The background of the top half of the cover features a large, semi-transparent watermark of the word "AITHER" in a bold, sans-serif font. The watermark is composed of several overlapping, slightly offset instances of the word, creating a layered effect. The background itself is a dark teal color with a subtle geometric pattern of triangles and lines.

Review of interactions between the EPBC Act and the agriculture sector

Final report

A final report prepared for the Department of the Environment and
Energy

Friday 28 September 2018

A I T H E R

The Hon. Melissa Price MP
Minister for the Environment

Dear Minister

In accordance with the terms of reference, I am pleased to provide you with the Independent Review of Interactions between the Environment Protection and Biodiversity Conservation (EPBC) Act and the agriculture sector. The Review was designed to make recommendations to improve the implementation of the Act for agriculture while maintaining environmental standards.

This Review has shown that farmers mostly interact with the EPBC Act in relation to the listing processes for nationally threatened species and ecological communities, one of the Matters of National Environmental Significance (MNES) under the Act, and in seeking approvals for new agricultural development which might have an impact on them. To the extent that farmers are aware of the Act, they perceive the Act to be complex and difficult to follow and therefore a barrier to development (and conservation of biodiversity). They also perceive the approach of the Department of the Environment and Energy in implementing the Act to be generally unhelpful, impractical and punitive, although some acknowledge the reduction in the Department's resources to be a contributing factor. Interestingly the number of agricultural referrals of actions that may have an impact on MNES is relatively low at 2.7% of the total of 6002 referrals since the inception of the Act in 2000.

More specifically, farmers prefer to deal with locally based (State/industry) advisers but they also are generally not aware of farmer's obligations under the EPBC Act (and their interactions with State based obligations). The information available on obligations for agricultural development under the EPBC Act is difficult to find and follow. Environmental impact assessment processes and listing processes for MNES are widely viewed by farmers as unpredictable, unclear, complicated, costly, time consuming and impractical for example, determining if an activity is a continuing use or may have a significant impact, determining if a threatened species or community is present, implementing a detailed survey process for relatively obscure species, implementing a spot spraying program for invasive weeds over large areas or dealing with a planted non native crop invaded by a mobile species which is a MNES.

Overall there is a strong view that farmers are disincentivised from referring agricultural actions for consideration and (if relevant) approval by the Minister. Rather than the regulatory "small project by small project" approach currently used, an incentive/market based approach is seen by farmers as likely to be more successful in achieving the Act's objectives.

The Review recommends a number of short, medium and long term actions that cover both improving existing processes and introducing a number of new approaches aimed at making the system easier and more effective for farmers, including for investment and development, while also enhancing the realisation of environmental outcomes.

To promote the protection of national environmental assets and at the same time facilitate the development of agriculture, articulating the "vision" for regulating the agriculture sector - for example, "protecting MNES while minimising the regulatory burden on farmers" - and agreeing the manner of engagement with farmers is intended to guide more productive interactions with the sector. Providing locally based face to face outreach through preferably state based natural resource management agencies to assist farmers in understanding and meeting their obligations at both a

state and federal level is strongly recommended, as is the appointment of a case officer to manage each referral. Consideration should be given to increasing agricultural expertise and understanding in the Department. Web based information and tools should be reorganised and updated to be more targeted, intuitive, usable and functional. An online tool which provides for an automated codified assessment of those actions not requiring EPBC approval and a legislatively based certificate should enable farmers to obtain legal certainty more efficiently.

To reduce the element of surprise of listing of threatened species and communities, nominations should be open for public comment prior to the Minister referring them to the Threatened Species Scientific Committee (TSSC) for consideration. A scientifically qualified farmer should be added to the TSSC and conservation advices and recovery plans should be ground truthed with local practitioners prior to formalisation. Concurrent with a listing recommendation, the Minister should receive Departmental advice on the social and economic impact of that listing and where material, mitigating measures that might be appropriate.

To provide a “carrot” to balance the “stick” approach, there appear to be no strategic approaches with appropriate incentives to enable the agriculture sector to grow and develop (as often encouraged by government policy) while maintaining national environmental standards. The Department should adopt a non statutory regional planning approach with natural resource management organisations in areas where interactions between agriculture and MNES are likely and/or significant to identify priority MNES and develop statutory or non statutory means of protecting them prior to development occurring. In this respect the New South Wales government has made a well resourced offer for their Local Land Services to work with the Department in the two areas suggested to pilot this regional planning approach – the Monaro grasslands and Walgett. While the precise details of such an exercise remain to be decided between the two organisations, this offer provides a real opportunity to test the notions of working with the states on the ground and identifying how the requirements of both jurisdictions can be met in the most efficient and effective manner. I strongly recommend the acceptance of this offer.

Another major element of a more strategic incentive based approach is the recommendation of an initial \$1billion over four years to establish a National Biodiversity Conservation Trust tied to the EPBC Act to support the public benefits of protection of MNES using market based approaches. This would enable the long term protection and management by farmers (among others) of MNES through arrangements such as conservation agreements. A fund such as this could provide an avenue for the protection of MNES identified in regional planning approaches.

I would like to acknowledge the willing support of the Aither team members who worked on this Review. I would also like to acknowledge the assistance and cooperation of farmers especially the National Farmers Federation, and the contributions of other interested parties. Finally in the face of some considerable criticism, officers of the Department have been nothing but helpful and supportive and open to our suggestions.



Wendy Craik AM
28 September 2018

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Abbreviations

ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
ALCA	Australian Land Conservation Alliance
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CRM	Customer Relationship Management
DAWR	Commonwealth Department of Agriculture and Water Resources
DNRME	Queensland Department of Natural Resources, Mining and Energy
DoEE	Commonwealth Department of the Environment and Energy
EIANZ	Environment Institute of Australia and New Zealand Inc.
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 [Cth]
EDOs of Australia	Environmental Defenders' Offices of Australia
EIS	environmental impact statement
ESP	Environmental Stewardship Programme
FPAL	Finalised Priority Assessment List
GDP	Gross Domestic Product
IT	information technology
NSW LLS	New South Wales Local Land Services
MDBA	Murray-Darling Basin Authority
MNES	matter(s) of national environmental significance
NESP	National Environment Science Program
NGO	non-government organisation
NFF	National Farmers' Federation
NHT	Natural Heritage Trust
NRM	natural resource management
NSW DPI	New South Wales Department of Primary Industries
PER	public environment report
PPAL	Proposed Priority Assessment List
RFA	Regional Forest Agreement
RLP	Regional Land Partnership
SOE	Australian State of the Environment Report
TSSC	Threatened Species Scientific Committee

Glossary

Action	Action is defined broadly in the EPBC Act and includes a project, a development, an undertaking, an activity or a series of activities, or an alteration of any of these things. A lawful continuation of an existing use does not require approval under Part 9 of the Act. <i>Source: EPBC Act 1999, Section 523.</i>
Assessment	<p>An environmental assessment of a controlled action under the EPBC Act. There are five different levels of assessment, depending on the significance of the project and how much information is already available. Each level involves considering technical information assembled by the proponent and comments made by the public. <i>Source: DoEE website.</i></p> <p>Assessing an action includes assessing the impacts that the action has or will have, or is likely to have on the relevant matters of national environmental significance. <i>Source: EPBC Act 1999, Section 528.</i></p>
Assessment bilateral agreement	An agreement, entered into by the Commonwealth Environment Minister with a state or territory government that provides for a single environmental assessment process conducted by that state or territory government. Based on the proponent's environmental assessment, that state or territory government provides a report to the Australian Government assessing the likely impacts of an action on the relevant matters of national environmental significance. The Commonwealth Environment Minister and the relevant state or territory government then make separate decisions about whether or not to approve the action. <i>Source: DoEE website.</i>
Common Assessment Method	A collaborative agreement between the Australian Government and the states and territories on a consistent method for the assessment and listing of nationally threatened species and ecological communities. <i>Source: DoEE website.</i>
Condition classes and thresholds	Condition classes and thresholds are specified for many ecological communities listed under the EPBC Act. A threshold represents a point at which an ecological community changes from one reference condition, or class, to another. These help define which areas of an ecological community may be subject to significant impact considerations under the EPBC Act because areas that fall below specified minimum condition thresholds, and are in lower condition classes, are excluded from national protection (for example, very small and or degraded woodland patches that do not meet the minimum thresholds for size, native vegetation cover or species diversity). They also may be used by a land manager to guide management decisions (e.g. thresholds may be used as targets to improve the condition of a particular area to a higher condition class). <i>Source: DoEE website.</i>
Controlled action	A proposed action that has been determined by the Commonwealth Environment Minister (or their delegate) under Part 7 of the EPBC Act to have, or be likely to have, significant impacts on a matter of national environmental significance. Controlled actions require approval under the EPBC Act before they can commence. <i>Source: DoEE website.</i>
Designated proponent	The person designated under Division 2 of Part 7 of the EPBC Act as the person proposing to take an action. <i>Source: EPBC Act 1999, Section 528.</i>
Ecological community	A group of native plants, animals and other organisms that naturally occur together and interact in a unique habitat. Its structure, composition and distribution are determined by environmental factors such as soil type,

	<p>position within the landscape/seascape (e.g. altitude/depth), climate, and water availability, chemistry and movement (e.g. oceanic currents). Species within each ecological community interact with and depend on each other – for example, for food or shelter. EPBC Act listed ecological communities include grasslands, woodlands, shrublands, forests, wetlands, marine, ground springs and cave communities. <i>Source: DoEE website.</i></p> <p>The extent in nature in the Australian jurisdiction of an assemblage of native species that inhabits a particular area in nature and meets the additional criteria specified in the regulations (if any) made for the purposes of this definition. <i>Source: EPBC Act 1999, Section 528.</i></p>
Environmental offset	<p>A measure that compensates for the residual adverse impacts of an action on the environment, after avoidance and mitigation measures are taken. Where appropriate, environmental offsets are considered during the assessment phase of an environmental impact assessment under the EPBC Act. <i>Source: DoEE EPBC Act environmental offsets policy - http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy</i></p>
Matter of national environmental significance	<p>Nationally and internationally important flora, fauna, ecological communities and heritage places to which the EPBC Act applies. These are:</p> <ul style="list-style-type: none"> • world heritage properties • national heritage places • wetlands of international importance • nationally threatened species and ecological communities • migratory species • Commonwealth marine areas • the Great Barrier Reef Marine Park • nuclear actions (including uranium mining) • a water resource, in relation to coal seam gas development and large coal mining development. <p>Other protected matters are:</p> <ul style="list-style-type: none"> • the environment, where actions proposed are on, or will affect, Commonwealth land and the environment • the environment, where Commonwealth agencies are proposing to take an action. <p><i>Source: EPBC Act 1999, Part 3.</i></p>
Referral	<p>A person proposing to take an action that the person thinks may be or is a controlled action must refer the proposal to the Minister for the Minister's decision whether or not the action is a controlled action. Proposals may also be referred by states, territories and agencies of the Commonwealth and states and territories where they have administrative responsibilities relating to the action. The Minister may request referral of a proposal. <i>Source: EPBC Act 1999, Part 7.</i></p>
Significant impact	<p>A significant impact is an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts to the relevant matter of national environmental significance. The Department has</p>

	<p>significant impact guidelines available on its website - http://www.environment.gov.au/epbc/publications/significant-impact-guidelines-11-matters-national-environmental-significance</p> <p><i>Source: DoEE website.</i></p>
Strategic assessment	<p>A landscape scale assessment of a policy, plan or program that can consider a much broader set of actions and their impacts on matters of national environmental significance than individual 'project by project' assessment does. Once finalised, an action undertaken in accordance with an endorsed policy, plan or program does not require approval under the EPBC Act.</p> <p><i>Source: DoEE website.</i></p>

Executive summary

Purpose and scope

The *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act, the Act) is the Australian Government's central piece of environmental management legislation. The purpose of this Review is to assess the impact of the implementation of the EPBC Act on agriculture and identify potential legislative and non-legislative improvements to how agriculture is regulated under the Act without reducing environmental standards.

This Review is restricted to consideration of the agriculture sector; views and ideas on how best to improve the operation of the EPBC Act more broadly will be invited as part of the second independent statutory review of the EPBC Act, which must commence no later than October 2019. Additionally, this report is limited to a review of the Act, including its objectives, as it relates to the protection and management of matters of national environmental significance (MNES).

The EPBC Act

There are numerous pieces of environmental legislation that affect farmers. While states and territories (including local government) have primary responsibility for environmental management, the Australian Government also plays a significant statutory and leadership role through the creation of a framework for ecologically sustainable development. The EPBC Act's objectives include: to provide for the protection of the environment; to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources; to promote the conservation of biodiversity; and to promote a co-operative approach to the protection and management of the environment. The Act places the Environment Minister (the Minister) at the centre of national decision-making for management of nationally and internationally important flora, fauna, ecological communities and heritage places, known as MNES.

The Act creates several mechanisms for achieving its objects, including an environmental impact assessment regime. This provides a framework for determining which development activities are likely to significantly impact MNES on the basis of a broader framework for ecologically sustainable development. It also determines how avoidance and mitigation measures and environmental offsets can enable development to occur, generating an acceptable level of impact to environmental and economic values. This environmental impact assessment process is a major focus of this Review, as is the process for listing and delisting nationally threatened species and ecological communities, one of nine types of MNES recognised in the Act.

Methodology

A targeted stakeholder consultation process was undertaken with farmers and farmer representatives in regional centres and elsewhere. Face-to-face and telephone consultations were conducted with a range of stakeholders. These consultations were targeted toward gathering views from agriculture sector stakeholders, including individual farmers, peak bodies, state and territory governments, environmental groups, interested academics, and individuals with experience dealing with the EPBC Act. In total, 78 individuals were consulted, representing 49 different organisations and agencies. Consultations were conducted in Townsville, Launceston, Walgett, Ilford, Cooma and Broome, in addition to major city consultations in Melbourne, Sydney, Brisbane, Hobart, Canberra and Perth.

In addition to stakeholder consultations, 77 submissions were received from farmers, agriculture sector peak bodies, environmental groups or similar organisations, government departments and their representatives, university academics, policy think tanks and other groups/individuals.

Finally, the Review refers to several other major reviews of the EPBC Act conducted since the Act came into effect 18 years ago. Chief among these is the first statutory review of the Act conducted to date, completed by Dr Allan Hawke in 2009. Other government reports that help provide context for a review of the interactions between the EPBC Act and the agriculture sector include the Productivity's Commission's 2016 [Inquiry Report on the Regulation of Australian Agriculture](#), the Australian Government's 2015 [Agricultural Competitiveness White Paper](#), the [interim report](#) of the Senate Select Committee on Red Tape's examination of the effect of red tape on environmental assessment approvals, and the Australian Government's [White Paper on Developing Northern Australia](#).

