation of the polluter pays principle for weed spread, where possible, to ensure that control costs are shared by those responsible for weed spread and to provide an economic incentive for responsible behaviour. The most effective and fair mechanisms need analysis and we do not recommend a particular regime here.

Penalties under the Weeds Act should include orders for remediation. As it can be difficult to trace responsibility for weed spread to a particular person, it may be more effective to focus on risk-creating behaviours with a 'risk creator pays' approach – so that anyone engaging in activities that carry a risk of weed spread (above a certain threshold of risk) – such as planting a high-risk crop or selling potentially invasive plant species – is required to bear the cost of managing that risk, for example by paying a bond (to be used for control of escapees or remediation) and/or levy (eg. for independent monitoring). Responsible behaviour could be promoted by requiring lower bonds or levies for operators demonstrably taking actions to reduce risks, such as by complying with a code of practice.

Recommendation: Implement the 'polluter pays' principle, with the most effective and fair regime to be determined in a subsequent review, with options including bonds and levies for practices with a risk of weed spread. Use economic incentives such as lower bonds to promote best practice.

6.2 *Sale of properties*

The ENGOs commend DI&I for proposing that information should be provided about the weed status of properties for sale. As the Issues Paper states, "It is reasonable for noxious weed matters that can also have a significant impact on the prospective purchaser's enjoyment of the land and/or financial situation, to also be disclosed." However, the options

proposed only require the disclosure of weed control notices currently affecting the land and outstanding expenses payable to the LCA or any resulting charge on the land. This minimal level of disclosure will not make much difference to buyers' information. At the very least relevant weed control orders should be disclosed. However, many weeds that affect the value of a property are not declared and not subject to weed control orders. Weed management is typically the most expensive NRM problem for farmers and probably also for landholders managing land for lifestyle or conservation purposes. So, the weed status of a property beyond declared weeds is important information for many purchasers. In addition, there is a high public benefit in promoting links between land value and weed status as it will motivate landowners to control weeds that may compromise sale value. As the Issues Paper points out, "the matter of noxious weeds [or other weeds], the impacts of the lack of information, and possible resulting lack of ability to respond to the problem, can have wide ranging impacts on the community, far beyond the impacts on the individual."

The ENGOs recommend requiring a weed inspection report for properties of a certain size and/or type so that buyers are fully aware not only of their legal liabilities for weed control but more generally of weed problems. The type and detail of required disclosure could vary depending on size, purpose and location of the property. One model to consider is the 2010 Commonwealth Commercial Building Disclosure Program that requires energy rating certification on the sale of commercial properties.

Recommendation: Require disclosure about the weed status of properties for sale on s149 certificates (Environmental Planning and Assessment Act) so that buyers are aware of their legal liabilities for weed control, and other weed issues, and to promote linkages between valuation and weed status. Disclosure could take the form of a rating certification.

7. Developing optimal governance arrangements

Weed issues are challenging in part because of the need for cooperation by a diverse array of institutions and people and the need for dispersed responsibility. The ENGOs have recommended in section 3.2 that promoting cooperation be explicitly recognised as an object because it is so integral to the effective operation of the Act. Public participation can improve governance on environmental issues. The following recommendations to assign joint responsibility to the environment and primary industry agencies and Ministers, provide greater authority to regional weed committees, and improve the comprehensiveness of declarations go some way to promoting cooperation and public participation.

7.1 Legislative responsibility

Weeds are NSW's farmers' most expensive natural resource management problem, so it is appropriate that the State's primary industries agency has a major role in weed management. However, with weeds significantly affecting over 40% of NSW threatened species (mostly plants) and about 90% of endangered ecological communities – more than any threat other than habitat loss (and equivalent to inappropriate fire regimes) – environmental threats are at least as serious as those for agriculture, probably more so. Groves and colleagues (2003) estimated that about 30% of naturalised plant species in Australia are a "major problem" for managers of natural ecosystems, compared to 16% for agriculture, and the majority of newly invading species in NSW are environmental rather than agricultural threats. But NSW's environmental agency has a limited regulatory and formal policy role for weeds, which reflects the historical primary focus on agricultural weeds.

At present, the environment minister and DECCW have no legislated role or responsibility for environmental weeds beyond NPWS's role in weed control as a land manager and in overseeing threatened species recovery efforts and threat abatement plans. Their influence on law and policy relies on agreements and relationships rather than direct responsibility. The Environment Minister is hobbled in his/her responsibility for threatened biodiversity and key threatening processes by not having any capacity to regulate weeds that threaten biodiversity.

