EPBC Act: Reforms to Address Threats to Nature

The EPBC reform process to date has primarily focussed on assessments and approvals, but to stop extinctions and restore ecological health, Australia needs to:

1. Protect and restore threatened species and ecological communities – known as '**recovery**'
2. Eliminate or reduce the major threats to nature – known as '**threat abatement**'

Even if recovery processes were optimal, the current fragmented and limited focus on threat abatement within the EPBC Act and government priorities leads to continuous growth in threatened species lists, ongoing extinctions, landscape degradation and significant economic costs.

Reforms of the EPBC Act will fail to stem the loss of biodiversity and environmental degradation unless they also significantly strengthen Australia's capacity to systematically identify, prevent and abate threats to nature - especially invasive species.

Recommendation: Undertake a focused and dedicated consultation process specifically on strengthening threat prevention and abatement measures under the EPBC Act.

Key issues with the current approach

Inadequate Threat Identification: The current system relies on an ad-hoc, nomination-based process for listing Key Threatening Processes (KTPs), leading to a lack of comprehensive and systematic identification of existing and emerging threats.

Weak Prevention and Early Intervention: Live import regulations are insufficient and often lack clear objectives and standards, leading to the introduction of high-risk invasive species. Post-border regulation of established invasives is inconsistent across states and territories.

Ineffective Threat Abatement: Many listed threats lack corresponding abatement plans or policies, and even when plans exist, implementation is often uncoordinated and unaccountable.

Limited Monitoring and Reporting: There are no robust requirements for monitoring the status of threats or progress in abatement efforts, hindering adaptive management and accountability.

Opportunities for Reform

1. Strengthening Prevention at the Border: Live Imports

The EPBC Act's **live import provisions (Part 13A)** are a crucial first line of defense against invasive species. Reforms should:

1. **Specify Clear Objectives and Standards:** Mandate a highly precautionary, risk-averse approach for all live import decisions, with clear objectives to prevent the import of species and pathogens harmful to native biodiversity.
2. **Expand Scope to All Taxonomic Groups:** Extend assessment requirements to fungi, protists, viruses, bacteria, archaeobacteria, not just plants and animals.
3. **Establish Prohibited Lists and Review Processes:** Create a "prohibited list" for unsuitable taxa and introduce mechanisms for periodically reviewing and, if necessary, removing species from the Live Import List based on new information or emerging risks.
4. **Enhance Transparency and Expert Advice:** Require public consultation on all import applications, publish assessment documents, and establish an independent scientific committee to advise on decisions.

2. Enhancing Australia's Threat Abatement System

A comprehensive and proactive threat abatement system is essential to prevent new extinctions, foster ecosystem resilience, and recover threatened biodiversity. Reforms should:

1. **Systematic Threat Identification and Listing:** Move beyond ad-hoc nominations to a systematic process for identifying, classifying, and listing all nationally significant threats, including emerging and future threats, with a lower burden of proof for urgent interventions.
2. **Flexible and Collaborative Responses:** Enable flexible response options, including multiple threat abatement plans or strategies per KTP. Foster joint development and implementation with state and territory governments, underpinned by formal agreements.
3. **Action-Oriented Plans:** Require expert advice on essential and feasible actions for threat abatement and delisting, focusing on 5-10 year priority actions.
4. **Robust Monitoring, Reporting, and Oversight:** Mandate regular monitoring and reporting on threat status and abatement progress, with independent oversight by an Environmental Protection Agency (EPA) or similar body.

3. Harmonising National Responses to Invasive Species

The inconsistent regulation of invasive species across Australian jurisdictions creates significant problems. **Section 301A** of the EPBC Act offers a powerful tool for national harmonisation:

1. **Retain and Strengthen Section 301A:** Establish a nationally consistent, risk-based scheme to regulate the sale and transport of invasive or potentially invasive species within Australia.
2. **Require Implementation:** Require the listing of species that pose a threat and mandate consideration of regulatory responses for nationally significant invasive species threats.

4. Better Safeguarding Australia's Important Places

Improve protection ofAustralia's World Heritage, National Heritage, and Ramsar wetland sites by:

1. **Expanding the Definition of 'Action':** Broaden the definition of "action" to include government policies, plans, or programs that relate to the management of nationally and internationally significant places, particularly when they pose a significant risk to their values.
2. **Setting National Environmental Standards:** Establish clear national environmental standards for the management of spatially defined Matters of National Environmental Significance (MNES), requiring proactive threat management and providing triggers for Commonwealth intervention when standards are not met.