Findings

The Review found that there is strong support for retaining the EPBC Act. Only one organisation consulted for the Review (the Institute of Public Affairs) called for the Act to be abolished.¹ Although many stakeholders are not satisfied with the way that the Act is currently administered, there is no coordinated push for the Australian Government to repeal the Act.

It is reasonable to expect that the impacts of the declining state of the environment, climate change and ongoing agricultural development and expansion (in many cases encouraged by government policy) in Australia will generally result in more rather than fewer points of interaction between the agriculture sector and national environment protection law. More plants, animals and ecological communities are likely to be listed as nationally threatened, and agricultural activity will be more likely to occur in locations where those plants, animals and communities are present (both as agricultural activity occurs in new locations and as new areas of remnant threatened vegetation or remnant habitat for threatened species are identified). In light of this, the Review recommends a more proactive and strategic approach to protecting MNES and improving interactions between farmers and the Department of the Environment and Energy (DoEE) in the implementation of the Act.

The most significant concerns raised about the operation of the Act can be summarised as follows:

- There is a lack of clarity around the overarching objectives of regulation of agricultural activity under the Act, and a view that, as it is currently implemented, the Act is neither effectively nor efficiently meeting its regulatory objectives in relation to the sector.
- Many in the agriculture sector believe that farmers, and to a lesser extent agribusiness, are not sufficiently aware of their obligations under the Act and, where they are aware of the Act, often do not adequately understand how to access relevant information or interpret the information on their obligations that is currently available.
- Existing environmental impact assessment processes and threatened species and ecological community listing processes established under the Act are widely viewed as unclear and needlessly complicated, insufficiently transparent, inadequately considerate of the realities of agriculture, and excessively time-consuming and costly for farmers who engage with them. Overall, there is a strong view that farmers are disincentivised from referring agricultural actions for consideration and (if relevant) approval by the Minister due to these perceived or real shortcomings in the implementation of the Act.

¹ Public submission no. 45

- There is a lack of appropriate incentives and strategic approaches to assist the agriculture sector to grow while maintaining national environmental standards, with the EPBC Act viewed as a largely punitive tool, implementation of which is not resulting in improved data, collaboration with state and territory governments and local communities, or the promotion of a view among farmers that Australia's environmental assets are of real value to the agriculture sector.
- DoEE is regarded to be insufficiently resourced to enable timely, appropriate and effective assistance to be provided to project proponents in the agriculture sector.

Recommendations

The Review focused on options for reducing the burden of the regulatory obligations created by the EPBC Act on farmers without reducing environmental standards. The recommendations of the Review suggest these dual outcomes are possible, at the same time as increasing the effectiveness and efficiency of the Act in meeting its stated objectives.

Full implementation of these recommendations will deliver practical benefits for agricultural development and environment protection in Australia. These benefits include:

- locally relevant face-to-face DoEE outreach
- more accessible, functionally improved and automated DoEE systems, including codified certificates where EPBC approval is not required
- enhanced clarity for farmers around when to refer actions and when not to refer actions
- greater cooperation with state- and territory-based organisations (natural resource management organisations or similar) to improve harmonisation between state and territory and Australian Government legislation
- formally qualified farmer membership of the Threatened Species Scientific Committee and joint technical expert/farmer field testing of conservation advices
- faster and more consistent DoEE decision making
- more proactive and strategic regional planning to support protection of MNES (as opposed to reactive project-by-project assessment of impacts)
- enhanced incentivisation of protection of MNES by farmers through the establishment of a National Biodiversity Conservation Trust to invest in MNES conservation where there is a public benefit.

Implementation of the non-capital recommendations will require an increased funding commitment from the Australian Government in the short term (i.e. during the next parliamentary budget cycle), however, efficiency gains can be expected in the medium and long term as the overall cost (per interaction) associated with management of the interaction between the EPBC Act and the agriculture sector is reduced. Positive outcomes for the agriculture sector and for the Australian environment can be expected to increase over this period, with more localised communication and strategic approaches at regional scales increasing farmers' awareness of and engagement with MNES and ultimately improving protection and conservation outcomes from the management of agricultural land.

While the Terms of Reference for the Review restrict its scope to consideration of the interaction between the EPBC Act and the agriculture sector, a number of the Review's recommendations will, once implemented, deliver benefits for other sectors. Some recommendations tailored to the agriculture sector might be adapted to apply to other sectors. These could be considered in the statutory review of the EPBC Act to be conducted in 2019.

AWARENESS AND UNDERSTANDING

Recommendation 1

It is recommended that the Department of the Environment and Energy develop an agreed vision of the desired outcome from implementing the EPBC Act for agriculture.

- An example of such a vision statement could be: ‘To actively protect matters of national environmental significance while minimising the regulatory burden on farmers’.
- This vision statement could be included within an agriculture-oriented supplement to the Department of the Environment and Energy’s current Service Charter, developed in consultation with farmers to set out the manner in which the Department will engage with farmers (e.g. through local face-to-face consultation, consistent case management, development of communications material with advice from an experienced practitioner in farmer communication etc.).

Recommendation 2

It is recommended that collaboration between agriculture sector experts and environment and biodiversity experts be encouraged, to identify innovative practices and activities and areas of prospective agricultural growth over the next ten years. The Department of the Environment and Energy should consider vehicles for promoting this collaboration, such as a biennial ‘outlook workshop’ to be convened with the sector in partnership with the Department of Agriculture and Water Resources, especially the Australian Bureau of Agricultural and Resource Economics and Sciences.

Recommendation 3

It is recommended that an outreach facility (with an initial focus on the agriculture sector) be developed to enable face-to-face interaction with farmers on the implementation of the EPBC Act. Options (which should be monitored and evaluated) for establishing this facility include:

- assessing the effectiveness of current collaboration between the Department of the Environment and Energy and New South Wales Local Land Services, and considering further expansion of this model in other states and territories if the benefits are found to outweigh the costs.
- outposting Department of the Environment and Energy staff.
- contracting suitably qualified locally based and trusted agricultural experts.

Recommendation 4

It is recommended that the Department of the Environment and Energy consider the costs and benefits of developing an agriculture sector specialisation within the Environment Standards Division.

Recommendation 5

It is recommended that individual case officers, including from among outposted officers (if applicable), are appointed within the Department of the Environment and Energy to manage referrals from the agriculture sector.

Recommendation 6

It is recommended that relevant existing information on farmers’ obligations under the EPBC Act is organised on a single webpage (or collection of pages) on the website of the Department of the Environment and Energy. Content for this webpage should be drafted by an individual with experience communicating with farmers, and the webpage should be promoted through hyperlinks on the websites of the Department of Agriculture and Water Resources, the National Farmers’ Federation and other government agencies and peak bodies as necessary.

Recommendation 7

It is recommended that the Department of the Environment and Energy's Customer Relationship Management (CRM) system be functionally improved and updated to record all interactions with customers and potential customers of the Department who refer, or require assessment and approval of conditions and monitoring, under the EPBC Act. The system should also be searchable.

LISTING AND DELISTING

Recommendation 8

It is recommended that the EPBC Act be amended to:

- require that nominations of species or ecological communities for listing under the Act, and all supporting information, be made publicly available for comment for a period of 30 business days, between confirmation by the Department of the Environment and Energy of those nominations that comply with the EPBC Regulations and the referral of those nominations by the Minister to the Threatened Species Scientific Committee for consideration.
- extend the time available to the Threatened Species Scientific Committee to prepare the Proposed Priority Assessment List for the Minister from a maximum of 40 business days to a maximum of 60 business days.

Recommendation 9

It is recommended that the EPBC Act be amended, and appropriate resourcing provided, to expand the membership of the Threatened Species Scientific Committee to include an individual with formal qualifications in science and practical experience in productive landscape management. It is recommended that this be implemented immediately, prior to the change being formalised through an amendment to the Act.

Recommendation 10

It is recommended that the Minister receive advice, concurrently with the listing brief on the relevant species or ecological community, as to the likely location and extent of impacts on the agriculture sector associated with the listing, and, where these might be viewed as material, options available to mitigate any likely significant social and economic impacts of a listing decision.

Recommendation 11

It is recommended that risk-based ground-truthing of conservation advices and recovery plans for listed species and ecological communities be undertaken, with the involvement of local practitioners and technical experts, prior to the formalisation of that advice.

ENVIRONMENTAL IMPACT ASSESSMENT

Recommendation 12

It is recommended that the Department of the Environment and Energy set out what constitutes an acceptable survey method to be undertaken by a proponent prior to the proponent undertaking the work. Additionally, it is recommended that the Department accredit, and regularly audit, a single professional association (e.g. Environment Institute of Australia and New Zealand) to in turn accredit relevant environmental professionals to undertake flora and fauna surveys in support of referrals, noting that individuals may still employ the services of non-accredited individuals.

Recommendation 13

It is recommended that an online tool be established under the EPBC Act to enable individual landholders, or Commonwealth officers or authorised individuals working with landholders, to access automated processing of 'not controlled action' decisions where there is no significant

impact on matters of national environmental significance. This tool should be formalised through an amendment to the Act.

Recommendation 14

It is recommended that, following the Australian Government response to this report, the Department of the Environment and Energy monitor and report back to the Meeting of Environment Ministers on progress against implementation of the recommendations and the success of the recommendations in enhancing harmonisation between the operation of the EPBC Act and each state and territory's existing environment protection and land management legislation.

Recommendation 15

It is recommended that the EPBC Act be amended to allow the holder of an approval to request the Minister, in writing, to revoke, vary or add conditions for environmental approvals granted under Part 9 of the EPBC Act, where an existing condition is no longer relevant, is establishing a perverse outcome, cannot reasonably be undertaken due to changing circumstances or new information, or could be undertaken in a more cost-effective manner.

Recommendation 16

It is recommended that the policy for EPBC Act environmental offsets on private lands be reformed following a review of environmental offsets including by considering options for:

- working toward improving harmonisation of environmental offset assessment methods between jurisdictions, either by developing a common assessment method for offsets or developing a Commonwealth standard for offset assessment methods that states and territories can choose to meet by seeking accreditation.
- providing guidance targeted at agriculture sector stakeholders on how environmental offsets are calculated and when an offset is and is not an appropriate mechanism to manage significant impacts on matters of national environment significance.
- developing a voluntary register of parcels of land containing matters of national environmental significance that may be eligible to be purchased as environmental offsets in future.
- establishing a public register of approved environmental offsets established under the Act, and providing regular reporting on the results of monitoring and evaluation of conservation outcomes.

STRATEGIC APPROACHES AND NEW INITIATIVES

Recommendation 17

It is recommended that datasets developed in support of referrals and assessments be conditioned to Commonwealth standards to enable relevant data to be incorporated into national datasets in a timely fashion and made publicly discoverable, accessible and reusable. Where there is an unacceptable risk that revealing the location of these species or ecological communities may result in their collection or destruction, the Department of the Environment and Energy's sensitive data policy should apply.

Recommendation 18

It is recommended that a priority area for funding in the next round of the National Environmental Science Program or its successor be aimed at providing advice regarding the implementation of the EPBC Act. In addition to providing the Department of the Environment and Energy with responses to specific questions related to the EPBC Act, research priorities could include:

- a national review of approaches to EPBC Act environmental offsets and advice on their effectiveness in achieving stated objectives.

- development of a common assessment method for EPBC Act environmental offsets (see Recommendation 16 in this Review).
- development of a coordinated regional approach to conservation management of MNES and, in particular, threatened species and ecological communities.
- assessment of approaches to long-term monitoring of threatened species and ecological community health in regions where interactions between environment protection objectives and agricultural development activities already occur or are likely to occur in future.
- best-practice approaches for assessment of cumulative impacts on MNES.

Recommendation 19

It is recommended that the Department of the Environment and Energy work with regional natural resource management organisations or other appropriate groups to develop non-statutory regional plans in regions where interactions between environment protection objectives and agricultural development activities are likely to be challenging or extensive, to:

- identify priority matters of national environmental significance within each region and proactively engage with local landholders to provide relevant advice and pursue appropriate statutory and/or non-statutory protection objectives.
- provide for review of the plan (e.g. every ten to fifteen years) in response to new scientific or other knowledge, the impacts of climate change, and other contextual developments.

It is recommended that non-statutory plans in relation to the listed ecological communities of the Monaro and Walgett regions be undertaken as potential pilots for this approach.

Recommendation 20

It is recommended that the EPBC Act be amended to provide for bioregional plans to:

- change the terminology from ‘bioregional plans’ to ‘regional plans’ to better align with existing regional administrative boundaries.
- allow the Commonwealth to develop regional plans (while encouraging in practice that these plans are designed and implemented collaboratively between states/territories/regional natural resource management organisations and the Commonwealth).

Recommendation 21

It is recommended that an initial allocation of \$1 billion over four years be provided to establish a National Biodiversity Conservation Trust fund explicitly tied to the EPBC Act to support the public benefits of protection, including by farmers, of matters of national environmental significance through the adoption of a market-based approach that incentivises farmers (and others) to protect and actively manage matters of national environmental significance outside of legislated requirements. Where there is a public benefit, the Fund should have the capacity and authority to, inter alia:

- support the purchase of private land management agreements acquired under Australian Government environmental offsetting programs.
- directly purchase environment protection and biodiversity conservation outcomes through the acquisition and active management of land, based on a strategic and proactive long-term investment plan.
- make payments to accredited state and territory Trusts that deliver actions in the long-term investment plan.
- compensate landholders affected by the influx of a mobile threatened species into an area causing significant financial burden.

It is further recommended that the Department undertake some preliminary work to develop an approach to assessing public benefits and regularly monitoring, evaluating and publishing the results of the Trust's activities.

Recommendation 22

It is recommended that the Commonwealth provide the Department of the Environment and Energy with the appropriate additional resources required to implement the recommendations in this Review and achieve associated long-term efficiency improvements in the regulation of the agriculture sector under the EPBC Act.

1. Background and scope of this Review

1.1. Scope

The *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) is the Australian Government's central piece of environmental management legislation. It came into effect on 16 July 2000 and is administered by the Department of the Environment and Energy (DoEE).

The EPBC Act creates environmental protection and biodiversity conservation obligations that intersect with and potentially impact many different parts of the Australian economy. One of those impacted is agriculture. Impacts can be short-term or long-term, and positive or negative, and may accumulate in both severity and scale over time.

In March 2018, the then Australian Minister for the Environment and Energy and the Australian Minister for Agriculture and Water Resources (the Minister) [announced](#) that an independent review of interactions between the EPBC Act and the agriculture sector (the Review) would be undertaken with the goal of finding practical ways to help farmers fulfil their obligations under the EPBC Act (DoEE, 2018e). The commissioning of this Review follows the publication by DoEE in 2016 of the final report of the Regulatory Maturity Project, and DoEE's [response](#) to that report, committing DoEE to working in partnership with stakeholders to improve the Department's approach to regulation (Woodward, 2016).