In view of the fact that weeds are a serious environmental threat and inherent to the goals of DECCW, the ENGOs recommend that institutional arrangements be reformed to achieve the following:

Promote cooperation between agencies with overlapping responsibilities and promote integrated responses to weed problems. The environment agency has portfolio responsibilities that require responses to threatening processes beyond the boundaries of the conservation estate. A greater role for the environment agencies is likely to increase linkages with the management of other environmental threats such as land clearing.

Avoid conflicts of interest by separating responsibility for regulation and enforcement from industry promotion and development. Agricultural agencies and Ministers for example may have conflicts of interest over agricultural plants that threaten the environment.

Protect the public good. Protecting the natural environment from invasive species depends on the willingness of government to protect the public interest as there is little commercial incentive to protect biodiversity. Much more is spent by agricultural businesses – at least an order of magnitude more – on controlling invasive species than is spent by governments. Greater involvement of the environment agency in law and policy would raise the profile of invasive species as environmental threats and place them more firmly in the agenda and budgets of the environmental sector. This could lead to increased financial support for invasive species programs by the non-government sector to augment government programs.

Provide capacity via legislative authority for agencies to fulfill their responsibilities and meet portfolio goals. Because invasive species are such a significant and pervasive threat, an environment agency cannot effectively protect the environment unless it can shape policy on invasive species.

Improve resource sufficiency. A major impediment to effective weed management in NSW is insufficient funding. If both environmental and agricultural agencies have a strong stake in biosecurity as part of their portfolio responsibilities, there is potential for bigger budgets with two agencies jointly promoting reforms and bidding for funds.

This proposal is not intended as a criticism of staff or Ministers involved in weed management in either department, or to imply that DI&I are only interested in agricultural weeds. Legal arrangements should function to give environmental threats appropriate priority regardless of current incumbents and relationships. Biodiversity conservation is not an overall priority for DI&I, with their mission of 'building a diversified state economy that creates jobs' by attracting investment, supporting industries and building partnerships with industry sectors (ENGOs are not an 'industry sector').

Institutional arrangements should maximise the potential for both environmentally and agriculturally responsible decisions under the Noxious Weeds Act, no matter which individuals make the decisions. There is greater potential for this if environmental agencies have a strong role. Both the environmental and agricultural sectors are likely to benefit from a structure that strengthens collaboration between agencies and increases the overall governmental focus on invasive species. A collaborative arrangement would increase the

involvement of the environmental sector in weed policy, helping increase the priority accorded.

The ENGOs recommend that under the Noxious Weeds Act, the Environment and Primary Industries Ministers have equivalent authority or authority relevant to their portfolio responsibilities, and that biosecurity, including weeds, be administered by a joint agency. One potential model for joint control is the NSW Marine Parks Authority, which reports jointly to the Primary Industries Minister and the Environment Minister. The second option is to transfer responsibility under the Act to the environment department.

Recommendation: Establish joint administrative arrangements between environmental and primary industries agencies that reflect the high environmental and agricultural priority of weed management. Accord the Environment Minister and the Primary Industries Ministers equivalent or relevant powers under the Act, including for the declaration of weeds. Otherwise, transfer lead agency status to DECCW.

7.2 Weed declarations

ENGOs recommend there should be more comprehensive and rapid use of declarations to reduce the spread of weeds. The majority of environmentally harmful weeds have no formal weed status and can continue to be traded and planted, including into non-invaded areas. Of 340 environmentally significant weeds recently ranked by NSW Government officers⁸, about 90% can be sold in all or part of NSW, including 80% of those ranked a moderate to very high threat/ability to impact on biodiversity. This facilitates higher propagule pressure, introduction into new areas and introduction of other potentially more invasive varieties. The same issue applies to many agricultural weeds as well.

Declaration processes are often very slow, often taking more than 3 years. As the Sydney Weeds Committee has pointed out,⁹ the current process is too administratively burdensome, using up resources that could be devoted to control and permitting spread during long declaration processes.