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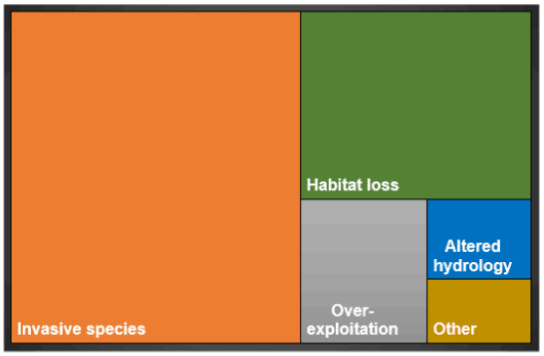
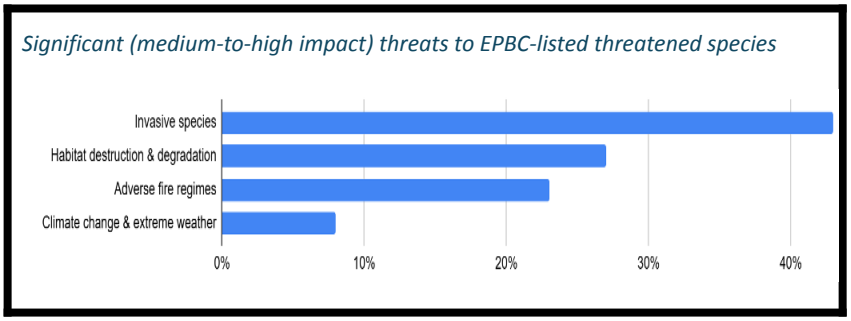


The primary drivers of extinctions of Australian plants and animals since European colonisation (weighted according to the number of extinctions).



Brief 1: According threats to nature and invasive species appropriate priority in EPBC reforms

1. Why should there be a stronger focus on threats to nature?

To protect Australian species and places, including those listed as matters of national environmental significance, Australia needs to systematically identify, prevent and mitigate significant threats to nature.

Reformers of the EPBC Act should therefore ask the following questions, and consider the potential role of the EPBC Act to fill gaps and address deficiencies:

- **Threat identification**: Have significant threats to biodiversity been systematically identified? Are there processes for systematically identifying future and emerging threats?
- **Threat prevention**: Is there a strong focus on preventing future threats and intervening early to prevent emerging threats from becoming entrenched and to stop new species and ecological communities from becoming threatened?
- **Threat abatement**: Are nationally significant threats the focus of nationally coordinated threat-specific abatement plans, programs or policies? Are they being jointly and effectively implemented by federal, states and territory governments?
- **Monitoring and reporting**: Are nationally significant threats and threat abatement progress being monitored, evaluated and reported?

As summarised in Table 1, the answers to these questions show that the threats focus of the EPBC Act is currently fragmented and limited. Related reasons to focus strongly on threat prevention and abatement include the following:

- **Zero extinctions**: Threat prevention and abatement are essential for preventing extinctions. Most native species in Australia are not monitored and some could go extinct without their decline being noticed. Some recently extinct species were not even listed as threatened.
- **Threatened species**: Threat prevention and abatement are essential to prevent the list of threatened species (and ecological communities) from continuous growth. Even if all species currently on the list could be recovered, new species will become threatened while major threats remain potent and new threats arise.
- **Resilience**: The most effective way to increase species and ecosystem resilience to unavoidable impacts from threats such as global warming or bird flu is to prevent and reduce other threats.
- **Global biodiversity framework targets**: Threat reduction is a major focus of GBF targets, including a 50% reduction in the establishment of potential invasive species by 2030.
- **Productivity**: Increasing productivity growth will rely on more effectively preventing and abating environmental threats (section 3).

Table 1. The threats focus of the EPBC Act, gaps and proposed reforms

	Current EPBC functions	Current EPBC gaps	Reform proposals and options
Threat identification	Listing of key threatening processes	Not comprehensive - reliant on nominations No systematic focus on future and emerging threats	Brief 3: Systematic threat identification and listing, including emerging and future threats
Threat prevention and early intervention	Live import functions (invasive species)	Lack of clear objectives, limited species scope and major legacy issues (most permitted species never assessed)	Brief 2: Establish objectives and standards, include all species in the scope and establish review mechanisms.
	Section 301A (potential for invasive species listings and regulation)	Never implemented.	Brief 4: Retain and implement to enable nationally harmonised responses to invasive threats.
	Assessments and approvals (controlled actions)	Limited focus on a small subset of environmental threats	Could be boosted by listing KTPs as an MNES to require assessment of actions likely to exacerbate threats.
	Threat abatement functions	Limited focus on emerging threats and onerous listing and planning functions not suitable for rapid responses	Brief 3: Develop a threat abatement focus on emerging and future threats to enable early intervention.
Threat abatement	Threat abatement functions	Lack of threat abatement responses to most major threats, including many invasive species (e.g. due to the novel biota listing). Deficient implementation of many plans.	Brief 3: Facilitate flexible threat-specific response options for threat abatement and joint implementation with the state and territory governments.
Threat monitoring and reporting	Threat abatement functions	Lack of requirements for monitoring and reporting on threats or threat abatement. No independent evaluation and oversight of progress.	Brief 3: Require monitoring and reporting on threats/threat abatement and institute oversight mechanisms.

2. Why should there be a stronger focus on invasive species?

Invasive species have been the biggest driver of species extinctions and declines in Australia. The threat of invasive species is escalating as new invasive species establish and as existing invaders spread or proliferate.

Reforms of the EPBC Act will fail to stem the loss of biodiversity and environmental degradation unless they significantly strengthen Australia's capacity to prevent and mitigate the threats of invasive species – as outlined in briefs 2 to 5.

Extinctions: Since colonisation, Australia has averaged >1 extinction every 3 years. Invasive species have been a primary driver (>30% contribution) in about three-quarters of extinctions (Figure 1) – particularly of mammals and frogs. This has continued into modern times, with invasive species a primary driver of at least 20 of 27 probable extinctions since 1960.