The purpose of the Review is to assess the impact of the implementation of the EPBC Act on agriculture and identify potential improvements to how agriculture is regulated under the Act. The Terms of Reference are clear – that the Review should 'examine the interaction between the EPBC Act and the agriculture and food industry sector, in order to identify regulatory and non-regulatory improvements to assist this sector while maintaining environmental standards'.

Specifically, the Review should complete the following tasks:

1. Understand where real and perceived barriers exist for farmers in navigating the requirements of the EPBC Act, with a particular focus on environmental referrals, assessment and approvals, and the listing and delisting process for threatened species and ecological communities.
2. Undertake targeted consultation with agriculture sector stakeholders and other interested parties to identify concerns in the interaction between the EPBC Act and the sector and highlight areas where efficiencies might be realised.
3. Provide an overview of the appropriateness of the current regulatory settings of the EPBC Act in regard to their impact on the agriculture sector, with consideration to the objects of the EPBC Act.
4. Outline options to practically improve how the agriculture sector is regulated under the EPBC Act and to reduce the regulatory burden faced by farmers and applicants.
5. As far as possible, consider the costs and benefits of the recommendations as required by the Australian Government.

The full Terms of Reference are included at Appendix 1.

Further refinements to the scope of the Review were made after publication of the Terms of Reference, including that:

- the Review should focus on terrestrial food and fibre production.
- fisheries activities are out of scope as these actions are regulated through accredited management plans and approved wildlife trade operations under the EPBC Act.
 - However, it was noted that the Review is open to considering aquaculture developments where there are interactions with the referral, assessment and approval provisions of the EPBC Act, as deemed appropriate by the independent reviewer.
- forestry operations undertaken in areas covered by a Regional Forest Agreement (RFA) are out of scope.
 - However, it was noted that the Review is open to considering private native forestry (where not covered by an RFA) where there are interactions with the EPBC Act, as deemed appropriate by the independent reviewer.
- coal seam gas development, and the relationship between this industry and protection of water resources, are out of scope.
 - However, it was noted that the Review is open to considering mining activities, as far as they impact on the agriculture sector, where there are interactions with the EPBC Act (such as through environmental offsetting requirements), as deemed appropriate by the independent reviewer.
- changes or proposed amendments to state and territory vegetation management legislation are out of scope, though the independent reviewer recognised that farmers may have concerns about how these changes might impact the way in which they interact with the EPBC Act.

Views and ideas on how best to improve the operation of the EPBC Act more broadly will be invited as part of the second independent statutory review of the EPBC Act, which must commence no later than October 2019. The first statutory review was provided to the then Australian Government Environment Minister by Dr Allan Hawke in October 2009. The forthcoming statutory review will have a broader scope than this independent Review, which is restricted to consideration of the agriculture sector. This Review notes where aspects of the operation of the EPBC Act should be considered through the course of the 2019 statutory review.

1.2. Introduction to the EPBC Act

Environmental regulations are numerous and complex and often overlap between levels of government. Under the division of powers between the Australian Government and the states under the Australian Constitution, the states and territories (including local government) have primary responsibility for environmental protection. The EPBC Act is the primary vehicle for implementing ecologically sustainable development at the Australian Government level. It establishes a national approach to a wide range of environmental protection and biodiversity conservation matters, and places the Environment Minister at the centre of national decision-making for management of nationally and internationally important flora, fauna, ecological communities and heritage places, known as matters of national environmental significance (MNES). A brief history of the development of environment protection legislation and responsibilities at the national level is provided in Appendix 2. At present, the nine recognised types of MNES are (*EPBC Act 1999* (Cth), Ch. 2, Pt. 3):

- world heritage properties
- national heritage places

- wetlands of international importance (often called ‘Ramsar’ wetlands)
- nationally threatened species and ecological communities
- listed migratory species
- Commonwealth marine areas
- the Great Barrier Reef Marine Park
- nuclear actions (including uranium mining)
- a water resource, in relation to coal seam gas developments and large coal mining development.

The legislation gives effect to Australia’s obligations under international conventions. The EPBC Act aims to protect crucial environmental and cultural values, at the local, regional, national and international level, for the long-term benefit of Australia. It does this by providing a framework for balancing the conservation of MNES with Australians’ economic and social needs.

Along with its creation of responsibilities and powers for environment protection and biodiversity conservation, the EPBC Act is also the main tool for managing wildlife trade and Commonwealth, National and World Heritage places and values. Although this Review is significantly focused on the role of the Act as the primary environmental impact assessment legislation at the national level, the Act also fulfils a range of other functions, particularly in relation to delivering on Australia’s international obligations. Treaties and declarations to which the Act relates include the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES), the *Convention on Biological Diversity* (Biodiversity Convention), the *Convention on Wetlands of International Importance* (Ramsar Convention), and the *Convention Concerning the Protection of the World Cultural and Natural Heritage* (World Heritage Convention) (Hawke, 2009b, pp. 13-14).

Section 3 of the EPBC Act lists eight objects:

- (a) to provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance
- (b) to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources
- (c) to promote the conservation of biodiversity
- (ca) to provide for the protection and conservation of heritage
- (d) to promote a co-operative approach to the protection and management of the environment involving governments, the community, land-holders and indigenous people
- (e) to assist in the co-operative implementation of Australia’s international environmental responsibilities
- (f) to recognise the role of indigenous people in the conservation and ecologically sustainable use of Australia’s biodiversity
- (g) to promote the use of indigenous peoples’ knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge.

The Act creates several mechanisms for achieving its objects, including an environmental impact assessment regime. This provides a framework for determining which development activities are likely

to significantly impact MNES. It also determines where avoidance and mitigation can enable development to occur. Using environmental offset measures a project may be approved where residual impacts to environmental and cultural values are acceptable. This environmental impact assessment process is described in more detail in Chapter 3 of this Review.

Importantly, the Minister cannot intervene in a proposed action unless it has had, will have or is likely to have a significant impact on one of the nine types of MNES, even though there may be other undesirable environmental impacts associated with the proposed action. Generally, environmental matters that are not MNES are the concern of state and territory governments. The Minister does not have the power to act as a general 'court of appeal' and intervene in decisions of state or local governments that are not likely to significantly impact MNES. As noted in the 2009 Hawke review, 'the Environment Minister is not, and should not be, the arbiter of last resort on all environmental issues' (Hawke, 2009b). Additionally, although it is a central piece of legislation, the EPBC Act is just one tool available to the Australian Government to protect Australia's environment and not the most appropriate or relevant tool for many activities (Hawke, 2009).

The EPBC Act has undergone multiple amendments and operational changes since it was established. However, not all significant changes have required legislative amendments (for example, consideration of environmental offsets). A complete list of legislative items that amend the EPBC Act can be found on the [Federal Register of Legislation](#) (Federal Register of Legislation, 2018).

1.3. Methodology

This Review was conducted between April and September 2018. Information on the independent reviewer is available in Appendix 3.

1.3.1. Briefing paper

A briefing paper prepared to inform stakeholders of the purpose, scope and timing of the Review was published on the DoEE website on 7 May 2018. A copy of the [briefing paper](#) is available online (Aither, 2018).

The briefing paper was intended to stimulate discussion about the Review. It set out questions that were used to frame targeted consultations with farmers, industry groups and other stakeholders through the course of the Review. These questions provided a structure for respondents to consider in making public submissions.

1.3.2. Targeted consultations

The Review conducted face-to-face and telephone consultations with a range of stakeholders in seven Australian states and territories between April and July 2018. Consultations were targeted toward gathering views from agriculture sector stakeholders, including individual farmers, sector peak bodies, state governments, environmental groups, interested academics, and individuals with experience dealing with the EPBC Act.

In total, the Review team consulted 78 individuals, exclusive of meetings conducted with DoEE and in addition to large groups of people engaged with through the independent reviewer's discussions at meetings of the National Farmers' Federation (NFF) Sustainable Development Committee and Members Council. These 78 individuals represented 49 different organisations and agencies, and included nine individual farmers. The Review team contacted an additional 26 individuals (across 21

organisations or agencies) who either declined or failed to respond to an invitation to participate in a consultation.

Consultations were conducted in Townsville, Launceston, Walgett, Ilford, Cooma and Broome, in addition to major city consultations in Melbourne, Sydney, Brisbane, Hobart, Canberra and Perth. Some consultations were conducted by phone.

A list of those consulted for this Review can be found in Appendix 4.

1.3.3. Submissions

Public submissions to the Review were invited between 7 May 2018 and 22 June 2018.

In total, 77 submissions were received by the Review, consisting of 57 public attributable submissions, eight public anonymous submissions, and 12 confidential submissions. Submissions were received from:

- individual farmers and other concerned individuals (35)
- agriculture sector peak bodies (12)
- environmental groups or similar (12)
- government departments and their representatives (10)
- university academics, policy think tanks or other (8).

A list of submissions received can be found in Appendix 5.

1.3.4. Other reports

In preparing this report, a range of relevant materials were referred to, including the Productivity's Commission's [Inquiry Report on the Regulation of Australian Agriculture](#) (Productivity Commission, 2016), the [Agricultural Competitiveness White Paper](#) (Commonwealth Government of Australia, 2015a), the Senate Select Committee on Red Tape's [2017 interim report on the effect of red tape on environmental assessment approvals](#) (Department of the Senate, 2017), and [Our North, Our Future: White Paper on Developing Northern Australia](#) (Office of Northern Australia, 2015). A full list of references is included at the end of this report.

1.4. Past reviews of the EPBC Act

The EPBC Act is subject to statutory reviews at least once every ten years, under Section 522A of the Act, and additional reviews as needed. Several major reviews have been carried out since 1999.

The [final report](#) of the first statutory review of the Act was tabled in Parliament on 21 December 2009, with the next due to be completed in 2019 (Hawke, 2009b). Although the review recommended that the EPBC Act be repealed and replaced with a new Act, the review was broadly supportive of the Act and found that the Act had many positive features that it recommended retaining, including:

- clear identification of the MNES
- the Minister's role as the key decision-maker
- public participation provisions

- explicit consideration of social and economic issues
- statutory advisory mechanisms
- the strong compliance and enforcement regime.

However, the review also found that the Act was a product of its time and its fitness for purpose could be improved consistent with new information and understanding. It recommended that the Act be repealed and replaced and that the scope of a new *Australian Environment Act* be significantly broader than that of the existing Act (Hawke, 2009b). The review also recommended that regulatory burden be reduced by removing unnecessary regulation and improving efficiency, and by funding administration so that early investments could be made to make the regulatory system work more smoothly (Hawke, 2009b).

The Australian Government released its [response](#) to the review in 2011 (Department of Sustainability, Environment, Water, Population and Communities, 2011). The government response largely focused on operational changes, and did not support the review's recommendation to redraft the Act, but rather proposed a set of amendments along four themes (Department of Sustainability, Environment, Water, Population and Communities, 2011):

1. a shift from individual project approvals to strategic approaches, including new regional environment plans
2. streamlined assessment and approval processes
3. better identification of national environmental assets, including listing 'ecosystems of national significance' as a MNES
4. cooperative national standards and guidelines to harmonise approaches between jurisdictions and foster cooperation between stakeholders.

In 2007, the Australian National Audit Office reviewed actions taken under the Act since its commencement into threatened species and communities (Australian National Audit Office, 2007). The audit was critical of the Australian Government Department then in charge of administering the Act for a lack of progress in listing threatened species and ensuring compliance with environmental law.

Many of the themes and recommendations developed in past reviews of the EPBC Act have been raised again during consultations for this Review and in written submissions. The recommendations made in this Review draw on recommendations made in past reviews of the Act and in other related reports, such as the Productivity Commission's *Inquiry Report on the Regulation of Australian Agriculture* (Productivity Commission, 2016). There is relatively strong agreement between this Review and other related reviews and reports on the broad direction of legislative and operational reforms required to enhance the effectiveness and efficiency of the EPBC Act in meeting its objects. Related to this is the observation that there is significant capacity for improvements to the way that the EPBC Act interacts with the agriculture sector, including those improvements recommended in this Review, to be applied to interactions between the Act and other sectors of the Australian economy.

2. Agriculture in the Australian environment

This chapter provides a brief overview of the state of Australia's terrestrial natural environment and biodiversity. An overview of the agriculture sector is also provided, summarising its economic significance and likely drivers of future development. Agriculture's interaction with a changing environment is also covered.

A general trend of more rather than less interaction between agricultural development and environmental protection and biodiversity conservation objectives can be expected, because of the likely expansion and intensification of agricultural activities. Such interaction could have positive implications for both sectors. Modelling by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) found that 'markets that support carbon sequestration could benefit farmers and rural communities (particularly in New South Wales and Queensland), increasing farm incomes by more than 30 per cent, and national income by up to 3 per cent above existing trends' (CSIRO, 2015). Under the Australian Government's Emissions Reduction Fund vegetation management accounts for 65 per cent (122m tonnes CO₂-E) of contracted abatement, which generally involves crediting carbon storage from vegetation regrowth by removing stock by fencing or preventing land clearing (Climate Change Authority, 2017). On the other hand, potential negative implications include accelerated loss of biodiversity due to the expansion and intensification of agricultural development in native species habitat and decreased resilience of both the environment and agriculture in the face of climate change.

2.1. Australia's environment and biodiversity

Australia is one of the most biologically diverse countries in the world, containing more endemic species of flora and fauna than 98 per cent of the world's countries (Commonwealth Government of Australia, 2015b). The health and condition of Australia's environment has implications for the health of the economy, including for agriculture. For example, healthy river flows support irrigated activities, reductions in erosion maintain soil cover and support soil productivity, and improved vegetation reduces salt intrusion of soils and dust storms, supporting crop development. Over the past two centuries, the natural ecology of Australia has been subject to considerable modification (Jackson, et al., 2016). For example, since European settlement approximately 13 per cent of native vegetation has been converted for various land uses, and a further 62 per cent is subject to some degree of disturbance (Jackson, et al., 2016). These changes have occurred alongside the general decline in the state of the environment.

Australia's biodiversity is considered to be in a generally poor condition and on a declining trend. Since European settlement, over 130 Australian species have become extinct (Commonwealth Government of Australia, 2015b). The total number of threatened species listed under the EPBC Act has been increasing since its establishment in 2000. As at August 2018, there are 511 animal and 1,355 plant species listed as threatened or extinct under the EPBC Act (DoEE, 2018d). According to the *State of the Environment 2016* (SOE) report, pressures on Australia's biodiversity are considered to be worsening and are likely to continue to do so unless there is significant change to biodiversity and broader conservation management (Jackson, et al., 2016).

