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Hawke Review Recommendations and Invasive Species

Along with land clearing and climate change, invasive species are one of the three top threats to Australian's biodiversity and many matters of national environmental significance. But the EPBC Act does not provide an adequate framework to address their threats, particularly the threats of invasive species already in Australia.

…and the worst for Australia is yet to come with most invasive species having occupied only a portion of their potential range, and interactions with climate change likely to considerably worse their impacts.

Hawke review, ss 6.31-32.

The EPBC Act currently addresses invasive species threats in two major ways: pre-border (assessment of the importation of exotic animal species) and post-invasion (if they are listed as a key threatening process. The recommendations in the Hawke review fill some of the gaps and address some of the glaring defiencies in existing regulation.

1. Recommendation 23(1): a COAG process to address the spread of invasive species

> The Council of Australian Governments (COAG) develop criteria and management protocols for the movement of potentially damaging exotic species between States and Territories, working towards a list of 'controlled' species for which cost-effective risk-mitigation measures may be implemented.

The problems to be addressed: There are no controls on the sale and movement of thousands of invasive and potentially invasive plant species throughout much of Australia. Currently there are about 26,000 exotic plant species in Australia, of which about 3000 have naturalised to date. At least 1000 are invasive in natural areas. Many more are expected to become invasive with the 6000 or so species that are weedy overseas and not yet in Australia considered a high-risk category. But the majority of invasive and potentially invasive plant species are not subject to any regulation. But fewer than 500 taxa are regulated in any state or territory apart from WA, which has a permitted list approach. The lack of constraints over sale and movement of exotic plant species is one of the largest gap in environmental legislation in Australia – criticised by the Hawke review as "a substantial failure" of state/territory laws.

Recommended response: Adopt the recommendation for a COAG process. Use the COAG process to seek agreement to (i) listing and regulating under the EPBC Act, s301A,[1] those invasive species having or likely to have a significant impact on bioidiversity; (ii) a nation-wide adoption by states and territories of a permitted list approach to non-native species, and (iii) harmonisation of other aspects of invasive species regulation, such as categories of declaration.

Regarding proposal (i), there should be a process by which the public can nominate species for listing as controlled species with assessment by an expert committee.

Regarding proposal (ii), a permitted list approach involves defining which species can be legally sold within a defined region (eg. a state) and limiting new introductions to taxa assessed as low risk. This approach is used at the national border, in states/territories for vertebrate species, and in WA also for plant species.

Regarding proposal (iii), there are many areas of state/territory regulation relevant to invasive species that are lacking or inconsistent. For example, some jurisdications lack regulation of game reserves involving invasive species and there are different categories of declaration of invasive species that should be harmonized.

We also recommend the Federal Government use its existing powers under s301A to start listing 'controlled' species that have already been identified as nationally significant invasive species, including species listed as key threatening processes and weeds of national significance.

Justifications for reforms:

- The threat of invasive species is very high and growing. Due to the lack of regulation many more species could become invasive and/or spread further.
- There is no feasible alternative to achieving the desired outcome. Although there has been a national weed strategy since 1997 with a focus on preventing weed spread, limited reform has occurred, and is unlikely to occur in the absence of strong federal leadership and a COAG agreement. The national biosecurity reforms being developed are not intended to cover these postborder issues.
- The proposed reforms would complement other reforms, both of the EPBC Act and in federal biosecurity. It could provide a tool for addressing key threatening processes, for example escaped garden plants and five invasive pasture grasses, as well as other invasive threats that qualify for listing as key threatening processes.
- Implementation of a permitted list approach to non-native species at a post-border level is the only way to realistic way to prevent unsafe introduction and spread of invasive species - the problem identified in the Hawke review. See Appendix 1. This approach is already being used for some categories of non-native species, and has proven functionality. It is applied at the national border for new imports and in Western Australia for plants, and in states and territories for most vertebrate species. Coordinated adoption of a permitted list approach

[1] Section 301A of the EPBC Act, which have never been used, allows for the government "to make a list of non-native species that could threaten biodiversity and implement plans to reduce, eliminate or prevent the impacts of species that appear on this list" (s. 6.40). It also provides for regulation of trade and movement.

nationwide would provide the basis implementing all governments' agreement to prioritise prevention of new biological invasions. It has a high benefit: cost ratio.

- A permitted-list approach also provides for the capacity to assess the introduction of native plant species beyond their natural range. Native weeds are a serious and growing environmental threat.

2. Recommendation 23 (2, 3): Environmental foresighting

> The Act be amended to require periodic preparation of mandatory 'outlook' reports that identify emerging threats to the environment and provide policy options to address emerging environmental issues; and
>
> The Australian Government establish a Unit or Taskforce devoted to foresighting to identify and guide management responses to emerging threats

The problem to be addressed: As the review found, "Emerging issues are difficult to manage from a regulatory perspective as traditional regulation tends to be a reactive and somewhat inflexible instrument." The EPBC Act provides tools mainly to address entrenched threats – eg. listing of key threatening processes – or takes a piecemeal approach – eg. assessing controlled actions – rather than proactively and comprehensively addressing threats before they emerge or become entrenched. For example, the emerging biofuels industry could cause serious weed problems but there is no national policy and mostly inconsistent, reactive state/territory regulations that fail to prevent the use of high-risk species. Genetic modification of invasive species – eg. increasing disease or drought tolerance – could increase their invasive potential, but again there is a lack of policies or assessments to address this emerging threat.