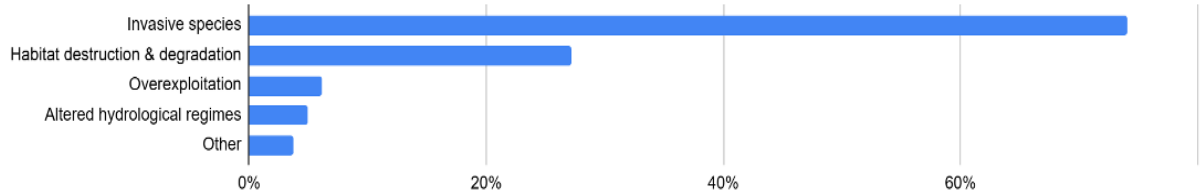


Figure 1. Major drivers of Australian extensions (confirmed and probable)

Imminent extinctions: Of 42 vertebrate species assessed in NESP studies as being at >50% risk of extinction within 20 years, 36 species (86%) are threatened to a medium or high degree by 69 invasive species threats (often in combination with other threats). Of 67 plant species assessed in NESP studies as being at significant risk of extinction within 10 years or 1 generation, 44 (66%) are threatened by invasive species.

Threatened species: Invasive species are the most prevalent threat to threatened species listed under the EPBC Act. Of species listed in 2018, one NESP study found that invasive species impacted 82%, and another NESP study found they were a significant (medium-to-high impact) threat to 44% of listed taxa, including 81% of endangered / critically endangered animal taxa.

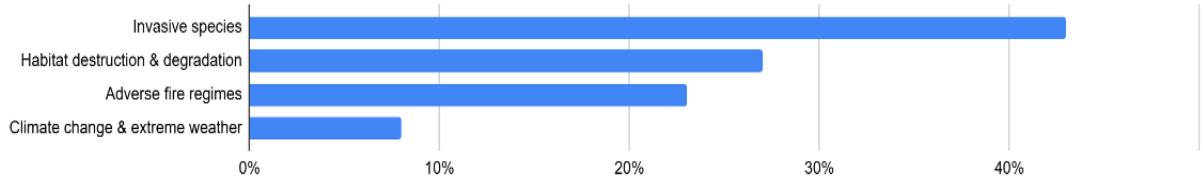


Figure 2. Significant (medium-to-high impact) threats to EPBC-listed threatened species 2018

New and emerging threats: Since the advent of the EPBC Act, hundreds of new species have established in the wild, including several threatening or potentially threatening invaders – for example, myrtle rust, jaguar cichlid, freshwater gold clam, polyphagous shot-hole borer, red imported fire ant (under eradication) and parrot bornavirus (unconfirmed). The likely arrival of H5 bird flu is looming and dozens of other highly threatening species moving globally could arrive.

3. How would a stronger focus on threats to nature aid productivity?

The Australian Government's strong focus on productivity growth has directed attention to its intersection with the EPBC Act approvals processes:

> *Fixing Australia's broken environment laws to speed up development approvals while safeguarding nature is more important than tax reform or any other measures when it came to boosting Australia's ailing productivity, former Treasury secretary Ken Henry says. (AFR)*

To improve productivity, equal attention in the EPBC Act reform process should be given to:

(1) the effectiveness of the EPBC Act (in combination with other environmental laws and policies) in preventing and mitigating the threats to nature that also undermine productivity (Table 2)
(2) ensuring that governance arrangements and funding for functions under the EPBC Act are optimal and cost-effective for achieving defined environmental objectives and targets.

As Ken Henry has pointed out, 'The biggest threat to future productivity growth comes from nature itself; more particularly, from its destruction'.

This is consistent with the World Economic Forum's 2025 Global Risks Report which rated 4 environmental threats as the most severe of all risks facing the planet over the next 10 years. 'Biodiversity loss and ecosystem collapse' moved from #37 in 2009 to #2 in 2025.

Table 2. Productivity and the potential contribution of the EPBC Act

EPBC Act functions	**Potential contribution of the EPBC Act to productivity**
Assessments and approvals	Facilitate sustainable productivity growth: Well-designed, efficient, and robust environmental regulation is not a drag on the economy but an enabler of sustainable economic activity.
Threat prevention and abatement	Prevent / mitigate environmental threats that undermine productivity: Systematic nationally coordinated threat prevention and abatement is essential for reducing productivity losses.
Governance and funding	Ensure that functions under the Act cost-effectively achieve the defined objectives: Effective governance arrangements and sufficient funding are essential for optimising the productive use of public resources for environmental outcomes.

Vital inadequately answered productivity-focused questions for Australia include:

- In what ways do environmental threats undermine productivity (Box 1)?
- What are the costs to productivity of poorly managed and emerging environmental threats?
- How much of the decline in productivity over the past few decades is due to increasing impacts of environmental threats?
- What are the likely consequences for productivity of current escalating threat trends?
- How would strengthening environmental threat prevention and abatement aid productivity?