The SOE 2016 report lists multiple pressures on the Australian environment (Jackson, et al., 2016). Many of these pressures, such as land-use change, habitat fragmentation and invasive species, have occurred over the past century or longer, while others, such as climate change, have more recently had measurable impacts (Jackson, et al., 2016). Cumulative impacts, including from interacting pressures, are amplifying threats to the environment (Jackson, et al., 2016).

Two critical drivers of environmental change are population growth and economic activity (Jackson, et al., 2016), both of which are projected to grow in the next few decades (CSIRO, 2015). The 2015 *CSIRO Australian National Outlook* report found that Australia can continue to experience economic growth while reducing pressures on the environment. Policy choices and institutional settings will be crucial to facilitating such interactions and balancing the outcomes (CSIRO, 2015).

2.1.1. Land

Land clearing, habitat fragmentation and livestock grazing (the dominant land use) are among many pressures affecting biodiversity in Australia. Over half of the species listed as threatened under the EPBC Act are considered to be at risk from habitat fragmentation (Jackson, et al., 2016).

The condition and productivity of soil in Australia is affected by salinity, soil carbon stock, acidification and erosion. Australia has low baseline soil carbon stock, and land clearing, intensifying land use and a drying climate are causing further declines (Jackson, et al., 2016). Soil acidity is also a major challenge in Australia, affecting approximately 50 per cent (50 million hectares) of Australia's agricultural land (Jackson, et al., 2016). Soil acidification has implications both for the environment and for the agricultural sector, limiting the types of species and varieties of vegetation and crops that can grow in these soils.

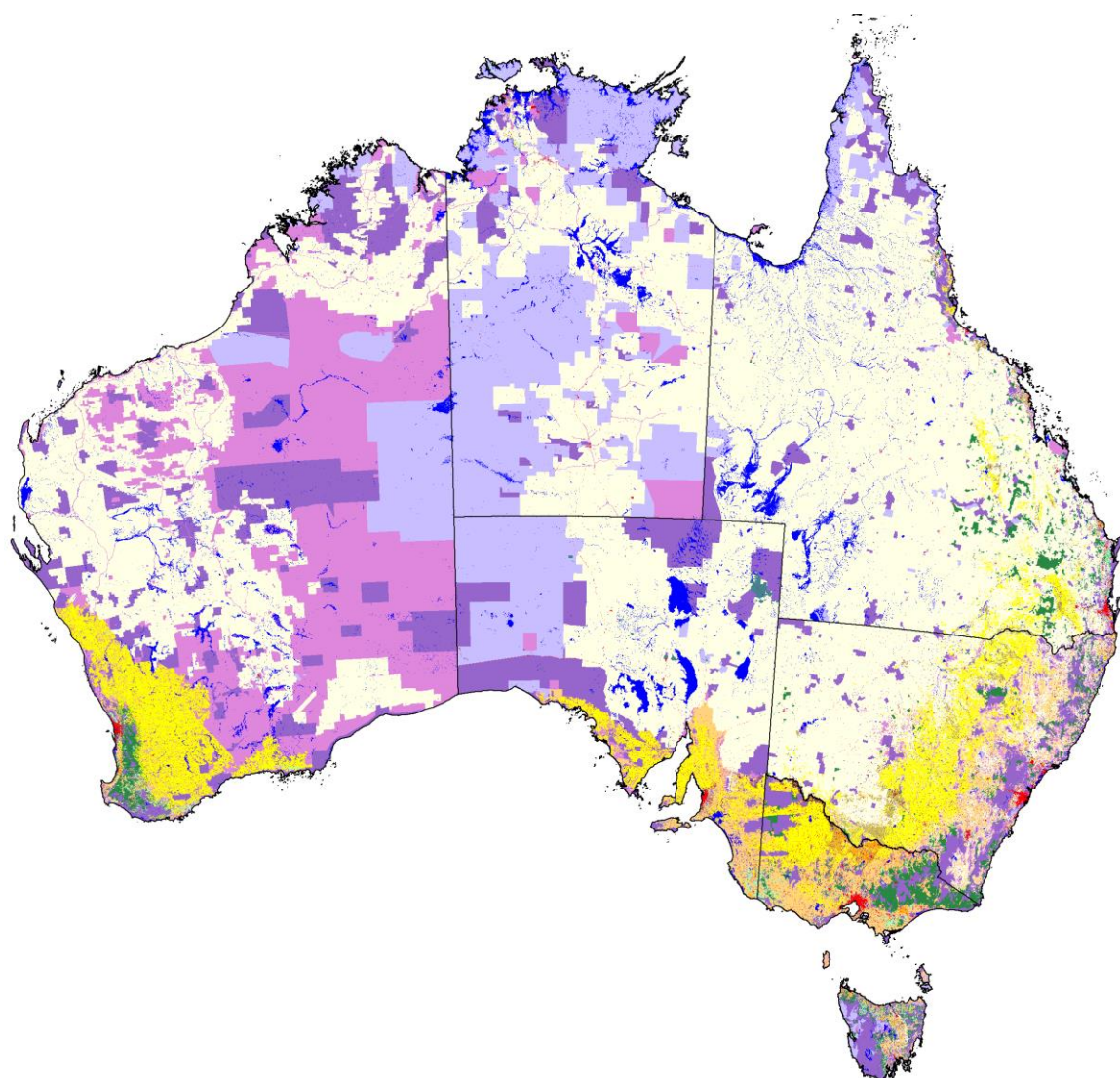
2.1.2. Climate

Australia's climate is naturally highly variable with low mean rainfall and high rainfall variability compared with most other countries. This variability is likely to increase with a changing climate (Bureau of Meteorology and CSIRO, 2016). Climate modelling predicts major changes in future rainfall, including lower total rainfall in southern Australia and greater severity and incidence of droughts and floods (Bureau of Meteorology and CSIRO, 2016). Winter and spring rainfall will probably continue to decrease across southern Australia while time spent in drought will increase. However, rainfall has increased across parts of northern Australia since the 1970s (Bureau of Meteorology and CSIRO, 2016).

Climate change is an important influence on both agriculture and the environment. The duration, frequency and intensity of extreme heat events has increased across much of Australia, as has extreme fire weather and fire season length (Bureau of Meteorology and CSIRO, 2016). Weather conducive to fire events is expected to become more regular in southern and eastern Australia (Bureau of Meteorology and CSIRO, 2016). Australia's mean surface air temperature and surrounding sea surface temperature have both warmed and this is likely to continue (Bureau of Meteorology and CSIRO, 2016). As a result, many in the agriculture sector have diversified their operations in commodities, practices and locations to ensure annual production is maintained.

2.2. Australian agriculture

Agriculture accounts for 58 per cent of Australia's land use (ABARES, 2017). The largest single land use type by land area – in agriculture specifically and in Australia overall – is grazing of native vegetation, which accounts for 45 per cent of the Australian landmass. Ninety per cent of this occurs on leasehold land. Figure 1 shows agricultural and other land use in Australia in 2017.



Land use

Nature conservation	Plantation forestry	Irrigated horticulture
Other protected areas	Dryland cropping	Urban intensive uses
Minimal use	Dryland horticulture	Intensive animal and plant production
Grazing native vegetation	Land in transition	Rural residential and farm infrastructure
Production forestry	Irrigated pastures	Mining and waste
Grazing modified pastures	Irrigated cropping	Water

Source: ABARES, 2018c.

Figure 1 Catchment scale land use in Australia, 2017

Agriculture is an important contributor to Australia's economy, contributing between two and three per cent of gross domestic product (GDP) (Commonwealth Government of Australia, 2015a). Australian farmers provide almost 93 per cent of domestic food supply and generated 13 per cent of export revenue in 2014 (Batt, 2015). In 2016-17, the gross value of farm production in Australia was \$62.3 billion. This output is the product of 85,681 farm businesses employing approximately 251,000 people (ABARES, 2018b). In the same year, the total value of Australian agricultural exports was \$49.0 billion (ABARES, 2018b), a record high for the industry, demonstrating the importance of export markets to the future of Australian agriculture. To illustrate this point, 71 per cent by volume of total Australian

grains, oilseeds and pulses production in 2016-17 was exported (ABARES, 2018b). While agriculture's current contribution to GDP is lower than in the past, this change reflects the growth of other sectors of the economy rather than a decrease in absolute agricultural output.

Drivers which will influence the development of Australian agriculture include domestic and international demand for Australian produce and changes in agricultural practices. Different types of agricultural activity are being undertaken and use of technological advancements is increasing. The agriculture sector will face challenges from climatic and environmental conditions such as drought, rising temperatures and increasing risk of natural disasters, which will impact on the two drivers mentioned above. Domestically, environmental change will differentially impact the physical environmental conditions under which agriculture operates in different parts of Australia, changing the suitability of the land and climate for certain land use practices in some geographical locations. At an international scale, climate change will impact global supply and demand chains and so shape demand for Australian produce.

Recent major government policy statements on agriculture include the Australian Government's 2015 [*Agricultural Competitiveness White Paper*](#) (Commonwealth Government of Australia, 2015a), which committed \$4 billion to investing in opportunities for strengthening sector security and remaining competitive, and [*Our North, Our Future: White Paper on Developing Northern Australia*](#) (Office of Northern Australia, 2015), which established the \$75 million Cooperative Research Centre for Developing Northern Australia with an initial focus on agriculture, food and tropical medicine. Policies target agriculture itself as well as associated assets such as transport routes and water infrastructure. The Australian Minister for Agriculture and Water Resources has also stated that he supports the NFF's vision for agriculture to become a \$100 billion a year industry by 2030 (Minister for Agriculture and Water Resources, 2018), as set out in [*Talking 2030: Growing agriculture into a \\$100 billion industry*](#) (NFF and KPMG, 2018b).

States and territories have developed targets for growing the size and productivity of the sector. For example, the Northern Territory recently released the Department of Primary Industry and Resources' [*Strategic Plan 2018-2022*](#) (Department of Primary Industry and Resources, 2018), [*Growing the Northern Territory: Opportunities for plant industries in the NT*](#) (Department of Primary Industry and Resources, 2016) and [*Investing in the Horticultural Growth of Central Australia*](#) (Department of Primary Industry and Resources, 2017). These strategies focus on the growth of new types of agriculture on land that was not previously thought suitable for agriculture. Western Australia's [*AgriFood 2025*](#) initiative aims to double the real-term value of sales from Western Australia's agri-food sector between 2013 and 2025 (Department of Agriculture and Food, 2017). Tasmania's *AgriVision 2050* establishes a target for growing the value of the agriculture sector in Tasmania tenfold to \$10 billion per year by 2050 (Department of Primary Industries, Parks, Water and Environment, 2016). Queensland has recently suggested that 'there is significant scope for expanding more intensive land uses, manyfold in some cases, from a purely agronomic point of view... Any such expansion would be subject to considerations such as infrastructure, markets, environmental impacts and alternative land uses' (Department of Agriculture and Fisheries, 2018).

2.2.1. Consumer demand

Growing demand in domestic and international markets and recent trade agreement are increasing the economic incentive for agricultural production.

The Australian population grew 1.6 per cent in 2017 (Australian Bureau of Statistics, 2018). The population is projected to reach between 42.4 million and 70.1 million in 2101 (Australian Bureau of Statistics, 2013). A growing population means growing demand for agricultural products, particularly food, which will increase demand on domestic production. Currently, Australian farmers produce almost 93 per cent of Australia's daily domestic food supply (Batt, 2015).

International demand is also increasing. By 2050, the global population is projected to grow by over 2.2 billion to reach 9.8 billion people. Australia currently exports around 70 per cent of its food production, and government and industry-led strategies seek to continue this trend, including through free trade agreements (Langridge & Prasad, 2013). Agricultural export, particularly of food products, is an important focus of government and industry planning, as seen through initiatives such as the Australian Government's 2013 [National food plan: our food future](#) report, which focuses heavily on exports. A core driver of international demand is Asia's increasingly wealthy middle classes, which is anticipated to contribute 85 per cent of the global growth of the middle class by 2030 (Department of Agriculture, Fisheries and Forestry, 2013). For example, Australia's reputation for 'clean and green' agriculture products is important to the Chinese market, driving demand for products such as infant formula (Eady & Hajkowicz, 2015; Pash, 2018). From 2006-07 to 2016-17, the share of Australia's total farm exports shipped to Asia increased from 52 per cent to 69 per cent (ABARES, 2018a).

2.2.2. Agricultural practices

Location

Climate change and land use competition are influencing the location of different types of agricultural activity in Australia. For example, agricultural development is being encouraged in northern Australia. This is partially associated with increasing rainfall in this region and decreasing rainfall in traditional farming areas in south eastern Australia: May-July rainfall in southwest Australia has decreased 19 per cent since 1970 and April-October (growing season) rainfall has reduced 11 per cent in the continental southeast since the 1990s (Bureau of Meteorology and CSIRO, 2016). However, activity in northern Australia is also being driven by government and industry promotion and support for irrigated agriculture and new agricultural ventures, including through the *White Paper on Developing Northern Australia* (Office of Northern Australia, 2015), which identifies 17 million hectares of land in the north with soils potentially suitable for agriculture. Expansion into many of these areas would likely entail practices not currently in widespread usage on this land, such as irrigated agriculture and extensive groundwater usage (CSIRO, 2009).

Agricultural expansion is also likely to be increasingly constrained by competition for land for other uses, including urban and infrastructure development, mining, natural resources, carbon sequestration, and land for environmental offsets and buffers and conservation and heritage values (Jackson, et al., 2016). The most intense competition for land is expected in coastal areas and in strategically valuable land surrounding major cities. Land use competition means that agricultural expansion is likely to occur in areas that have not traditionally been used for agriculture, including in or near environmental assets.

Technology and innovation

Developments in technology and innovation can radically increase farm productivity and will play a crucial role in maintaining productivity. Australia's recent agricultural productivity growth rate averages 1.1 per cent, which is notably lower than the global average of 1.7 per cent (ABARES, 2018a). Innovation and technology is a focus of many agriculture strategies and policies, such as the NFF's *Talking 2030: Growing agriculture into a \$100 billion industry* (NFF and KPMG, 2018b) and the Australian Government's [Rural Research, Development and Extension Priorities](#) (DAWR, 2018a). It can also have significant impacts on agriculture's effect on the environment.

For example, practices such as controlled traffic farming have been shown to increase productivity and efficiency but require particular environmental conditions (i.e. straight boundaries) to be productive (Grains Research and Development Corporation, 2013). Similarly, larger average farm size can improve productivity but can also contribute to clearing of larger areas, including patches of land providing connectivity between regions of native animal habitat, to achieve these gains. Larger

farm sizes are a growing trend, driven by factors including market competition, automation and farm consolidation (Turnour, 2014).