Recommended response: Adopt the recommendation for development of an environmental foresighting capacity with the publication of regular foresighting reports and the establishment of a foresighting taskforce.[2] Provide capacity for the community to nominate emerging threats for assessment.

Justification for reforms:

- This is a smart approach that could result in threat prevention, cost savings and conflict reduction.
- Foresighting reports could inform programs across government and reduce the likelihood of governments funding programs and R&D that exacerbate environmental threats.

3. Secondary recommendations 12.3, 12.4: hybrids & variants

> A more systematic approach is needed for assessing proposed new imports to respond to the potential invasive risks of new variants of currently listed species.

[2] "Foresighting is the process of gathering and interpreting information to identify emerging threats and determine what might be done to mitigate them"

The live import list should be reviewed to make it clear that specimens listed do not include variants or hybrids unless otherwise specified.

The problem to be addressed: New variants or hybrids of existing invasive species can increase their invasiveness, eg. by increasing tolerance of drought or salinity or increasing vigor. The savannah cat was not permitted entry into Australia because of a risk it would escape and increase predatory pressures of feral cats. Increasing the genetic pool of an invasive species can lead to it becoming super-invasive. But there is no systematic requirement for risk assessment of new variants or hybrids, and most new variants of permitted species are automatically permitted entry into Australia or permitted release if bred in Australia.

Recommended response: Require assessments of the invasive risks of new variants proposed for importation or release (if bred in Australia). This should apply to assessments under the EPBC Act, under the proposed new Biosecurity Act and under state/territory laws.

Justification for reforms:

- Risk assessment of new variants and hybrids of existing invaders is necessary to prevent the release of particularly high-risk invaders.

4. Secondary recommendation 6.3: developers/providers of new technology & controlled actions

The Act needs to be able to identify as persons taking an action, the developers/providers of products derived from gene technology or other emerging technologies that may disperse or disseminate and impact on a matter protected under the Act.

The problem to be addressed: The review identifies that there are difficulties associated with assessing new technologies, such as GMOs and nanotechnology, under the Act, in part because it is difficult to identify the potential proponent of an action when multiple parties release a product. This problem may also apply to new cultivars/breeds of invasive or potentially invasive species, whether they are conventionally bred or GMOs. Currently, new conventionally bred cultivars of invasive pasture grasses and garden plants are developed and released within Australia without government risk assessment. Genetically modified cultivars may not be properly assessed for their invasive potential under existing protocols for new gene technologies. Some of these new varieties are likely to have very significant impacts on MNES when they invade world heritage areas, Ramsar wetlands, listed ecological habitats or habitats of threatened species. But it is difficult to link a particular invasion to a particular grower, and the impacts are typically observed long after planting has occurred. In such cases, it makes sense for the developers and providers of new cultivars to be required to refer the development and provision of potentially invasive products for assessment as a controlled action. This should be as early as possible in the development of such products to minimise the costs associated with developing a product that should be refused under the EPBC Act.

Recommended response: Support this recommendation and clearly define an action under the Act to require that developers and providers of new invasive or potentially invasive cultivars or breeds, whether conventionally bred or genetically modified, refer products for assessment before they are released.

Justification for reforms:

- Assessment of these products prior to release can prevent future invasive threats, and is much more effective and cost-effective than assessing multiple releases or addressing the threats after product escape has occurred.
- Most other new products with the potential to cause harm – eg. new chemicals or food products – require assessment before release. This same approach should be applied to products with the potential to harm the environment.

5. Recommendations 19, 20 & secondary recommendation 5.3: key threatening processes and threat abatement plans

That the Act be amended to:

- better define key threatening processes (KTPs)
- allow greater flexibility in the criteria for eligibility for listing a KTP
- allow strategic identification of KTPs at a range of scales
- provide for greater flexibility in the development and implementation of Threat Abatement Plans and allow transition to regional planning approaches and strategic threat management.

The requirements for nomination of a threatened species, ecological community or key threatening process should be simplified to allow for easier use and greater public participation in the nomination process.

The problem to be addressed: Most of the federally listed key threatening processes (KTPs) are invasive species, and there are many more that would qualify as KTPs.

The review found that the current approach to listing KTPs and developing threat abatement plans is prescriptive and lacks flexibility. It also fails to prioritise the potential for threatening processes to impact on various matters of national environmental significance protected under the Act, and doesn't provide for the "strategic identification or prioritisation of threats or their management." Nomination processes are quite demanding, which limits public participation.

One of the management deficiencies is a lack of federal regulatory links to KTP listings of invasive species. For example, the listing of escaped garden plants relies on each state/territory to regulate use of species threatening biodiversity. Given the lack of reforms to date in most state/territory jurisdications under the weed strategy, the listing is unlikely to make much difference unless there is a federal capacity to regulate species in this category of threat, eg. under s301A of the Act.

There are also major deficiencies in funding for mitigation of KTPs.

Recommended response: Adopt the proposed recommendations for greater flexibility, prioritisation and strategic management. Increase capacity for community nominations. Involve the proposed foresighting unit in identification and prioritisation of emerging threats. Develop a regulatory capacity to manage invasive species listed as KTPs under s301A. Identify and provide the level of funding necessary to address priority actions to mitigate KTPs.

Justification for reforms:

- More powerful and flexible options for mitigation of KTPs should inherently be a high priority for reform, as conservation cannot be achieved without addressing these high-level threats. This will become increasingly paramount as climate change exacerbates some KTPs (including many invasive speices and increases the vulnerability of native species to threats.