Box 1. Examples of impacts of invasive species on productivity

Economic impacts of invasive threats:

- Direct economic impacts – e.g. weeds and pests cost farmers >$5 billion/year. In 2011–12, the combined estimated cost (economic losses and control) of invasive species was $13.6 billion (0.3% of GDP).
- Potential economic impacts – e.g. a failure to eradicate red imported fire ants is predicted to cost >$22 billion by the 2040s.
- Indirect economic impacts – e.g. gamba grass has extended the season of severe fire weather in the Northern Territory by 6 weeks, increasing the costs of fire management 9-fold; feral honey bees are major pollinators of 5 weeds that cost industry >$270 million/year (e.g. lippia, gorse)

Declines in productivity of nature-based industries:

- Declines in condition of ecotourism assets – e.g. several high-profile national parks, including World Heritage areas, are facing biodiversity collapses due largely to invasive species, including mammal collapses in Kakadu, Purnulu, Booderee and Great Otway national parks, reptile collapses on Christmas Island, and ecosystem collapse in Litchfield NP; 6 animal extinctions since 2000 have been of species with most of their habitat in national parks.
- Decline in agricultural assets – e.g. the loss of digging mammals due to cats and foxes has undermined soil health by reducing soil and nutrient turnover, water infiltration and distribution of mycorrhizal fungi.

Consequences for carbon and nutrient cycles:

- Reduced carbon sequestration – e.g. myrtle rust could reduce annual carbon sequestration in Australia by up to 1.6%, resulting in a value loss of >$340 million/year.
- Increased carbon emissions – e.g. If not controlled, the buffalo population in the South Alligator River region of Kakadu National Park is estimated to increase to >60,000 in 20 years, leading to emissions of almost 100,000 tonnes by the 20th year.
- Compromised nutrient cycling – e.g. the efficiency of denitrification in Port Phillip Bay fell by 37–53% due to the European fanworm invasion.

Rising costs due to suboptimal threat prevention and threat abatement:

- High costs for threatened species recovery – e.g. the cost of mitigating the threat of weeds to threatened species is estimated to exceed $400 billion a year. The number of weeds and their distribution is increasing rapidly.
- Increasing costs of restoration: A major proportion of restoration costs are for the management of invasive weeds and feral animals.

Brief 2: Strengthening prevention at the border – regulation of live imports

1. The importance of reform

The live import provisions (Part 13A) are among the most pivotal of the EPBC Act. **Poor decisions about which species to permit as live imports can result in more environmental harm than permitting any major development**. A single introduction, particularly if a species carries pathogens that can infect native wildlife, can result in extinctions.

Currently live import decisions are subject to less defined assessment standards and scrutiny than most other decisions under the EPBC Act. The live import provisions were not considered by the Samuel review of the EPBC Act, except from a CITES perspective.

In a renewed EPBC Act, live import provisions should now be given attention proportional to their importance for biodiversity conservation, for the following reasons.

- **High-risk**: Australia has already suffered enormous damage from the deliberate introduction of live biota. Since the advent of the EPBC Act, several new invasive species have established in Australia, including those that arrived as permitted live imports (e.g. Siamese fighting fish).
- **Irreversibility**: Given the often irreversible nature of most species introductions and their potential for severe to catastrophic environmental impacts, live import decisions require the highest standards of environmental protection.
- **International targets**: Strengthening live imports is important for Australia to achieve target 6 of the Global Biodiversity Framework – to reduce by 50% the rates of introduction and establishment of known or potential invasive alien species.
- **Cost-effectiveness**: Live import regulation is Australia's first and most cost-effective line of defence against invasive species threats. It is far more efficient to prevent harmful species introduction than to attempt eradication or management after establishment.

2. Priority gaps and deficiencies

The Samuel review noted that the 'EPBC Act does not clearly outline its intended outcomes'. This is particularly true of the live import provisions.

- **Unclear objects and lack of standards**: What live import regulation is intended to achieve for biodiversity conservation is unclear. The current objects for Part 13A lack an object specific to preventing the introduction of species likely to be harmful for native biodiversity. No standards for assessment or decision-making are specified. The latitude of the decision-maker for live imports – the environment minister – is extremely wide.
- **Constrained and uncertain scope**: The current scope of assessments is unjustifiably constrained to just the import of live animals. Decisions for plant imports and assessments for biocontrol agents have been delegated to DAFF under the Biosecurity Act and no other kingdoms of life – fungi, protists, bacteria, viruses – are included in the scope as under s303EA a 'regulated live specimen' is limited to a live plant or animal. These in effect are also delegated to DAFF. Furthermore, there is ambiguity (or different interpretations) about whether a 'regulated live specimen' includes all the other species that inevitably are imported with a named regulated plant or animal species.
- **Lack of assessment focus on introduced disease risks**: Any plant or animal species imported to Australia brings with it thousands of other species, including pathogens or parasites potentially harmful to native biodiversity. DCCEEW does not currently assess these risks and the assessments under the Biosecurity Act are not consistent with the standards that should apply under the EPBC Act, including the precautionary principle..