Genetically modified crops and new breeding technologies have a significant impact on agriculture. They have the potential to deliver beneficial characteristics in crop plants, including increased yields, salt, insect and disease resistance and climate tolerance, which can increase agricultural production within the constraints of limited land and water resources. Potential environmental impacts include reliance on stronger herbicides and decreasing crop diversity. Australia lacks consistent regulation of genetically modified crops, which are currently banned in South Australia and Tasmania (Primary Industries and Regions, n.d.; ABC News, 2014) but are being used in other states and territories where usage has been connected with increased crop yields (NFF and KPMG, 2018b).

Water supply is a focal point for innovation, for example in Tasmania where a significant investment in modern irrigation has greatly increased agricultural productivity. However, in other parts of the country, already constrained water resources are projected to come under greater pressure and the importance of using water to maintain the environment has been recognised through relatively recent initiatives like the Murray-Darling Basin Plan and the establishment of the Commonwealth Environmental Water Holder and various state environmental water holders. The environment's claim on a portion of the available water resource means that the agriculture industry, already the biggest national user of freshwater supplies, is likely to continue to increase its water-use efficiency as environmental water demands increase. Technological innovation can drive productivity, for example, the wireless network which controls, monitors and measures Victoria's Goulburn-Murray irrigation system (NFF and KPMG, 2018b).

However, there are limits to the degree to which technological developments and innovation can alleviate pressure on natural resources. CSIRO research indicates that technological advances and improved farming practices may only be sufficient to make up for the impacts of climate change (Vidot, 2017; Hochman, Gobbett, & Horan, 2017). Increasing dependency on technology and innovation to maintain productivity can also create risks. For instance, dependency on imported fertiliser and fuel leaves Australia susceptible to supply chain shocks and can influence the balance of chemicals used in farming (Eady & Hajkowicz, 2015).

3. Interactions between agriculture and the implementation of the EPBC Act

The majority of interactions between farmers and the EPBC Act currently occur in the context of the environmental impact assessment regime established by Chapter 4 of the Act. This chapter of the report describes the environmental impact assessment process and outlines the current status of those interactions. It details the steps farmers are required to understand and undertake, depending on their individual circumstances:

- be aware that the Act exists
- know and understand their obligations under the Act
- determine whether or not their proposed farming activities require referral under the Act
- refer individual actions under the Act
- participate in an assessment process to determine the potential impacts of actions on matters of national environmental significance
- comply with any conditions placed on approval of actions, including where land has been purchased or acquired as an environmental offset.

3.1. Knowing when to engage with the Act

The EPBC Act provides a framework to protect and manage MNES. In part, it does this by prohibiting taking an 'action' that has, will have or is likely to have a significant impact on a protected matter, without approval (*EPBC Act 1999* (Cth); *EPBC Regulations 2000* (Cth)). Actions that meet this criterion are known as 'controlled actions'. Section 523 of the EPBC Act defines an action as including a project, development, undertaking, activity, or series of activities, or an alteration to any of those things. Any person proposing to take an action that the person thinks may be or is a controlled action must refer the proposal to the Minister for the Minister's decision as to whether the action is a controlled action (*EPBC Act 1999* (Cth), Sec. 68). This referral process is described in more detail in Chapter 3.2 of this Review.

In simple terms, under the EPBC Act, it is every individual proponent's responsibility to determine whether:

- the action they propose to undertake has, will have, or is likely to have an impact on a MNES (see Chapter 3.1.1)
- any impacts, or likely impacts, on a MNES are significant (see Chapter 3.1.2)
- the proposed action is exempt from the requirement for approval established by the Act (see Chapter 3.1.3).

3.1.1. Impact on MNES

As described above, there are presently nine recognised types of MNES named in the EPBC Act. Historically, agriculture sector actions referred under the Act have been referred on the basis that they will have or are thought likely to have a significant impact on:

- world heritage properties
- national heritage places
- wetlands of international importance (often called ‘Ramsar’ wetlands)
- nationally threatened species and ecological communities
- listed migratory species, or
- the Great Barrier Reef Marine Park.²

Consideration of the first five of these six MNES requires farmers to refer to lists of individual properties, places, wetlands, species or ecological communities to determine whether a MNES is, or is likely to be, impacted by the proposed action or not.³ When considering nationally threatened species and ecological communities and listed migratory species, proponents may need to refer to DoEE’s [Protected Matters Search Tool](#) and/or commission flora and fauna surveys to gather further information on the presence of plants, animals and ecological communities on their property.

An action may have both beneficial and adverse impacts on the environment. However, only adverse impacts on MNES are considered when determining whether or not an action is a ‘controlled action’ that requires further assessment and approval under the Act (DoEE, 2013).

3.1.2. Significant impact

DoEE’s [Significant Impact Guidelines 1.1 – Matters of National Environmental Significance](#) define a significant impact as ‘an impact which is important, notable, or of consequence, having regard to its context or intensity’ (DoEE, 2013). This can be understood as a major adverse impact on a MNES, noting that even relatively small impacts may be significant for a species that is critically endangered (but possibly not for one that is listed as vulnerable). The assessment of significant impacts considers the sensitivity, value and quality of the MNES which may be impacted, as well as the intensity, duration, magnitude and geographic extent of the impact on the MNES.

‘Likely’ impacts do not need to have a probable or greater than 50 per cent chance of occurring as the result of an action: it is enough that the significant impact is a real or not remote possibility (DoEE, 2013). In the case of scientific uncertainty about the impacts of an action and serious or irreversible potential impacts, the EPBC Act is applied with a precautionary approach. This means that a lack of certainty about an action’s potential outcomes does not automatically justify a decision that the action is not likely to have significant outcomes.

3.1.3. Continuing use

Some actions may be exempt from the requirement for approval by the Minister because the action represents an instance of ‘continuing use’.

Section 43B of the EPBC Act states that a person may take an action without an approval if the action is a lawful continuation of a use of land, sea or seabed that was occurring immediately before the commencement of the Act (i.e. before 16 July 2000). Subsection 3 specifies that neither of the following is a continuation of a use of land, sea or seabed:

² Based on information provided by DoEE.

³ For further information on the listing and delisting process for nationally threatened species and ecological communities, refer to Chapter 6 of this Review.

- an enlargement, expansion or intensification of use
- either any change in the location of where the use is occurring, or any change in the nature of the activities comprising the use, that results in a substantial increase in the impact of the use on the land, sea or seabed.

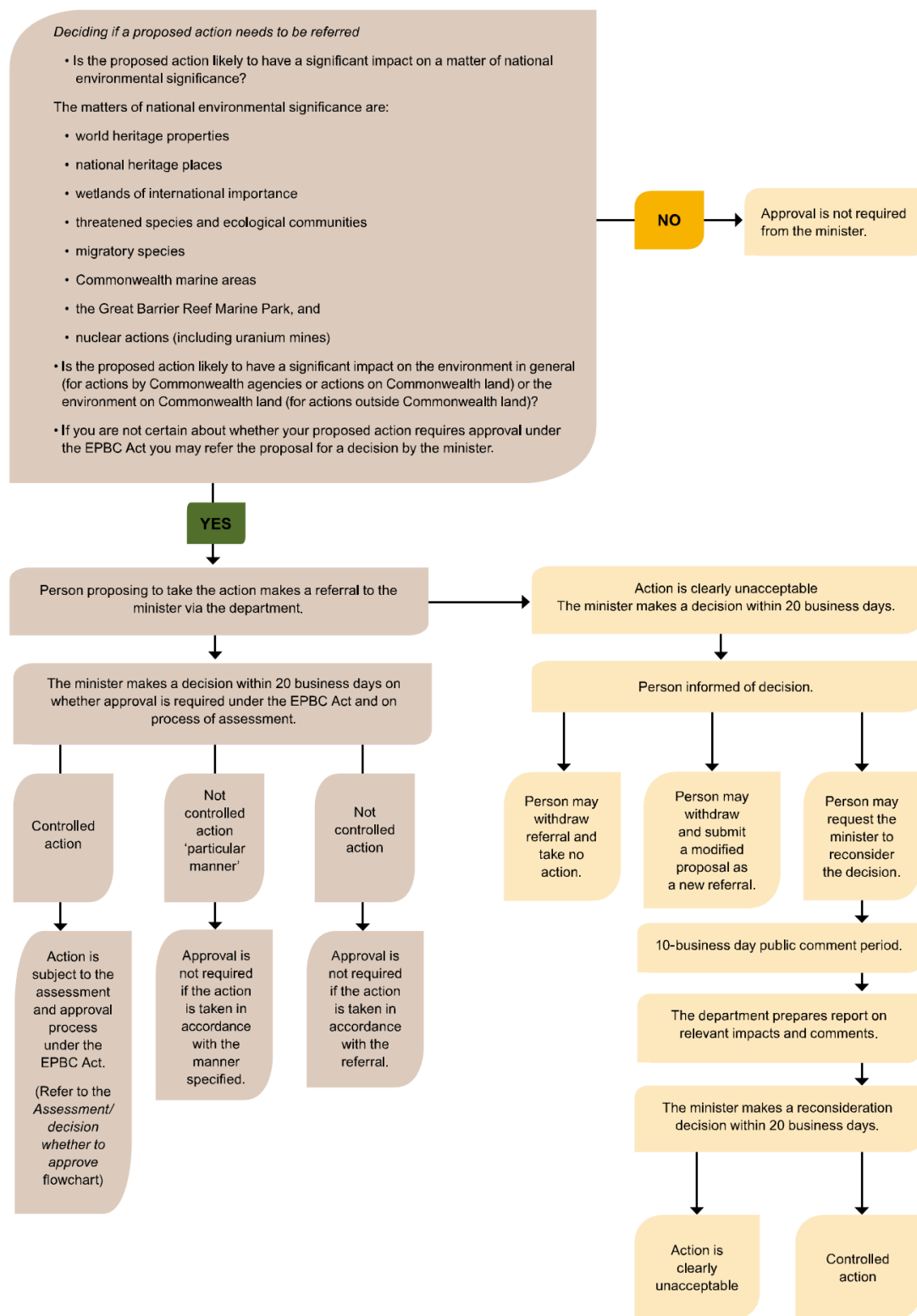
DoEE has prepared advice specifically for the agriculture sector on the types of agricultural developments unlikely to require approval under the EPBC Act (DoEE, 2017). These include:

- ongoing grazing, horticultural or cropping activities
- maintaining existing fences, access tracks and firebreaks
- maintaining existing farm gardens and orchards
- maintaining existing farm dams or water storages
- maintaining existing pumps and clearing drainage lines
- replacing and maintaining sheds, yards and other buildings
- targeted control of weeds and spraying for pests on individual properties or roadside verges with minimal disturbance to native species (e.g. selective spot spraying)
- road maintenance, including grading on the road edges
- moving farm vehicles and machinery providing there is a minimal impact on native vegetation
- the continuation of historic controlled burning for wild fire protection.

If a proposed agricultural development does constitute continuing use, then it is exempt from further consideration under the EPBC Act regardless of what matters of MNES are present or the level of impact the proposed action will or may have. As with other provisions of the EPBC Act, it is the individual proponent's responsibility to determine whether or not their proposed action constitutes continuing use. Proponents may seek guidance from DoEE on this and other aspects of their obligations under the Act.

3.2. Referring an action

As noted above, any person proposing to take an action that is not a continuing use and that the person thinks may be or is a controlled action must refer the proposal to the Minister for the Minister's decision whether or not the action is a controlled action. The first step in this process is determining whether or not a proposed activity constitutes a continuing use under the EPBC Act. If it is a continuing use, the activity can proceed without referral. This referral process is set out in Figure 2 below.



Source: Department of the Environment, Water, Heritage and the Arts, 2010.

Figure 2 EPBC Act environmental impact assessment process – referral

On receipt of a referral, the Minister (or his or her delegate) will determine whether or not further assessment and approval is required under the EPBC Act. This is the referral decision. There are four potential outcomes of the referral decision (DoEE, n.d.-c):

- controlled action: assessment needed
- not controlled action ('particular manner'): no assessment needed; the activity must be carried out in accordance with the manner specified
- not controlled action: no assessment required; activity may proceed
- action clearly unacceptable: there is a clear impact on a MNES; the activity must not proceed

Activities may also need to be assessed under relevant state or territory legislation, although this is not referred to in the Act.

3.2.1. Time and cost – referral

As noted in Figure 2, the EPBC Act requires the Minister to make a decision within 20 business days of receiving a referral under the Act on whether approval is required and, if it is, on the process of assessment (*EPBC Act 1999* (Cth), Sec. 70). There is also a time and effort requirement on the part of the proponent to determine whether a proposed action is likely to have a significant impact on a MNES and to undertake a referral if they determine that it is, including by preparing supporting documentation and evidence as required. Any costs associated with making this determination and preparing to make a referral, if required, are borne by the proponent. Under DoEE's cost recovery implementation agenda, lodgement of a referral for a decision by the Minister attracts a fee (additional to referral preparation costs) (DoEE, n.d.-a). Individuals and small businesses, with an aggregated turnover of less than \$10 million in the previous financial year, are likely to be eligible for an exemption from this fee (DoEE, 2017).