There is the option for the responsible Minister to declare many more weeds. Currently, the decision to declare weeds is at the discretion of the Minister for Primary Industries, guided by recommendations of the Noxious Weeds Advisory Committee after a technical assessment by the department and nominations can come from a variety of sources. The NWAC has developed a policy on declarations to guide decision-making, which specifies that “there must be a demonstrated public benefit from the proposed declaration.”

The ENGOs consider the public benefit would be served by more comprehensive and rapid declarations, including declarations to achieve containment (as proposed in section 4.2), and that there should be processes (including delegated authority for declarations) and criteria under the Act to facilitate and guide this. The decision to declare a weed should be scientific, based on risk or threat assessments and the potential to reduce or prevent harm, and all introduced plants meeting a certain threshold of risk or harm should be considered for declaration – for example, all plants exceeding a defined ranking in the scheme used by Downey et al. (2010), weeds listed as key threatening processes or in listing advices for a threatened species or ecological community.

⁸ Downey P, Scanlon T and Hosking J. 2010. Prioritising alien plant species based on their ability to impact on biodiversity: a case study from New South Wales. *Plant Protection Quarterly* 25(3): 111-26.

⁹ Sydney Weeds Committees. 2009. Response to NSW Weed Management Summit 26/5/09.

The decision about the class of declaration needs to take account of factors in addition to invasive risk and harm, including the feasibility of control, and impacts on landowners. The ENGOs recognise that declarations of noxious weeds may impose obligations on landholders and that in some cases requirements for control are too onerous or expensive for private and public landholders, or unlikely to assist in significantly reducing existing weed impacts. In a large proportion of cases, however, banning further sale and movement of an environmentally harmful weed is likely to be of public benefit by reducing the risk of spread into new areas, potentially limiting propagule pressure, and preventing the introduction of new varieties that increase the potential for harm. Adoption of a 'managed species' class of noxious weed provides an option for continued sale of those invasive species with commercial value and risks that that can be managed. The flexibility of declaration class options reduces barriers to declaration.

Decisions about declaration can be difficult, particularly when harmful species are valued commercially or culturally. These factors complicate decisions but taking them into account is consistent with ESD principles. Decision-making processes would benefit from more explicit guidance in the Act about factors that must be considered in accordance with ESD, including impacts on biodiversity and ecological integrity, interactions with other threats such as climate change, the likely long-term costs to future generations (intergenerational equity), and impacts of control. Decisions should meet a 'public benefit' test as advocated by the Noxious Weeds Advisory Committee in its policy on declarations. Decisions about declaration should also consider the interests of other states in preventing weed spread beyond NSW's borders, which is already consistent with Class 5 weeds (restricted plants) and consistent with the proposed object for interstate cooperation in section 3.2. Because it can be difficult to predict outcomes of weed invasion, the precautionary principle is important.

The ENGOs recommend allocating the responsibility for declarations to those with the most relevant portfolio responsibilities or institutional capacities.¹⁰ The Issues Paper proposes a reform consistent with this: the proposal that Local Control Authorities be delegated to declare Class 4 weeds. We support this recommendation. A similar logic should apply for regionally significant weeds by providing regional weed committees (or authorities) the authority to declare weeds at a regional level and determine control actions in consultation with their members. The process for these declarations needs to facilitate timely intervention to prevent weed spread.

We recommend that consistent with the portfolio responsibilities of the Environment Minister, s/he should have authority to declare weeds of threat or potential threat to the environment (as recommended in section 7.1). We recommend that the NSW Scientific Committee be able to recommend declarations of environmental weeds, complementing its current responsibility for threatened species and ecological communities and key threatening processes. There should be clear avenues by which the public can nominate weeds for declaration.

Recommendations: Develop criteria consistent with ESD under the Act to guide declaration decisions, and identify triggers/thresholds for environmental weed declaration assessments (eg. when weeds are identified in key threatening processes, as threats in listing advices for threatened species and ecological communities, or above a threshold score in the

¹⁰ Currently, the Minister for Primary Industries has sole responsibility for declaring noxious weeds and the decision is discretionary. However, nominations arise from a variety of sources and are subject to departmental assessment and advice from the Noxious Weeds Advisory Committee. We understand that normally advice to declare is accepted.

Downey et al. ranking of environmental weeds). Delegate responsibility for declarations to those with the most relevant portfolio responsibilities and institutional capacities, including Local Control Authorities (for class 4 weeds), regional weed committees (for class 3 weeds), the Minister for Environment and Minister for Primary Industries (for class 1-3 weeds, with recommendations from the NSW Scientific Committee and regional weed committees).