- **No specified standards or review potential for delegated decisions**: The delegation to DAFF for certain decisions is not contingent on the assessments under the Biosecurity Act meeting any particular environmental standards. One inconsistency is that hybrids of animals must be assessed under the EPBC Act whether or not the parent species are permitted but plant hybrids do not require assessment if the parent species are permitted.
- **High legacy risks**: Most species on the Live Import List – thousands of species – have not been assessed under the EPBC Act, for they were simply transferred from the previous legislation – Wildlife Protection (Regulation of Exports and Imports) Act 1982 - under which there were no formal requirements for assessment. There has been no review of the risks of these legacy species to determine whether they remain 'suitable' for live import.
- **Lack of review**: There are no requirements for periodic reviews of the Live Import List or triggers for review when new information emerges (e.g. when a species becomes established and invasive elsewhere or as information about climate change would alter the assessed risks).
- **Limited requirements for transparency and public consultation**: Although DCCEEW chooses to invite public comments on many decisions and to publish at least some of the assessment materials, there are no requirements under the Act for this to occur.

3. The EPBC potential

Strengthening and expanding the scope of EPBC Act's live import provisions offer the potential to significantly improve environmental protection, including for matters of national environmental significance – by strictly limiting the introduction of potentially harmful non-native species.

It is appropriate that the objects and standards under the EPBC Act for assessing live imports should be highly risk-averse and precautionary, and differ from those applied under the Biosecurity Act.

For the following reasons, permitting imports of live species that could establish in the wild should be exceptional rather than commonplace:

- **Lack of knowledge:** The environmental consequences of introductions are typically poorly known or unknown – due to the uniqueness of the Australian environment and poor knowledge of environmental impacts. Impacts on crops and livestock are much better known, for the same species are farmed overseas and there are economic incentives for research. The common lack of environmental data justifies application of the precautionary principle.
- **Interactions in the wild**: Natural ecosystems are highly complex (in contrast to relatively simple agricultural systems). The interactions of introduced species in nature therefore are inherently somewhat unpredictable, including all the microbial species they bring with them.
- **Lack of management options:** Typically, once an introduced species is established in the wild, managing any adverse impacts is difficult or impossible and relies on public funding. Managing the impacts on a single crop or livestock species is much more feasible.
- **Irreplaceability**: Native species and ecosystems, mostly unique to Australia, cannot be replaced, whereas agricultural species can be, by resistant varieties or other species.
- **Perpetuity**: Once a species is established in the wild it is likely here forever – with the ability over subsequent decades and centuries to evolve to better exploit its new environment and to adapt to or benefit from environmental changes, including climate changes.

Given the high risks of species introductions, including up to extinctions, and the inherent unpredictability of many environmental impacts, the live import provisions of the EPBC Act should be:

- **Highly precautionary and risk-averse:** The scientific uncertainties are often high and the long-term unpredictable risks can be severe.
- **Comprehensive of all live biota, including microbial species:** Any permitted species is inevitably accompanied by thousands of other species, some of which could be pathogenic

or parasitic to Australian species. Even if some categories of species are delegated for assessment under the Biosecurity Act, the decision-maker under the EPBC Act should ensure that such assessments are consistent with environmental objectives and standards before accepting their findings.

- **Focused on long-term risks:** Adverse impacts may manifest only decades or centuries after introduction, and these may be facilitated by long-term climatic or other environmental changes.
- **Regularly reviewed and responsive to new information**: Mechanisms are needed to trigger reviews of the Live import List – including of unassessed species and if new information becomes available to indicate that a species has unacceptable invasive risks.

4. Recommendations

1. Specify the following objects under the EPBC Act of regulating live imports:

Prevent the import of live organisms to Australia that could:

a. adversely impact native biodiversity, or
b. carry pathogens or parasites that could adversely impact native biodiversity, or
c. facilitate or exacerbate the adverse impacts of other introduced organisms on native biodiversity.

2. Develop assessment standards for live imports that:

(a) reflect the importance of a risk-averse, highly precautionary approach
(b) take account of the potential for direct and indirect impacts on biodiversity
(c) for assessments of biological control agents, take into account their potential net public benefits
(d) require consideration of long-term climate change projections and the potential for other long-term environmental changes.

3. Expand the scope of section 303E to include all taxonomic groups

Introduced live organisms from any taxonomic group have the potential to have significant adverse environmental impacts, and therefore section 303E should expand from just plants and animals to include all kingdoms of life: Plantae, Animalia, Fungi, Protista, Chromista, Virus, Bacteria and Archaeobacteria.

4. For delegated decisions, require assessment standards and objects consistent with the EPBC Act

For any assessments or decisions delegated to DAFF – as is currently the case for plant imports:

(a) the relevant EPBC Act objects and standards should apply
(b) the assessment methods should be periodically reviewed to ensure they are optimal for meeting EPBC objects and standards
(c) the decision-maker under the EPBC Act should retain a right to review and vary any decisions if they are inconsistent with the EPBC objects and standards.

5. Establish a prohibited list

A list of taxa assessed as unsuitable for live import should be established to:

(a) avoid the need to re-assess taxa previously assessed as not suitable for live import

(b) list taxonomic groups, including genera, families or phyla (e.g. reptiles and amphibians), assessed as not suitable for live import.

6. Establish processes to removing species from the Live Import List

A process to enable the removal of taxa from the Live Import List should be established, including by application from the public. The decision-maker should have the power to stop imports of particular taxa on the Live Import List in response to an immediate risk such as emergence of a new disease.