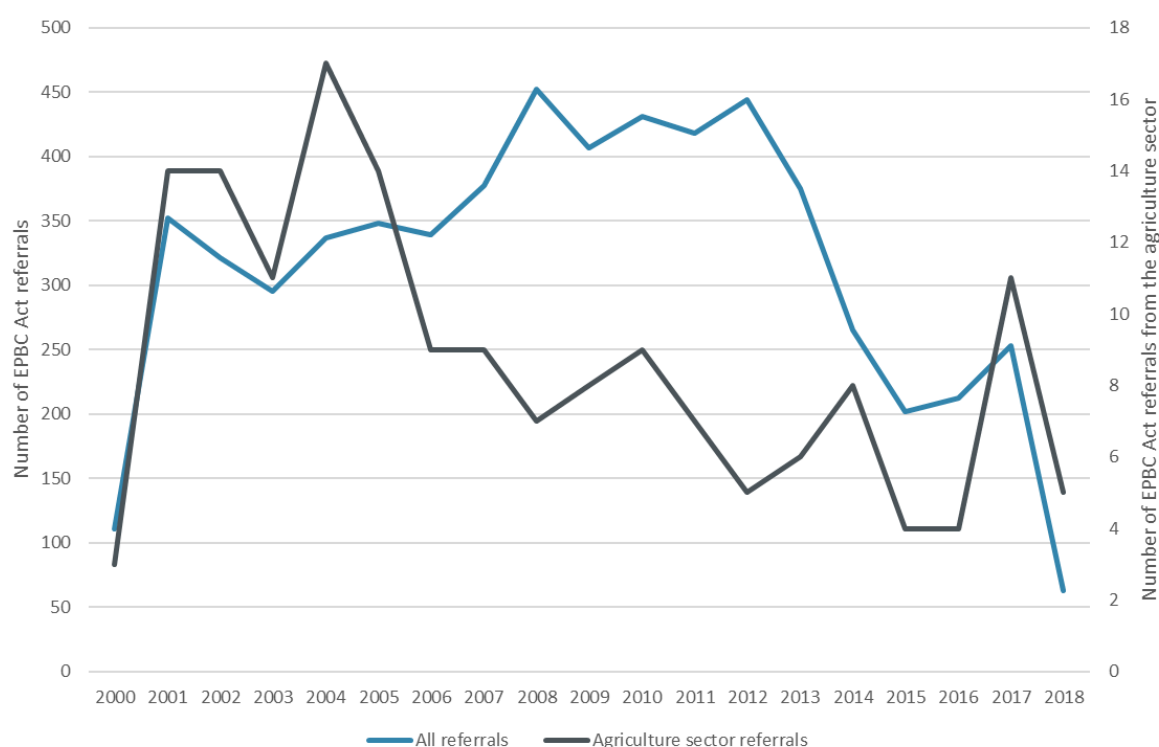
3.2.2. Referrals from the agriculture sector

Compared with other sectors of the Australian economy, the number of referrals under the EPBC Act received from the agriculture sector has remained consistently low since 2000. Numerical information on referrals in the agriculture sector between 2000 and 2018 is provided in Table 1. Figure 3 shows that the number of referrals received each year from the agriculture sector peaked in 2004, while the number of referrals received each year from all sectors peaked in 2008. The general trend over the past decade is toward reduced numbers of referrals, both overall and from the agriculture sector specifically. Table 1 shows that a total of 165 referrals have been received by DoEE from the agriculture sector since 2000, representing 2.7 per cent of the 6,002 referrals received under the Act, from all sectors, over the same period. It is not possible to determine the reasons for this low number. Due to its high proportion of small-scale practices and continuing use activities, it is reasonable to expect that the agriculture sector might trigger the EPBC Act less frequently than large-scale industries such as mining and construction; however, there are other factors that could potentially be contributing to the comparatively low numbers of agricultural referrals. The low numbers could be a result of one or several of the following:

- farmers self-assessing that they do not need to refer actions because the action is a continuing use or will not have a significant impact on an MNES
- farmers being unaware that they may need to refer an action
- farmers choosing to avoid referring an action

- farmers appropriately referring actions (i.e. this is an accurate representation of farmers' impact on MNES).

Of the 165 referrals from the agriculture sector since 2000, 60 have resulted in a controlled action decision, 59 have resulted in a not controlled action and 35 have resulted in a not controlled action (particular manner) decision. The 60 controlled action decisions in the agriculture sector represents 3.5 per cent of the 1,733 controlled action decisions made across all sectors since 2000. In terms of decision categories (controlled action, not controlled action, not controlled action (particular manner), approved with conditions, and not approved) the proportion of referrals from the agriculture sector in each of those decision types is broadly consistent with the proportion of all referrals under the Act in each decision category, although agriculture has noticeably larger proportions of not controlled action (particular manner) decisions (24 per cent of all decisions in the agriculture sector as compared to 18 per cent of all decisions) and not controlled action decisions (36 per cent as compared to 29 per cent).



Source: Data compiled by DoEE for the purposes of this Review.

Note: The EPBC Act came into effect in July 2000. Data in this figure is current to May 2018. As such, data from 2000 and 2018 presented here should not be interpreted as representative of a full year's referral activity.

Figure 3 Total EPBC Act referrals from all sectors and from the agriculture sector, 2000-2018

Table 1 EPBC Act environmental impact assessment statistics for the agriculture sector, 2000-2018

Sector	Referrals	Controlled action decision					Assessment method						Not approved	Approvals without conditions	Approvals with conditions
		Controlled action	Not controlled action	Not controlled action (particular manner)	Withdrawn	Lapsed	Accredited process	On referral information	On preliminary documentation	By EIS ^a or PER ^b	By public inquiry	Bilateral agreement			
CAT 1: Action benefits one business/ landowner	80	31	26	16	10	2	2	0	22	2	0	1	1	0	12
CAT 2: Action benefits multiple ag. businesses and is primarily undertaken for ag. sector	55	12	24	15	2	1	0	1	6	4	0	1	1	0	9
CAT 3: Action benefits multiple sectors, including ag.	30	17	9	4	6	1	3	0	6	1	0	4	0	1	7
Total	165	60	59	35	18	4	5	1	34	7	0	6	2	1	28
Total – all sectors	6,002	1,733	2,824	1,073	608	82	161	54	873	171	0	349	10	11	950
Agriculture as a percentage of all sectors	2.75%	3.46%	2.09%	3.26%	2.96%	4.88%	3.11%	1.85%	3.89%	4.09%	N/A	1.72%	20%	9.09%	2.95%

a environmental impact statement

b public environment report

Source: Data compiled by DoEE for the purposes of this Review.

Note: Discrepancies between the numbers of controlled action decisions proceeding to assessment and the number of assessed actions proceeding to an approval decision are explained by the withdrawal or lapsing of referred actions at various points in the environmental impact assessment process. This data is accurate to May 2018.

3.3. Assessment and approval of an action

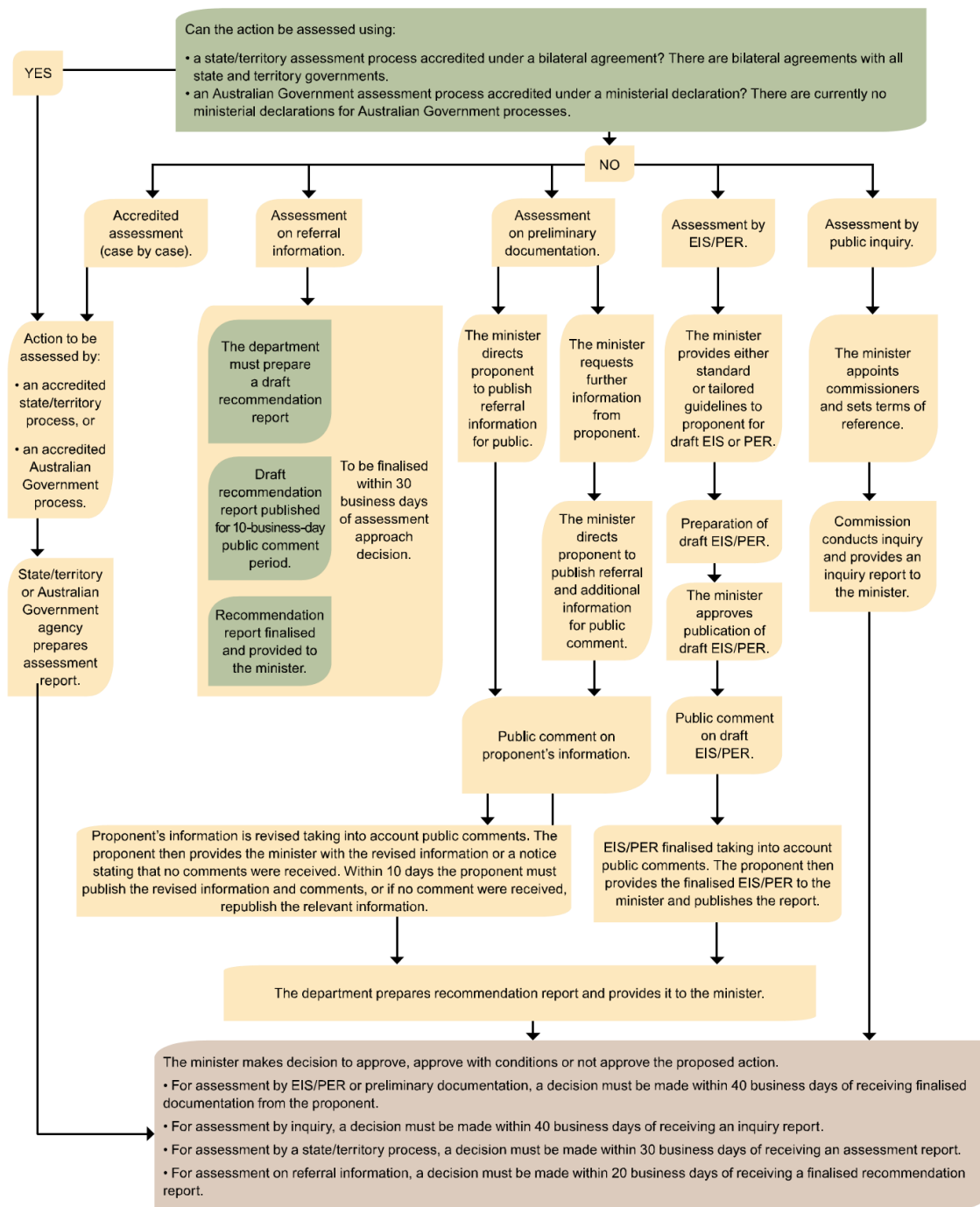
When a referred action is determined by the Minister to constitute a controlled action (i.e. an action that has, will have, or is likely to have a significant impact on a MNES), that action is subject to an assessment process set out in Part 8 of the Act.⁴ Assessment of controlled actions is conducted to provide information for a delegate to make a decision on whether or not to approve the taking of the actions. This approval process is shown in Figure 4 below.

Before an assessment begins, the Minister must choose one of the following methods of assessment:

- accredited assessment process: the action is assessed by an accredited state or territory process or an accredited Australian Government process.
- assessment on referral information: the action is assessed based solely on the information provided in the referral, with a draft recommendation report to be published for public comment prior to a final recommendation report being provided to the Minister.
- assessment on preliminary documentation: the action is assessed based on information prepared by the proponent, including referral information and other information as requested by the Minister. This information must be put out for public comment and is revised by the proponent to take into account public comments received. The assessment is then considered by DoEE in preparing a recommendation report for the Minister.
- assessment by environmental impact statement (EIS) or public environment report (PER): the action is assessed based on an EIS or PER prepared by the proponent in accordance with standard or tailored guidelines provided by the Minister, who must also approve publication of a draft EIS or PER for public comment and final EIS or PER that takes into account public comments and is considered by DoEE in preparing a recommendation report for the Minister.
- assessment by public inquiry: the action is assessed based on an inquiry report provided to the Minister, who appoints commissioners to undertake the inquiry and sets its terms of reference.

The most appropriate assessment method is chosen by the Minister depending on the significance of the project and how much information is already available. Each method involves the consideration of technical information assembled by the proponent and provides an opportunity for public comment on the proposed action.

⁴ With the exception of actions that a bilateral agreement or Ministerial declaration says are to be assessed in another way.



Source: Department of the Environment, Water, Heritage and the Arts, 2010.

Figure 4 EPBC Act environmental impact assessment process – assessment and approval

3.3.1. Time and cost – assessment and approval

The EPBC Act establishes processing time requirements for assessment according to the assessment method chosen by the Minister. In general, minimum time allowances are established for periods of public comment (often ten business days) and maximum time allowances are established for actions by proponents and the Minister. On receipt of the relevant final report (known by a different

name depending on the assessment method chosen), the Minister must make a decision to approve, approve with conditions or not approve the proposed action within 20 business days (assessment on referral information), 30 business days (accredited assessment process), or 40 business days (assessment on preliminary documentation, by EIS or PER, or by public inquiry). There is also a time and effort requirement on the part of the proponent to prepare, publish, revise relevant information and republish in support of their referral, with the associated time commitment and cost varying considerably depending on the nature of the proposed project, the significance and complexity of its potential impacts on MNES, and the assessment method chosen by the Minister. Any costs associated with complying with the assessment process (e.g. by procuring surveys) are borne by the proponent. Under DoEE's cost recovery implementation agenda, the undertaking of an assessment process attracts a fee (additional to the costs of facilitating assessment of an action), which varies according to the assessment method chosen and the complexity of the process (DoEE, n.d.-a). The same fee exemptions for individuals and small businesses that apply to referral fees also apply to assessment fees (DoEE, 2017).

3.3.2. Assessments of proposed agricultural development actions

According to information provided by DoEE, shown in Table 1, 34 of the 60 controlled action decisions resulting from referrals from the agriculture sector since 2000 have proceeded to assessment on preliminary documentation. Seven have been assessed by EIS or PER, five through an accredited process, one on referral information and none by public inquiry. Only six agricultural projects (10 per cent of all controlled action decisions) have been assessed under a bilateral agreement, compared with about 20 per cent of all other controlled action decisions. The relative reliance on different assessment methods for agricultural development actions does not appear to be out of keeping in any significant way with the manner in which different assessment methods have been used, on average, for all actions assessed under the EPBC Act since 2000.

Twenty-eight agriculture sector projects have been approved with conditions since 2000, representing 2.9 per cent of the 950 actions approved with conditions across all sectors over the period. Only ten proposed actions have not been approved across all sectors since 2000, with two of these being agriculture sector projects. As the total number of actions not approved since 2000 is only about one every two years and represents only 0.2 per cent of all referrals received over that period, there is no real evidence to suggest this should be cause for concern among agriculture sector stakeholders.

3.4. Conditions and environmental offsets

3.4.1. Conditions

As shown in Table 1, of those controlled actions approved under the EPBC Act since 2000, 98.9 per cent have been approved with conditions. Under Section 134 of the Act, the Minister may attach a condition to the approval of an action if he or she is satisfied that the condition is necessary or convenient for protecting, or repairing or mitigating damage to, a MNES.⁵ The Act provides examples of kinds of conditions that may be attached to approvals. These include:

- conditions requiring specified activities to be undertaken for protecting, or repairing or mitigating damage to a MNES

⁵ This is the case regardless of whether or not the protection is protection from the specific action being approved, or whether or not the damage has been, will be or is likely to be caused by the specific action being approved.

- conditions requiring a specified financial contribution to be made to a person for the purpose of supporting such activities
- conditions relating to any security to be given by the holder of the approval by bond, guarantee or cash deposit
- conditions requiring the holder of the approval to insure against a specified liability to the Australian Government
- conditions requiring a person taking the action to comply with conditions specified under a state or territory law or another law of the Australian Government
- conditions requiring periodic independent environmental audit of the action
- conditions requiring an action management plan to be submitted to the Minister for approval, and that plan to be implemented if approved
- conditions requiring specified environmental monitoring or testing to be carried out
- conditions requiring compliance with a specified industry standard or code of practice.

DoEE has developed policy and guidance to help proponents understand how conditions are designed and implemented.

One type of condition actively promoted by DoEE is outcomes-based conditions. DoEE's *Outcomes-based conditions policy* describes these as conditions that 'set out the environmental outcome the approval holder must achieve for a matter of national environmental significance without prescribing how that outcome is to be achieved' (DoEE, 2016c). Outcomes-based conditions are intended to allow businesses to focus most efficiently on achieving environmental outcomes when taking an action approved under the Act, and allow DoEE to focus post-approval efforts on monitoring environmental outcomes (DoEE, 2016b). A hypothetical example of an outcomes-based condition and examples of two other types of conditions are included in Box 1 below.