7.3 Public land managers

Agencies that manage public land have a special responsibility to manage weeds, to be accountable to the public, and to ensure exemplary exercise of a duty of care. In recent years NPWS has accorded high priority to weed management in national parks and been provided with substantial funding increases for invasive species management. Their progress is monitored and the agency has published reports on progress.

The ENGOs are concerned that weed management on public lands by other government agencies and public authorities, is deficient. There are currently no mechanisms for them to be accountable to the public on whose behalf they manage the land. For example, although NSW Forests publishes annual reports with a 'sustainability' section, the only weed-relevant factor they report on is expenditure on weed management (which is at a low level) (see Appendix 3). There is no information about the weed status of forestry lands (2.4 million hectares of public land) or effectiveness of management despite the high invasion risks associated with logging and the high conservation value of the forestry estate. See the case study in Appendix 3, which outlines concerns of the ENGOs about weed management in state forests. Forests NSW should be subject to the highest standards for weed management and accountable to the public because they manage public lands, often with high conservation values.

The ENGOs recommend that weed management should be reportable core business of all government agencies and public authorities with land management responsibility, with standardised weed mapping and reporting systems that provide sufficient information for the public to assess the effectiveness of weed management.

To demonstrate a duty of care, government agencies and public authorities with land management responsibility should be required to demonstrate compliance (with independent monitoring) with approved codes of practice and weed management plans, as discussed in section 5.2.

Public authorities are currently exempt from requirements under the Act for weed control. The issues paper recommends that the Act be amended to give public authorities the same noxious weed control responsibilities as private land owners or occupiers for Class 1 and 2 weed species. We support this proposal but question the exemption for other classes, particularly those for regionally significant weeds. We recommend that public authorities should be subject as are other landowners to requirements for control of at least class 1 to 3 weeds. NSW's Bush Fires Act was recently amended to ensure that public authorities are subject to control orders in the same way private landholders are. The same approach should be taken to weed management.

Recommendation: Require government agencies and public authorities with land holdings or responsibility for land management to report on weed status and weed management using standardised weed mapping and reporting systems. Require government agencies and authorities to demonstrate compliance with their duty of care through compliance with approved codes of practice and weed management plans. Treat public authorities in the same way as other landowners for control of class 1, 2 and 3 weeds.

7.4 Regional weed committees/authorities

Effective weed management requires coordination and prioritisation at a landscape scale. With cross-sectoral and cross-tenure representation, regional weed committees have evolved into dynamic forums for promoting cooperation, sharing expertise and determining regional control priorities through weed plans. Their capacity to develop and implement regional weed plans should be enhanced by greater legislative authority such as to declare regional priority weeds and require monitoring and reporting about weed status. They need to be supported by adequate funding.

Recommendation: Provide regional weed committees with legislative authority (and funding) necessary to implement regional weed plans, including powers for declaration and to require reporting on weed status.

8. Enforcing the Act

Enforcement of laws is essential to their effectiveness. The groups are concerned that breaches of the Act are widespread and that this is due in part to deficient enforcement. We do not know of any assessment of the extent of enforcement of, and compliance to, weed laws. Numbers of prosecutions do not necessarily reflect enforcement effectiveness. But that there has been only one prosecution under the Act (the only one reported on the Austlii website) – *Merriwa Shire Council v Castlebar Holdings Pty Ltd* [2004] NSWLC 2 – is strongly suggestive of a serious lack of enforcement. Although there is likely to be greater use of other enforcement tools, such as Penalty Notices (s 63, with a maximum penalty of \$220), we have no information about the frequency and effectiveness of their use. Use of Penalty Notices is likely to vary considerably across local government areas. Anecdotally, the ENGOS are aware of widespread lack of enforcement. Assessment of enforcement is vital for assessing the effectiveness of the Act and should be reviewed.

Recommendation: Review the effectiveness of enforcement under the Act and sample compliance levels.

To improve the capacity for enforcement of the Act, we recommend shifting jurisdiction to a court with appropriate expertise, providing open standing to enforce some provisions and ensuring that penalties are sufficiently high and flexible. Adoption of these reforms would bring the Weeds Act more up to the standard of other environmental laws.