7. Require periodic or triggered reviews of taxa on the Live Import List

Taxa on the Live Import List should be periodically reviewed, at least every 5 years, to ensure they are or remain 'suitable' for live import. The highest immediate priorities for review are the species never assessed under the EPBC Act and those not assessed for their disease risk. Public mechanisms should be established to trigger a review of any listed taxa for which there is information warranting a reassessment, including:

(a) information about its invasiveness elsewhere that may indicate a higher risk than previously assessed
(b) information about a new or emerging disease risk
(c) information about altered conditions in Australia that alter a risk profile.

8. Establish a scientific committee to provide advice on live import decisions

A committee of independent experts, with relevant environmental expertise, should be established as a subcommittee of the Threatened Species Scientific Committee to:

(a) review assessment documents and provide advice to the EPBC decision-maker on decisions about whether to add or remove species
(b) oversee periodic or triggered reviews of the Live Import List
(c) provide advice about the suitability of assessment methodologies
(d) review assessment methodologies and assessments delegated to DAFF.

9. Require transparency and accountability

(a) Require public consultation on all applications to add taxa to the Live Import List
(b) Require publication of all assessment documents for decisions about whether to add or remove taxa from the Live Import List, including departmental and expert advice to the decision-maker.
(c) Subject decisions on live imports to the oversight of an inspector-general type role.
(d) Provide third party rights to appeal decisions to add taxa to the Live Import List.

Brief 3: Strengthening the threat abatement system

1. The importance of reform

To stop extinctions and restore ecological health, Australia needs to prevent, eliminate or reduce the major threats to nature ('**threat abatement**'), in addition to protecting and restoring threatened species and ecological communities.

Even if recovery processes were optimal, the current limited and fragmented focus on threats within the EPBC Act and government programs will guarantee further ecological decline.

Threat abatement is necessary to:

- **Prevent new threatened species**: Unless threats are abated, Australia's list of threatened species will continue to grow.
- **Prevent new extinctions**: Unless threats are abated, new extinctions are inevitable, including of species not known to be threatened.
- **Recover threatened biodiversity:** Many species and ecological communities cannot recover without more effective or comprehensive threat abatement.
- **Foster resilience**: The most effective approach to strengthen resilience to unavoidable threats such as climate change is to minimise other threats.
- **Prevent or contain emerging threats**: Stopping or containing new threats before they become entrenched avoids harm and is typically the most cost-effective intervention.

2. Priority gaps and deficiencies

In the 25-year history of the EPBC Act, no threats have been delisted and few threats have been abated to any significant degree – exceptions include longline fishing and invasive rodents on islands – due to systemic deficiencies, including:

- **Ad hoc threat listing:** The identification of threats relies on an onerous, time-consuming nomination and assessment process, and ministerial agreement to assessment and listing – leaving major functional gaps in the listings.
- **Inconsistent classification**: Listed threats differ in scale and severity, ranging from particular (e.g. beak and feather disease) to all-encompassing threats (e.g. novel biota).
- **Lack of focus on emerging threats:** There is no systematic effort to identify and list emerging threats, despite the cost-effectiveness of prevention and early intervention.
- **Barriers to abatement of invasive species (the missing 's' in the EPBC Act):** Despite good intentions, the novel biota KTP listing has stymied threat abatement for invasive species because there is no allowance in the EPBC Act for the preparation of multiple threat abatement plans for a listed KTP. As a result of the novel biota listing, nominations were rejected for invasive species (invasive fish, deer, myrtle rust, and various weed species) whose threats have considerably worsened in the meantime.
- **Optional and slow development of threat abatement plans:** Only a small proportion of Australia's major threats are the focus of a threat abatement plan. The process from nomination to finalisation of a threat abatement plan takes several years.
- **Weak implementation:** Many threat abatement plans have been poorly implemented due to a lack of coordination, funding and commitment by Australia's governments.
- **No intergovernmental agreement:** In contrast to the biosecurity system – which engenders some collaboration under an intergovernmental agreement (e.g. on cost-shared national eradications) – there is no formal agreement by Australia's governments to jointly develop and implement threat abatement plans.[1]

[1] The Australian Government has secured state and territory commitments for the feral cat and escaped garden plants plans.

- **Poor accountability:** There are no requirements for monitoring or reporting on the status of listed threats or progress on threat abatement, even on Commonwealth lands. A requirement for a 5-yearly review specifies no particular standards and is often delayed. There is no independent oversight of threat abatement progress.

3. The EPBC potential

A reformed EPBC Act could foster systematic, collaborative prevention and abatement of major threats (prioritising implementation rather than preparation of plans), with the following elements:

- **Collaborative threat abatement**: Australia's governments would formally agree to work together to abate nationally significant threats. Institutional arrangements – including an executive-level intergovernmental committee – would reflect that commitment.
- **Comprehensive threat listings**: All nationally significant threats would be identified, listed and prioritised, in a logical classification schema.
- **Analysis of measures needed for threat delisting**: The response to each threat listing would be informed by a detailed independent analysis, overseen by the Scientific Committee, of (a) long-term actions needed to effectively prevent, contain or abate the threat, and (b) recommendations for 5–10-year priority actions.
- **Threat abatement plans or strategies reflecting a commitment to actio**n: Each listing of a nationally significant threat would require a response from the Environment Minister, based on negotiation with state/territory governments, informed by the advice of the Scientific Committee, about the agreed 5 to10 year response instrument(s) – for example, a threat abatement plan or strategy, law or policy reform, research.
- **Emerging threat identification and action**: Regular horizon scanning would identify emerging threats that could be listed under an expedited process to facilitate early intervention to prevent or contain a threat before it becomes entrenched.
- **Monitoring, reporting, accountability**: There would be monitoring and regular reporting on the status of each threat and threat abatement progress. Independent oversight and reviews would foster a culture of continuous improvement.