Box 1 – Hypothetical examples of conditions, by type

Prescriptive condition (technology or standards based)

Within 30 days of the Commencement Date, the Approval holder must erect rabbit-proof fencing on the western and southern boundaries of the Project Area in accordance with the *Standards for management—Fencing*, which provides:

- the minimum standard for rabbit-proof fences is 1,050mm width, 40mm mesh diameter, 1.4mm wire diameter rabbit-proof netting
- rabbit netting should be fixed so that it reaches at least 900mm above the ground and is either buried (to 150mm depth) or laid down and secured with pegs, rocks or timber
- the fence should be supported to withstand stock or native animal forces.

Systems-based condition (management based)

Within 30 days of the Approval Date and prior to the Commencement Date, the Approval holder must prepare and submit for the Minister's approval, a Threatened Species Management Plan which describes how and when the following will be undertaken:

- Pre-clearing surveys for the Western Ground Parrot (*Pezoporus flaviventris*) and Sandplain Duck Orchid (*Paracaleana dixonii*).
- Actions to avoid areas of Western Ground Parrot habitat within the Project Area.

- Roadside surveys, to detect road-killed fauna, including Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) and the Western Ground Parrot.
- Reporting to the Department about Western Ground Parrots found within the Project Area.

Outcomes-based condition (performance based)

At each of the Performance Dates, there will be no Net-Loss to the extent and distribution of the Existing Population of the Sandplain Duck Orchid (*Paracaleana dixonii*) within the Project Area.

Source: DoEE, 2016b.

DoEE has also established a *Condition-setting policy*, which aims to streamline the regulatory process by avoiding duplicative or unnecessary approval conditions between jurisdictions, in circumstances where state or territory conditions appropriately manage the environmental impacts on a MNES (DoEE, 2016a). This recognises the status of state and territory governments as having primary responsibility for environmental protection.

3.4.2. Environmental offsets

Sometimes, measures to avoid and/or mitigate the significant impacts of a controlled action on a MNES are not able to sufficiently mitigate all impacts. Residual impacts of an action on the environment may remain. In such instances, environmental offsets are sometimes used to compensate for these residual impacts, and are considered as part of the decision to approve or not approve a proposed action under the Act. If a project is approved with an environmental offset, the environmental offset is included as a condition of approval under Section 134 of the Act. Considered during the assessment phase of the environmental impact assessment process under the Act (though not defined in the legislation itself), environmental offsets are only considered after all reasonable actions to avoid or mitigate environmental damage related to the controlled action have been investigated (Department of Sustainability, Environment, Water, Population and Communities, 2013b).

DoEE has prepared an *EPBC Act environmental offsets policy* (Department of Sustainability, Environment, Water, Population and Communities, 2012a) and *Offsets assessment guide* (Department of Sustainability, Environment, Water, Population and Communities, 2012b) to help proponents determine when obtaining an environmental offset may be required, appropriate and feasible in relation to a specific action, and to provide guidance on what an effective environmental offset looks like. DoEE's policy establishes several environmental offset requirements, stating that suitable environmental offsets must (Department of Sustainability, Environment, Water, Population and Communities, 2012a):

- deliver an overall conservation outcome that improves or maintains the viability of the protected matter
- be built around direct environmental offsets but may include other compensatory measures
- be in proportion to the level of statutory protection that applies to the protected matter
- be of a size and scale proportionate to the residual impacts on the protected matter
- effectively account for and manage the risks of the environmental offset not succeeding
- be additional to what is already required, determined by law or planning regulations, or agreed to under other schemes or programs
- be efficient, effective, timely, transparent, scientifically robust and reasonable

- have transparent governance arrangements including being able to be readily measured, monitored, audited and enforced.

If an environmental offset is appropriate, the proponent should discuss offset options with DoEE and submit an environmental offsets proposal. This proposal should describe the environmental offset and demonstrate how it will provide an appropriate benefit to compensate for any residual impact on the MNES. DoEE will then assess this proposal against the policy and – where the impacted protected matter is a threatened species or ecological community – the *Offsets assessment guide*. If the proposed environmental offset is not considered to be suitable, DoEE will discuss this finding with the proponent and provide them with an opportunity to submit a revised proposal (Department of Sustainability, Environment, Water, Population and Communities, 2012a). As with many aspects of the environmental impact assessment process established under the EPBC Act, it is the proponent's responsibility to (including by working with DoEE) identify an appropriate environmental offset or package of offsets and develop an offsets proposal for submission to DoEE. DoEE encourages the use of market-based mechanisms to deliver offsets. As part of this process, the proponent is responsible for determining current land tenure of the environmental offset and developing a method of securing and managing the offset for the life of the impact of the proposed action.

3.5. A structure for discussion of issues and recommendations in this report

Having established an understanding of how the agriculture sector currently interacts with the EPBC Act, subsequent chapters of this report describe specific issues raised in the course of this Review, and associated recommendations, in relation to the environmental impact assessment process and other areas of interaction between the agriculture sector and the EPBC Act as follows:

- Determining what farmers' obligations are under the Act, either generally or in relation to specific agricultural development actions, and understanding how these interact with obligations established by state and territory legislation (see Chapter 4 – Awareness and understanding of EPBC Act obligations).
- Improving processes established under Chapter 5 of the EPBC Act for listing and delisting nationally threatened species and ecological communities (see Chapter 5 – Listing and delisting of nationally threatened species and ecological communities).
- Referring an agricultural development action under Chapter 4 of the Act and complying with subsequent assessment and approval processes and conditions (see Chapter 6 – EPBC Act environmental impact assessment processes).
- Strategic approaches and new initiatives for enhancing the capacity of the Australian Government to assist the Australian agriculture sector to grow while maintaining national environmental standards (see Chapter 7 – Strategic approaches and new initiatives).

The structure of this report is illustrated in Figure 5, demonstrating the overarching importance of clarifying objectives and developing an appropriate approach to regulation and the enabling nature of appropriate resourcing, which is required to ensure that issues associated with awareness and understanding and environmental impact assessment implementation are addressed and strategic approaches and new initiatives are adequately supported to realise their objectives.

Ch. 4	Awareness and understanding of EPBC Act obligations	
	Determining what farmers' obligations are under the Act, either generally or in relation to specific agricultural development actions, and understanding how these interact with obligations established by State and Territory legislation.	
Ch. 5	Listing and delisting of nationally threatened species and ecological communities	Ch. 6 EPBC Act environmental impact assessment processes
	Improving processes established under Chapter 5 of the EPBC Act for listing and delisting nationally threatened species and ecological communities.	Referring an agricultural development action under Chapter 4 of the Act and complying with subsequent assessment and approval processes and conditions.
Ch. 7	Strategic approaches and new initiatives	
	Strategic approaches and new initiatives for enhancing the capacity of the Australian Government to assist the Australian agriculture sector to grow while maintaining national environmental standards.	

Figure 5 Report structure

The following chapters set out the issues raised during consultations and in written submissions to the Review. Each chapter includes several recommendations, both legislative and operational, for improving the way that the agriculture sector is regulated under the EPBC Act and reducing the regulatory burden faced by farmers.

4. Awareness and understanding of EPBC Act obligations

Ch. 4	Awareness and understanding of EPBC Act obligations		
Ch. 5	Listing and delisting of nationally threatened species and ecological communities	Ch. 6	EPBC Act environmental impact assessment processes
Ch. 7	Strategic approaches and new initiatives		

Knowing that the EPBC Act exists and understanding what it is intended to achieve is the first step toward ensuring compliance with the Act and enabling achievement of the Act's central objectives. A lack of awareness and understanding is likely to result in a higher incidence of non-compliant activities in the agriculture sector and negatively impact achievement of the Act's objects.

Despite the importance of awareness and understanding of the EPBC Act within the agriculture sector to the achievement of the Act's objects, a recurring theme in consultations conducted for this Review is that there is very low awareness of the Act and its objects among farmers and landholders in many regions.

In a member survey conducted by the NFF,⁶ one quarter of respondents answered 'no' to the question, 'Have you heard of the EPBC Act?', and over 80 per cent of respondents answered 'no' to the question, 'Do you feel you have an adequate understanding of your obligations under the EPBC Act?'.⁷ The NFF's survey results were echoed by farmers across multiple states and territories as well as by representatives of other stakeholder groups. Recurring comments in written submissions and consultations can be summarised by the following three observations:

- A significant number of farmers are totally unaware of the EPBC Act and its objects.
- Of those farmers who are aware of the EPBC Act, many do not feel that they have an adequate understanding of their obligations under the Act.
- The EPBC Act is complex and there is insufficient education and outreach by the Australian Government to support farmers' understanding of their obligations.

Consultations and submissions revealed that many farmers feel a level of responsibility for environment protection and biodiversity conservation but believe they could be better supported to fulfil this role. This chapter considers the effectiveness of current efforts to inform and educate farmers about their obligations under the Act and discusses options for improving existing outreach and education efforts and implementing new approaches.

⁶ This survey was conducted by the NFF as a direct input into this Review. Results are based on responses from 155 self-selected farmers and agronomists who volunteered themselves through representative bodies such as AgForce and GrainGrowers. Self-selection bias may have resulted in a higher proportion of respondents having specific concerns about the EPBC Act or about environmental regulation more broadly than is the case among members of the agricultural community generally. The same self-selection bias may also be evident in the written submissions received by the Review.

⁷ Public submission no. 62

4.1. A responsive and collaborative regulator with a clear vision for the desired outcomes from regulation

Given the complex nature of the EPBC Act, generally low levels of awareness reported by farmers about their understanding of their obligations under the Act, and the fact that most farmers are likely to encounter the Act only once or twice in their farming lives, it is important that farmers are able to engage with DoEE and receive timely, accurate and practical advice. Farmers should be encouraged to seek advice without feeling they are unduly exposing themselves to the risk of prosecution under what some view as a largely non-collaborative environmental impact assessment and compliance and enforcement process. Positive engagement between DoEE and the agriculture sector is also important to enable DoEE to better understand whether their approach to EPBC Act implementation is working or not, and where there may be opportunities for improvement. Consultation undertaken as part of this Review points to a view among some stakeholders that DoEE is unresponsive, reactionary and overly restrictive in its engagement with the agriculture sector. It is noted that many of these issues are not new, and that some efforts are underway, such as the establishment of a working group with representatives from the NFF to increase mutual understanding and communication between DoEE and agriculture (DoEE, 2016d). However, more needs to be done and existing initiatives need to be better communicated and strengthened.

There is a view that DoEE takes a reactionary rather than proactive approach to engagement, as engagement on the EPBC Act tends to only occur when something has gone wrong. Several submissions reported that the first interaction farmers and landholders had with the EPBC Act was a letter of notification that they were in breach of national law, where they had been unaware of MNES such as Ramsar sites on or near their property. Several commentators and submissions associated this with feelings of uncertainty and distrust around the EPBC Act.⁸ Comments that engagement with DoEE is restrictive rather than constructive, and that decisions are not made transparently include: ‘officers focused on telling them what they were not allowed to do rather than giving them guidance or advice’, ‘it is always a threat, you do it our way or you will be fined or imprisoned’,⁹ ‘scaring people with letters is not helpful – need to look at less coercive ways of working together’, ‘we are treated like criminals’¹⁰ and ‘it’s hard to understand legislation with...threats of fines and incarceration’.¹¹ One farming group in Western Australia expressed the view that environmental officers have proven to have an adversarial approach to engaging with farmers and landholders and are not adequately informed about the agricultural industry. This has created a perception among some stakeholders that Australian Government officials are overly reactive and punitive.

The perception that environmental law and its enforcement are not letting farmers get on with farming is widespread, despite a relatively small touchpoint between the EPBC Act and the agriculture sector (see Table 1). This perception also relates to issues associated with long timeframes for assessment of proposed actions, uncertainty about whether to refer an action or not, and opportunity costs associated with not undertaking a development action due to poor understanding of how to engage with the Act or fear of being captured by a lengthy and expensive assessment process. The NFF farmer survey, for example, reported that 39 per cent of 88 respondents to a question about whether they had been deterred from proceeding with an agricultural development due to their understanding of the Act said they had. When asked why they had been deterred, the main answer selected from a

⁸ Confidential submission no. 46, no. 47, no. 48, no. 49 and no. 75

⁹ Confidential submission no. 47

¹⁰ Confidential submission no. 46

¹¹ Confidential submission no. 49

list of four was 'too complicated', followed by 'too expensive' and 'too risky'.¹² These issues are discussed in detail throughout this report.

There is a view in the agriculture sector that DoEE is not sufficiently responsive to proponent requests for information, advice or assistance. Accounts of inconsistent, conflicting and delayed government engagement with farmers seeking information about their obligations and those undertaking referral and assessment has damaged farmers' and peak agricultural bodies' perceptions of the EPBC Act. Tasmanian Irrigation submitted that while 'dealings with DoEE pre- and post- referral have [generally] been fruitful and useful, at times, it has been found to be difficult and confusing to know which DoEE section to contact...[which] can be frustrating...not knowing whether requests are being processed and/or progressed or not'.¹³ Uncertain, prolonged and ineffective engagement by DoEE is perceived to have increased the time and cost commitments of fulfilling obligations under the Act. One stakeholder said they take a 'spray and pray' approach to sending emails to DoEE by contacting all the people with whom they have dealt in the hope that someone will provide the information or advice being sought. There is a preference for clear guidelines on processes and their likely time frames and for information on costs (e.g. survey costs) to be available in advance of engagement.

At the same time, many individuals consulted for this Review and many submissions received did not explicitly raise concerns about the nature of engagements with DoEE or government representatives. However, the fact that multiple proponents who have engaged with federal officials have expressed dissatisfaction and frustration with these engagements justifies the need to establish explicit principles to guide these interactions in the future to minimise conflict and foster trust and certainty. DoEE has recognised the need for improved standards of engagement with external stakeholders and state and territory regulators. The final report of the Regulatory Maturity Project advocated a strategic approach to two-way engagement with stakeholders and active consultation in the design and implementation of regulation (Woodward, 2016). The report recommended that DoEE:

- increase its knowledge of regulated industries
- reduce the burden of information requests
- establish and maintain a single point of contact
- speak with a single voice
- improve engagement with community groups, co-regulators and communities of practice.

In its response to the report, DoEE noted efforts already underway, including the establishment of the working group with representatives from the NFF (DoEE, 2016d). This approach is supported.