8.1 Jurisdiction

Most environmental prosecutions are heard in the Land and Environment Court, a specialist court for cases to do with the environment, development and local government. ENGOS contend that the Land and Environment Court would be the most appropriate court to hear cases involving breaches of the Noxious Weeds Act, as its judges have the expertise and experience to assess environmental evidence, appreciate the potential impacts of breaches and apply appropriate penalties. Judges in Local Courts, which currently deal with proceedings under the Act (s 61), do not usually have experience with environmental matters and are therefore likely to underestimate the seriousness of weed impacts (or at least to vary in the degree of seriousness they treat weed offences). Having cases heard in the one specialist court would assist in achieving consistent outcomes and build a coherent body of case law. The Land and Environment Court is practiced at hearing cases initiated under open standing provisions, a reform recommended below for the Noxious Weeds Act. The Land and Environment Court already has a small role under the Act, to hear appeals against Weed Control Notices (s 25).

Recommendation: Shift jurisdiction to the Land and Environment Court.

8.2 Open standing

One of the essential elements of most modern environmental legislation is wide standing provisions to allow community enforcement. Such capacity is particularly appropriate for weed laws given the serious environmental impacts and huge public costs of weed invasions and the current low rate of enforcement. The public has multiple strong interests at stake: as landowners affected by weed invasion, as taxpayers paying for control programs, as consumers of affected ecosystem services, and as enjoyers and defenders of the natural environment. In NSW most environmental legislation has 'open standing' to allow any person to take civil proceedings to remedy or restrain a breach of the law. This not only facilitates enforcement if governments fail to do so but the potential for community enforcement can motivate public authorities and prosecuting agencies to be more rigorous in their enforcement duty.

Take the following scenarios:

A water authority is failing to control a declared weed on the banks of a stream from where it could spread throughout the catchment, and cause serious environmental and economic harm.

A bush regeneration group has spent hundreds of voluntary hours and public funds to control a noxious weed that threatens an endangered species. But a nearby property owner (public or private) is failing to prevent escape of that weed from their property into the habitat of the threatened species.

A business is cultivating a commercial crop species which is escaping from the property and invading a high-value wetland. The weed is not declared noxious because of its commercial value but will destroy the values of the wetland.

In each case, if government authorities fail to act, shouldn't the community have the right to seek an order from the Court for actions to prevent environmental and economic harm?

NSW has led the way in providing open standing under environmental laws including under the Environmental Planning and Assessment Act 1979 and the Protection of the Environment Operations Act 1997. The latter Act in s 253 provides that 'any person' may bring proceedings in the Land and Environment Court to restrain a breach or threatened breach of any Act if the breach is causing or is likely to cause harm to the environment.

Thirty years of experience in NSW has shown that community enforcement improves environmental outcomes and has not resulted in a flood of vexatious litigation. The former Chief Judge of the Land and Environment Court Justice Jerrold Cripps is one of many to observe this:

It was said when the legislation was passed in 1980 that the presence of section 123 would lead to a rash of harassing and vexatious litigation. That has not happened and, with the greatest respect to people who think otherwise, I think that that argument has been wholly discredited.¹¹

The ENGOs recognise there are some differences between the Noxious Weeds Act and other environmental legislation relevant to community enforcement. Most other enforcement

¹¹ Cripps J. 1990. People v The Offenders. Dispute Resolution Seminar, Brisbane 6 July 1990.

provisions are about stopping potentially damaging action whereas in some cases action under the Noxious Weeds Act would be about a failure to take positive action to prevent weed spread. There are also sometimes logistical impediments – lack of resources or techniques – that limit landholders’ capacity to control weeds. But the Court can weigh up such factors and apply the ‘reasonable and practical’ test of a duty of care. In addition, restrictions on access to private properties would limit the capacity for community to gather evidence and thus limit the cases that could be brought. Wide standing provisions could be useful to a farmer whose business is threatened by the failure of another landholder to control weeds. In many cases, just the potential for the community to take enforcement action is likely to be sufficient to motivate more serious enforcement action by agencies with prosecution powers.

All persons and authorities should be treated equally under provisions subject to community enforcement, unless there are good reasons in specific instances to exempt public authorities. Equality before the law requires removing the blanket exemption currently in the Act for public authorities, as discussed in section 8.3. It is appropriate that each side pay their own way as is usual for environmental legislation where the community acts for the public good.

Recommendation: Provide open standing under the Noxious Weeds Act for community enforcement, with the relevant provisions and thresholds to be the subject of consultation.