4. Recommendations

1. Comprehensively identify, classify and list nationally significant threats:

(a) Require comprehensive identification and listing of threats to all relevant matters of national environmental significance, not just threatened species/ecological communities.
(b) Apply a hierarchical threat classification schema - key threatening processes (overarching processes such as biological invasions and habitat loss/degradation) and threats of national environmental significance (e.g. a particular invasive species or land clearing).
(c) Ensure listing of threats is a scientific decision by basing listings on a systematic process for identifying threats, coordinated by the Threatened Species Scientific Committee. Maintain a public nomination process to supplement systematic listings.
(d) Regularly review listed threats to ensure the list remains up to date.

2. Establish a category of 'emerging threats of national significance':

(a) Establish a category for listing 'emerging threats of national significance' to facilitate urgent or precautionary interventions to prevent emerging threats from becoming entrenched threats.
(b) Enable rapid listing with a lower burden of proof than for established threats.
(c) Require annual horizon scanning to identify future or emerging threats and publication of an annual update on emerging threats to the Australian environment.

(d) Facilitate early action on looming or emerging threats.

3. Publish expert advice on essential and feasible threat abatement actions:

(a) Require the Scientific Committee, or a threats subcommittee, to prepare a statement for each listed threat of national significance to detail the measures needed – e.g. management actions, law/policy reform, research – to achieve abatement (and delisting) of the threat or the maximum level of abatement that is feasible. This can serve as a foundational document to inform the preparation of threat abatement plans or strategies, indicate reform and research priorities, and track abatement progress.

(b) Require the Scientific Committee, or a threats subcommittee, to recommend priority 5-to-10-year objectives for threat abatement.

4. Aim for joint development and implementation of threat abatement responses:

Informed by advice from the Scientific Committee, and through negotiation with the state and territory governments, the Environment Minister should publish a statement specifying the intended national, jointly implemented response to a listed threat of national environmental significance – including whether it will involve the preparation of a threat abatement plan/strategy or law/policy reform.

5. Enable flexible and/or bespoke response options:

(a) Enable the preparation of a threat abatement plan or strategy, including multiple plans per threat, in flexible formats best fitted to the threat.

(b) Facilitate statutory responses where this is needed to achieve threat abatement – e.g. list and regulate relevant categories of invasive species under s301A of the EPBC Act.

(c) Identify elements of threat abatement responses that must be taken into account for environmental assessments and approvals.

(d) Provide the potential to impose financial levies on activities that exacerbate threats – for the purpose of creating disincentives or to help fund threat abatement (based on the polluter pays principle).

(e) Require implementation of relevant threat abatement responses on Commonwealth lands and in regional plans.

6. Require monitoring and reporting and establish oversight:

(a) Require monitoring and reporting on the status of listed threats and progress on threat abatement. This should include all nationally significant threats (not just those with threat abatement plans) and will help identify trigger trends that warrant a response.

(b) Establish a national environmental standard for reporting on listed threats.

(c) The Environmental Protection Agency should evaluate and report on the implementation and effectiveness of threat abatement responses.

Brief 4: Harmonising national responses to invasive species

1. The importance of reform

Australia's already dire invasive species threats are guaranteed to get much worse unless regulations are enacted to **constrain the sale and transport of emerging and potential invaders within Australia's borders**.

Currently, thousands of plant species and hundreds of fish species with invasive potential present in Australia are completely unregulated. Others are inconsistently regulated – for example, Amazon frogbit, one of Australia's worst emerging aquatic weed threats, under assessment as a weed of national significance, is permitted for sale in half the states/territories.

Weeds are already Australia's most expensive and degrading environmental problem, with a recent National Environmental Science Program (NESP) study finding weed management makes up 81% of the estimated costs of recovering Australia's threatened species (equivalent to 25% of GDP). Another NESP study found that invasive fish are the biggest threat to imperilled native freshwater fish. Both threats have grown since the EPBC Act was enacted, with hundreds more weeds and at least 10 new non-native fish species detected as established in the wild.

For both environmental and productivity reasons, it should be a high priority this term of government to enact measures, including regulation, to prevent invasive threats growing worse.

The good news is that the EPBC Act already provides a regulatory tool that could be used to address substantial post-border gaps in regulation in Australia: section 301A.

2. Priority gaps and deficiencies

The 2009 Hawke review of the EPBC Act found the unconstrained movement of invasive species within Australia 'represents a substantial failure' of state and territory environmental regulation:

> *"Currently, several thousand plant species persist as ornamentals or as naturalised populations in urban settings. They represent a vast reservoir of potential future problems. Movement of these species within Australia is effectively unconstrained …"*

The failure of successive governments to implement s301A of the EPBC Act means:

- invasive risks are growing due to ongoing trade and transport of thousands of unregulated potential invasive species
- inconsistent state/territory laws across 8 jurisdictions create buyer confusion and unnecessary costs for industry
- compliance and enforcement are challenging, and illegal imports are tolerated.

3. The EPBC potential

One of the most consequential decisions of the Albanese Government was the agreement by all environment ministers to jointly prepare a threat abatement plan for escaped garden plants and aquatic weeds. The effectiveness of this plan will depend fundamentally on the willingness of Australia's governments to adopt a nationally harmonised, risk-based scheme to constrain the sale and transport of plants with invasive potential. Use of s301A is probably the best way to facilitate this national approach.

Section 301A enables the making of regulations to:

- provide for the establishment of a list of non-native species which may or would be likely to threaten biodiversity in Australia
- regulate or prohibit the import of species on the list, and the trade of species on the list between Australia and other countries and between state and territory jurisdictions
- regulate or prohibit actions involving species on the list

- provide for plans to eliminate, reduce or prevent biodiversity impacts of the listed species.

The use of s301A for these purposes is consistent with the Intergovernmental Agreement on Biosecurity, which specifies roles for the Commonwealth including (section 34):

- 34(b): providing national leadership for strategic biosecurity issues, including responses to exotic pests and diseases and management of nationally significant established pests and diseases
- 34(c): providing legislative, capacity and capability support to States and Territories, as required, to ensure the effective management of biosecurity risks
- 34(i): fulfilling Australia's obligations under international agreements and strategies.

As noted by the Hawke review, while 'any new measures would involve expense', reforms of this nature 'should engender a high return on the investment'. The benefits would include:

- **National consistency** – harmonisation would allow effective regulation, enforcement and compliance (recognising that domestic borders are highly porous), and certainty for industry (e.g. one national list of prohibited plant species instead of 8 or more lists).
- **Risk-based approach** – comprehensive alignment with risk using best-practice assessment methods is essential for threat prevention and mitigation.
- **Cost-effectiveness** – cost-shared national assessments and regulatory responses would be more effective and less costly than 8 different schemes.

4. Recommendations

1. Retain s301A of the EPBC Act: Retain s301A as an essential element of threat abatement for its potential to provide for nationally consistent risk-based approaches to prevent or abate invasive threats (e.g. escaped garden plants and aquarium fish).

2. Strengthen s301A to require or facilitate implementation:

(a) require the listing of species that represent threats or potential threats to biodiversity in specified categories (these could be specified as national standards)

(b) require the decision-maker for determining responses to the listing (or review) of invasive species listed as nationally significant threats to consider whether regulations under s301A should be developed to facilitate threat abatement.

3. Consider using the provisions under s301A to regulate the sale and transport of emerging and potential invaders, such as plants and aquarium fish with invasive potential.

Brief 5: Safeguarding Australia's important places

1. The importance of reform

Some of Australia's most precious places – World Heritage, National Heritage and Ramsar wetlands sites – face sustained threats, particularly from invasive species. Despite their status as Matters of National Environmental Significance (MNES), the Commonwealth has limited or no capacity to intervene if their management is inadequate to prevent, contain or abate serious threats. For example in 2018 the NSW Government provided legal protections for feral horses in Kosciuszko National Park, part of the Australian Alps national heritage site.

Given Australia's international and national obligations to protect MNES, the Minister should have statutory powers to intervene when the values of such sites are at significant risk.

2. Priority gaps and deficiencies

The EPBC Act lacks clear processes and triggers for the Australian Government to intervene when areas of national and international environmental significance are at significant risk due to inadequate or harmful management.

The current definition of an 'action' under the EPBC Act limits the potential for the Australian Government to intervene if a state or territory government proposes to manage an MNES site – as expressed in a plan, policy or program – in ways that are inconsistent with maintaining the site values or that conflict with national management principles or standards. Although an action such as a proposed introduction of a harmful invasive species to an MNES property would likely constitute a 'controlled action' under the EPBC Act, the failure to take reasonable actions to protect an MNES property from a significant threat (e.g. a harmful invasive species) does not.

3. The EPBC potential

The EPBC Act can be strengthened to enable the Australian Government to better meet its goals and obligations to protect internationally and nationally significant places. This should include the power to intervene in certain circumstances and national standards for management of MNES properties that reflect Australia's obligations to protect and maintain the values of MNES properties. Both the Samuel review and the government's Nature Positive Plan aim for national standards to have a normative effect on non-regulatory decision making.

4. Recommendations

1. Expand the definition of 'action' under the EPBC Act:

(a) The definitions of 'action' should be expanded to include 'a policy, plan or program of a government where these relate to the management of a National Heritage place, World Heritage property or wetland of international significance'

(b) triggers should be specified for when the Australian Government can intervene.

2. Set national environmental standards to define management obligations:

(a) Provide clear expectations for the management of spatially defined MNES, consistent with national and international obligations.

(b) Require proactive management to protect listed values, to identify and manage key threats to those values and to implement relevant threat abatement plans and strategies

(c) Specify processes to be triggered when management expectations are not met.