8.3 Exemptions for authorities

Currently, the Act (s 70(2)) exempts the Minister and public authorities in NSW (or people acting under the direction of the Minister or authority) from any proceedings brought in any court to prevent or remedy a breach of the Act.¹²

There may be some instances in which it is appropriate to exempt categories of authorities or persons from the Act but the blanket exemption is unwarranted and unhelpful for achieving the objects of the Act, given that public authorities manage large areas of land and that breaches by them can have serious impacts. It is also inequitable for the other landowners subject to the Act and would undermine the capacity for community enforcement of the Act. We request the government to remove this blanket exemption. If there is warrant for particular exemptions, they should be subject to public consultation.

Recommendation: Remove the exemption in s 70(2) of the Act and require all people and authorities to be liable to proceedings brought under the Act for breaches of the Act.

8.4 Penalties

The Act includes penalties for a range of offences with the highest of 100 penalty units for failure to comply with a weed control notice by a local control authority (s 19) and breach of a quarantine order (s 34A). Currently, with a penalty unit worth \$110, the maximum penalty under the Act is \$11 000. With the penalty for selling a notifiable weed just \$5500, there is very little commercial disincentive for a businesses to have strict quality control to ensure they don’t inadvertently sell notifiable weeds.

Having regard to the serious harm that can result from breaches of the Act, we consider current maximum penalties far too low. In contrast, maximum penalties under weed laws in

¹² “No proceedings in any court may be brought against the Minister, a local control authority or a public authority, or a person acting under the direction of the Minister or an authority, for an order to remedy or restrain a breach or a threatened or apprehended breach of this Act by the Minister, authority or person as an occupier of land or in any other capacity under this Act.”

Queensland are \$60 000, in South Australia \$100 000 and 2 years imprisonment, and in Western Australia \$100 000 and 1 year imprisonment. Under NSW's Pesticides Act 1999, the maximum penalty for causing harm to non-target plants and animals (by negligent or reckless use of a pesticide) is \$250 000 for a corporation and \$120 000 for an individual. We strongly recommend that penalties be increased in the Weeds Act to reflect the degree of harm that can result from breaches.

The groups also recommend including in the Act the potential for other types of penalties. Environmental legislation often includes the potential for remediation orders, for example, which is appropriate for weeds.

Recommendation: Increase maximum penalties under the Act to reflect the potential for serious and ongoing environmental harm from breaches, to provide a commercial incentive for compliance and to be consistent with other environmental legislation. Increase the range of penalties, for example to include the potential for remediation orders.

9. Funding

Insufficient public funding is a major barrier to effective weed management. While adequate funding cannot be mandated legislatively, we recommend that in conjunction with legislative reform funding requirements are assessed using an approach similar to that for 'standards of fire cover' to determine funding needed to provide an acceptable degree of protection to an area or asset. A funding model needs to be developed by which to determine a fair level of contribution from governments, landholders and businesses/industries and by which to implement the polluter pays principle (discussed in section 6.1).

Recommendation: In conjunction with legislative reform, determine funding needs based on a 'standards of cover' approach and develop a funding model to determine a fair level of contribution from governments, landholders and businesses/industries.

Appendix 1 Definition of ESD

ESD as defined in s 6(2) of the Protection of the Environment Administration Act 1997:

Objectives of the Authority

(2) For the purposes of subsection (1) (a), ecologically sustainable development requires the effective integration of economic and environmental considerations in decision-making processes.

Ecologically sustainable development can be achieved through the implementation of the following principles and programs:

(a) the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

In the application of the precautionary principle, public and private decisions should be guided by:

(i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and

(ii) an assessment of the risk-weighted consequences of various options,

(b) inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,

(c) conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,

(d) improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as:

(i) polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,

(ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,

(iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.”

Appendix 2 Biofuels: the need for precaution

Weedy species promoted as biofuels exemplify the limitations of a management approach (using codes of practice for example) to some commercial species and demonstrate why a precautionary approach is warranted. Extracts below are from ‘Weedy biofuels: what can be done?’ by Low et al. (2011).¹³

...the attributes required of biofuel crops—rapid growth rates with minimal input of fertilisers, high water use efficiency, lack of pests and diseases—are those of many weeds[10]. That is, ‘the very traits that characterize an ideal biofuel crop also typify much of our invasive flora’[9]. More than two-thirds of the plants proposed for use as biofuels in Hawaii, or which are cultivated in Hawaii and proposed as biofuels elsewhere, have been assessed as having a high risk of becoming invasive in Hawaii[11], and most of the species attracting attention in Australia have a substantial history as weeds [12]. Giant reed (*Arundo donax*) epitomizes the problems. It is a plant on the IUCN list of 100 of the world’s worst invasive alien species[13] that is highly valued as a biofuel because of its exceptional growth rates[14].

A key determinant of invasion success is propagule pressure — the number of propagules (seeds or self rooting plant fragments) available for establishment and spread [15,16]. The large scale of proposed biofuel plantings will ensure high propagule pressure, so that even plants with low invasion potential will have many opportunities to escape.

Contributing to this risk are widespread market failures. In Asia and Africa, jatropha (*Jatropha curcas*) was widely planted in response to government directives, speculation and venture capital availability. Many plantings have proved ill conceived, with no available markets for the seeds [17] or generating poor yields[18,19], resulting in abandoned plantings with the potential to spawn weed problems [20]. New business ventures often fail, especially in the agricultural sector, and this is proving particularly true of biofuels. The invasion potential of biofuel crop species may also be facilitated by genotype selection or breeding for weed- like attributes such as higher competitiveness, higher biomass yields, greater tolerance for poor growing conditions, and reduced input needs [9,21]. There can be considerable differences in invasion potential of different genotypes, which may partly explain why giant reed has proven more invasive in the United States than Australia to date[22]. Varieties selected for rapid growth as biofuels are likely to prove more invasive than past cultivars with ornamental striped leaves.

The sustainability challenge is to realise the benefits of biofuel crops without creating major agricultural and environmental weed problems, taking into account that:

_ biofuel crops are high-volume, low-value crops, implying high propagule pressure and limited producer profits to fund weed control;

_ the large scale of plantings and long time frame over which weed risk must be managed increases the likelihood of low-frequency extreme events or management lapses resulting in weed escape;

_ detectability of escapes and traceability to a particular producer, and hence application of the polluter pays principle, may be difficult; and

¹³ Low T, Booth C, Shepherd A. 2011. Weedy biofuels: what can be done? *Current Opinion in Environmental Sustainability* 3:1–5.

_ the potential for remedial action is limited, as weed escapes are usually irreversible and control expensive, requiring a long-term commitment of labour and resources.

...

Low-risk options for biofuels

Fortunately, the biofuels industry has a wide choice of potential crop species, particularly for second-generation fuels based on biomass, and non-weedy options can be selected. Every country has native plants that grow rapidly without imposing a weed risk, which may also provide some biodiversity benefits. In Western Australia, mallee eucalypts are showing promise as biofuels, while also providing habitat for small possums [51] and birds [52]. Invasive crops such as giant reed produce biomass at a faster rate than most native plants, but a cost-benefit analysis that considered the weed costs, which usually continue into the future, would conclude that native plants were a better option. Risk assessment should be applied to native species as well because some can prove invasive [21].

Appendix 3 Forestry and weed invasion

NSW Forests and weed invasion

Forests NSW manages 2.4 million hectares of forest, including 2.1 million hectares of native forest. Conservation groups are greatly concerned about the risks of weed invasion due to Forests NSW's logging practices that result in high disturbance levels and their failure to invest sufficiently in weed control. State forests are public lands and should be managed transparently in the public interest. Forests NSW should be subject to the highest standards for weed management and accountable to the public because they manage public lands, often with high conservation values.

Logging practices

Many weed species are favoured by disturbance. Areas of disturbed soil and open canopy (in logged areas or along logging tracks) provide optimal locations for weed establishment. The risk of invasion due to logging depends on the extent of disturbance and the availability of weed seeds. Logging machinery can also facilitate weed spread.

There is no evidence that risks of weed invasion are comprehensively considered in logging assessments, and the current process of self-assessment under Integrated Forestry Operations Approvals for the east coast of NSW precludes community oversight and the potential for community action when environmental damage occurs.

Current logging methods in NSW result in high levels of disturbance. The method known as Australian Group Selection is meant to confine clearing to areas of 0.25 ha (50 m x 50 m) but recent aerial photography shows that areas cleared are much larger and there is a checkerboard of multiple small areas of clear felling across logged forests. Despite the name, the method known as Single Tree Selection also results in heavy disturbance with licence conditions permitting removal of 40% of the harvestable wood at breast height. It is often impossible to determine from the results which method has been used as the extent of destruction and resulting areas of bare earth are considerably larger than suggested by these methods. The use of bulldozers and heavy industrial machinery cause considerable soil disturbance. Non target species, trees, understorey shrubs, vines and groundcovers are also felled. When removal of the target species is complete the entire area is burnt, commonly by means of fire accelerants applied aerially. This results in vast areas of heavily disturbed soil left bare with or without an ash bed depending on burn results over sometimes areas of up to square kilometres at a time.

Weed control

The only indicator that NSW Forests uses in its sustainability reports for weed management is expenditure on weed control. They provide no information about the status of weed invasions and effectiveness of management. However, even the financial indicator suggests that NSW Forests assigns low priority to weed management.

NSW Forests reported spending just \$1.1 million on weed management over 2.4 million hectares of forest in 2009-10, an average of \$0.46/ha. This is less than 20% of the estimated \$2.37/ha spent by NPWS for national parks¹⁴. Weed management reporting by NSW Forests also

¹⁴ Estimated as half the expenditure on invasive species management in national parks.

compares unfavourably with that of NPWS, which has published status reports on its weed and pest management program in national parks. NSW Forests' expenditure on weed management is 15% less than it was a decade ago.

NSW Forests expenditure on weed control

1997-98	2007-8	2008-9	2009-10
\$ 1.3 million	\$0.6 million	\$0.9 million	\$1.1 million

Evidence of invasion

Forests NSW does not provide the public with information about weed status and weed management in state forests. NSW Forests develop weed management plans but there is no independent assessment of compliance or public reporting on implementation. Evidence of weed invasion is therefore necessarily largely anecdotal.

Under weed management plans, forest managers are required to "monitor regeneration sites to ensure weeds do not become established." A community member with expertise in weeds has recently provided us with the following observations of weed establishment following logging in Kerewong State Forest in 2010. F. Pike (pers. comm.) surveyed areas pre and post-logging via single tree selection in compartments 134-136 in 2010 and 2011.

Survey results, 1.31 ha in compartment 134		
Weed	Pre-logging, March 2010	7 months post-logging, February 2011
Lantana (<i>Lantana camara</i>)	6 plants averaging about 3 x 3 m size	580 seedlings < 40cm height 6 original plants had increased in size to 10 x 3 metres (n = 4) and 20 x 3 metres (n = 2).
Camphor laurel (<i>Cinnamomum camphora</i>)	This site was one of the few without <i>C. camphora</i> pre-logging	32 seedlings
Crofton weed (<i>Ageratina adenophora</i>)	No specimens	200 plants
Deadly nightshade (<i>Atropa belladonna</i>)	No specimens	220 plants
Fireweed (<i>Senecio madagascariensis</i>)	No specimens	72 plants
Fleabane (<i>Conyza bonariensis</i>)	No specimens	40 plants
Tobacco bush (<i>Solanum</i>)	No specimens	224 plants

mauritianum)		
Thistles (3 species)	No specimens	200 plants
Survey results, 0.1 ha in compartment 134		
Camphor laurel	No specimens	50 plants

The establishment of lantana and camphor laurel contradict the statement in the weed management plan for the Northeast region that “Any weed species tend to be annuals or short-lived perennials that find it difficult to persist as the canopy closes and light is reduced.”

Weed status in surrounding areas: Logging conducted from 2008 to 2010 in hillsides in more remote compartments of Kerewong Forest and other surrounding forests coincided with an increase in camphor laurel (*Cinnamomum camphor*) invasion along Greens Highway track and germination of large numbers of seedlings in various unlogged compartments of Kerewong Forest, some of which had not been logged for up to 20 years. Lantana was present in isolated but dense thickets in the oldest regrowth areas (i.e. in areas not logged for at least and probably in excess of 20 years). It was also prevalent in more recently logged areas.

Following are images of disturbance and early weed invasion following logging in Kerewong State Forest.



Typical soil disturbance from heavy single tree selection operations, Kerewong Forest Compartment 135, February 2011



Lantana infestations proliferating in the wake of intensive logging in compartment 134



Camphor laurel infestations in Compartment 132 reported to NSW Forests in March 2010. Individuals then 0.5 m had grown to 3 m by February 2011.