The EPBC Act is intended to, inter alia, provide for the protection of the environment and promote ecologically sustainable development and the conservation of biodiversity (*EPBC Act 1999* (Cth), Sec. 3). According to its objects, the Act should promote a cooperative approach to the protection and management of the environment involving governments, the community, landholders and indigenous people (*EPBC Act 1999* (Cth), Sec. 3). Multiple organisations and individuals consulted for this report cited a perceived disconnect between the objects established in the Act and how the Act is structured and administered in practice. These points of perceived misalignment principally relate to:

- the adoption of a project-by-project approach to protecting MNES that does not deal with the broader landscape, nor does it adequately account for the cumulative impact of multiple projects over time

¹² Public submission no. 62

¹³ Public submission no. 33

- absence of a clear risk-based approach to regulating the agriculture sector such that actions considered (by proponents) to be small-scale and low in impact are receiving more attention from DoEE than more significant long-term threats to MNES.

Some stakeholders have claimed that a project-by-project (or action-by-action) approach to protecting MNES under the EPBC Act is not delivering on the overall objects of the Act. There is a perception among some agriculture stakeholders that the implementation of the EPBC Act is contributing to a focus on actions that are relatively low-impact and small in scale, compared with actions that they perceive to present more significant long-term threats to MNES. In other words, it is unclear whether the regulatory efforts of DoEE are being expended in a way that offers the best prospect of protecting MNES in the long term. One agricultural stakeholder consulted for this Review questioned whether the Australian Government knows what it wants to achieve through implementation of the EPBC Act and whether the Act is the best instrument for achieving the desired objectives.

The first step toward reorienting the regulatory posture adopted by DoEE in relation to agriculture could be to develop a shared vision of the desired outcome from implementing the EPBC Act in relation to the agriculture sector, captured in the form of a simple statement. By clearly stating what the objectives of the Australian Government's regulation of the agriculture sector under the EPBC Act are, and by setting out a strategic risk-based approach to realising those objectives in partnership with state and territory governments and external stakeholders, DoEE can ensure that protection and conservation activities are coordinated and directed toward national priorities.

Further, to ensure that a consistent behavioural approach and standards are adopted, it is recommended that DoEE draw on existing standards and processes to develop and meet a standard for productive engagement with representatives of the agriculture sector. DoEE's existing Service Charter, published in 2014, provides the basis for developing an agriculture-oriented supplement to the Charter which would guide interactions with the agriculture sector (DoEE, 2014c).

Recommendation 1

It is recommended that the Department of the Environment and Energy develop an agreed vision of the desired outcome from implementing the EPBC Act for agriculture.

- An example of such a vision statement could be: 'To actively protect matters of national environmental significance while minimising the regulatory burden on farmers'.
- This vision statement could be included within an agriculture-oriented supplement to the Department of the Environment and Energy's current Service Charter, developed in consultation with farmers to set out the manner in which the Department will engage with farmers (e.g. through local face-to-face consultation, consistent case management, development of communications material with advice from an experienced practitioner in farmer communication etc.).

4.2. A future-focused approach to regulation

As described in Chapter 2 of this Review, it is reasonable to expect that the combined impacts of the declining state of the environment and ongoing agricultural development, with the added impact of climate change, will result in more rather than fewer points of interaction between agriculture sector interests and environment protection objectives. In this context, the need to clarify the desired outcomes of regulating these interactions under the EPBC Act will become ever more pressing. Implementation of the Act will need to increasingly focus on critical threats to MNES in a risk-based manner. At the same time, the potential implications of these interactions for both the agricultural economy and the Australian environment could become more severe as competition for available resources, including land and water, increases. A responsive and collaborative approach to regulating

the agriculture sector will become ever more important, as both farmers and regulators will need to better understand, and more effectively respond to, emerging tensions between agricultural development and environment protection objectives in light of these implications. To facilitate this understanding, and related responses, it is important that DoEE has access to the best available information on future trends in the agriculture sector, such that geographic growth centres (e.g. potential expansion of agriculture in northern Australia) and likely high-growth sub-sectors can be identified.

Some of this forward-looking strategic work is currently conducted within DoEE for internal planning purposes, including in relation to possible future developments in the agriculture sector. However, there is scope for a more rigorous approach to gathering and analysing available information on future trends in agriculture and considering innovative techniques and approaches which may trigger a referral under the EPBC Act. Consideration could also be given to identifying specific geographical areas of prospective agricultural development that also contain MNES. One current example is the NFF's Regional Agriculture Deals initiative which is working to identify hubs for focused agricultural production, such as in northern Australia, where the natural advantages of a region would be identified and supported by strategic investment and cooperation between governments in transport and infrastructure and where it would be logical to include environmental protection (Simson, 2018). These areas, where farmer compliance with the EPBC Act could reasonably be expected to become an issue over the next five to ten years, could then become the focus for early community engagement efforts through collaborative planning. Although investment would be required in the short term to identify and work with relevant communities, this approach could help DoEE to improve the standard of its engagement with farmers and simultaneously deliver better environment protection outcomes in those regions where MNES are likely to be most threatened by agricultural activity. The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) could assist in undertaking such horizon scanning activities.

Recommendation 2

It is recommended that collaboration between agriculture sector experts and environment and biodiversity experts be encouraged, to identify innovative practices and activities and areas of prospective agricultural growth over the next ten years. The Department of the Environment and Energy should consider vehicles for promoting this collaboration, such as a biennial 'outlook workshop' to be convened with the sector in partnership with the Department of Agriculture and Water Resources, especially the Australian Bureau of Agricultural and Resource Economics and Sciences.

4.3. Outreach and education

As articulated in Chapter 4.1, it is important that DoEE is regarded as a responsive and collaborative regulator. At present, DoEE is not perceived in this way by all stakeholders in the agriculture sector. One means for helping to achieve a change in both perceived and real communication outcomes is to target outreach and education efforts toward on-ground, face-to-face engagement in farming communities. Many groups and individuals consulted indicated the need for improved extension, education and outreach to be led by DoEE, with some suggesting further involvement of regional and locally based bodies to provide information on the EPBC Act.

The NFF member survey found that 'locally available information and/or trusted sources (are) preferred.'¹⁴ In response to the question, 'Ideally, how would you like to receive information about the

¹⁴ Public submission no. 62

EPBC Act and your obligations under it?', 27 per cent of respondents preferred regionally-based DoEE offices and 36 per cent preferred industry associations. Acknowledging that DoEE already engages with several industry and regional bodies, including organisations representing the agriculture sector, there is an opportunity to collaborate with those organisations further to inform their constituents about the EPBC Act and its implications.

There are several potential models for an outreach facility (with an initial focus on the agriculture sector) to enable face-to-face interaction with farmers on the implementation of the Act. This Review proposes that one of the following models is most likely to efficiently and effectively deliver improved outcomes for farmers and, ultimately, for the protection of MNES:

- assessing the effectiveness of current ongoing collaboration between DoEE and New South Wales Local Land Services (NSW LLS), and considering further expansion of this model in other states and territories if the benefits are found to outweigh the costs
- outposting DoEE staff
- contracting suitably qualified locally based and trusted agricultural experts.

Each of these models has unique advantages and risks. The following sub-sections describe each model in turn.

4.3.1. State-federal cooperation modelled on the DoEE- NSW LLS collaboration

As well as poor understanding of their obligations under the Act, repeated concerns were expressed by farmers, government officers, representative groups and others that there is a significant lack of comprehension by farmers as to how their obligations under the EPBC Act intersect or overlap with their obligations under relevant state, territory and local laws. Overlapping and often contradictory regulation from different levels of government was noted by the Productivity Commission as part of a 'vast and complex array of regulation' to which farmers are subject. For example, the Consolidated Pastoral Company, one of Australia's largest beef producers, estimated that it complies with or takes account of over 300 acts, regulations and codes (Productivity Commission, 2016).

Over 90 per cent of respondents to the member survey conducted by the NFF answered 'No' to the question, 'Are you clear about how Federal and State native vegetation management laws fit together?'.¹⁵ One submission stated that 'it is difficult to establish which Federal or State Government law applies when maintaining a developed farm, or seeking to improve the capacity by making landscape change, or culling over populations [sic] of native animals without incurring red tape'.¹⁶ While the EPBC Act has remained reasonably unchanged since commencement, some state and territory laws have changed much more frequently. Acknowledging the practical difficulty of achieving and maintaining alignment between the provisions of Australian Government and state and territory laws, there appears to be substantial scope for enhanced efforts to improve understanding within relevant state and territory government departments about how the EPBC Act functions and vice versa.

There is a high reliance on state government officials for information on EPBC Act obligations: over 70 per cent of respondents to the NFF member survey stated that they seek advice on their EPBC Act obligations from state government agencies, rather than from DoEE.¹⁷ However, the Review heard multiple comments that there is a low understanding of the EPBC Act's functions and objectives

¹⁵ Public submission no. 62

¹⁶ Public submission no. 20

¹⁷ Public submission no. 62

among state government officials, and that there is insufficient clarity in communications from all governments regarding how Australian Government and state and territory laws fit together. Some individuals expressed frustration that no one person in any government can tell landholders what their cumulative obligations are, due to the sheer number of landscape-relevant pieces of legislation across jurisdictions. One farmer reported that NSW LLS officers could not answer questions about land clearing under the EPBC Act, while another¹⁸ engaged with state government officers who did not mention the EPBC Act at all. One farmer questioned how farmers could be expected to understand the 'entanglement' of the EPBC Act and state laws if NSW LLS officers did not appear to understand it.¹⁹ Another farmer in New South Wales stated that NSW LLS officers there 'don't know the answers' when it comes to farmers' obligations under the EPBC Act. Consistent with this, one NSW LLS officer consulted for the Review stated that their understanding of the EPBC Act is inadequate and that advice provided by DoEE is 'lacking in detail, clarity and practical applicability, based on what appears to be inadequate knowledge of the [local area]'.²⁰ Another farmer indicated that the state government officials he spoke to regarding his compliance with state law in clearing vegetation on his property did not mention the EPBC Act as relevant despite there being a strong likelihood that a referral under the Act was required.

Among those that interacted directly with Australian Government officials, similar complaints were heard, about a lack of capability to provide constructive and accurate advice on EPBC Act obligations at the local level. One group of farmers consulted for the Review stated that DoEE officials who participated in a recent visit to the local area were poorly prepared and ill-informed on basic matters. This lack of understanding of the total obligations of farmers within relevant Australian Government and state/territory government departments prevents officials at both levels from adequately supporting farmers to fulfil their regulatory obligations.

The Commonwealth Department of Agriculture and Water Resources (DAWR),²¹ as well as the Australian Land Conservation Alliance (ALCA)²² and Trust for Nature (a member of ALCA),²³ suggested that DoEE build the capacity of regional natural resource management organisations to act as first points of contact on the ground for farmers seeking preliminary advice on proposed actions. Where arrangements with state and territory governments cannot be agreed, working with non-government natural resource management organisations may be a productive alternative. The case study below demonstrates one model for closer cooperation between relevant state and territory government agencies and DoEE. This model recognises that states and territories are the primary regulators of land management and environment protection activities, that farmers are already seeking advice predominantly from these agencies, and that states and territories generally have more significant locally based staff networks than Australian Government agencies.

¹⁸ Confidential submission no. 75

¹⁹ Confidential submission no. 73

²⁰ Public submission no. 12

²¹ Public submission no. 60

²² Public submission no. 67

²³ Public submission no. 68

Case study: Collaboration between DoEE and NSW LLS

DoEE has recognised that changing state legislation in New South Wales may be creating uncertainty for landholders in understanding their obligations under the EPBC Act and has initiated a response to support landholder compliance by working closely with the New South Wales Department of Primary Industries (NSW DPI) (DoEE, 2018f). An emerging collaboration between DoEE and NSW LLS is a case in point. Although there is still room for improvement, it appears that significant progress has been made in advancing understanding of the EPBC Act through this collaboration.

DoEE and NSW DPI have been working on a tailored training program for NSW LLS staff to enable them to effectively talk to farmers about their regulatory obligations. This program recognises that NSW LLS officers are generally already recognised as trusted points of contact for landholders. DoEE is currently seeking opportunities to partner with New South Wales regulators to jointly communicate what legislative reforms in New South Wales mean for landholders (DoEE, 2018f).

The example of the Monaro region is instructive. When the Natural Temperate Grassland of the South Eastern Highlands was first listed as an ecological community under the EPBC Act in 2000, there were no key diagnostics, condition thresholds or survey recommendations in the conservation advice provided to landholders and advisers in the Monaro region (DoEE, n.d.-g). These details were added to the conservation advice following the revised listing of the ecological community in 2016. This was a collaborative effort by DoEE, in consultation with New South Wales government officers from the region, in an attempt to provide more guidance to assist landholders and others in determining if the listed ecological community is present on their land and to help inform decisions about significant impact relating to the ecological community (DoEE, n.d.-g). This allowed alignment with common methods used by NSW LLS officers in the Monaro. For example, the conservation advice specifies 20-metre by 20-metre survey plots for measuring native diversity, which is the same area required for New South Wales BioBanking and under the Interim Grasslands and Groundcover Assessment Methodology (DoEE, n.d.-g). However, while DoEE consulted with regional government officials, some landholders in the Monaro were critical of the fact that there was limited consultation with farmers on the Monaro prior to the revised listing coming to effect in April 2016.²⁴

The 2016 revised listing focused protection on the best examples of remnant grassland, by introducing condition thresholds to exclude areas of lower quality, and hence reduce the potential area unnecessarily captured by the EPBC Act in the Monaro region. However, this has created some confusion among farmers by increasing the perceived complexity of determining when a referral under the EPBC Act is required. According to the submission by Monaro Farming Systems 'there was no rollout/education/extension provided to landholders since 6 April 2016 [date of the revised listing] to notify or assist landholders of/with compliance requirements'.²⁵

To address this, DoEE has collaborated with the NFF to develop guidance material that includes a flowchart showing how to recognise the ecological community and determine what condition it may be in (DoEE, n.d.-f). Additionally, DoEE conducted an on-farm visit in the Monaro region in early 2018 to improve DoEE's own understanding of how the listing is applied in the region and associated issues (DoEE, 2018a; DoEE, 2018f). Following that visit, DoEE has been developing 'plain English' advice for the region that incorporates consideration of land use history and pasture type into the identification of grasslands protected under the EPBC Act (DoEE, 2018f). Furthermore, DoEE has recently engaged in on-farm training of NSW LLS officers regarding the EPBC Act listing process and regulation of threatened ecological communities to support them to better assist farmers in understanding their obligations and implementing conservation advices (DoEE, 2018f). Although there is still evidence of confusion among farmers about how to manage their land in accordance

²⁴ Public submission no. 44 and confidential submission no. 74

²⁵ Public submission no. 44

with the requirements created by the revised listing, collaboration with NSW LLS officers is an important first step toward overcoming communication barriers and gaps in understanding.

Members of DoEE's Environment Standards Division who have participated in the collaboration with NSW LLS are enthusiastic about the partnership and stated that NSW LLS staff are 'highly engaged'. They noted that efforts in New South Wales are generating more and earlier conversations about obligations. Additionally, NSW LLS staff revealed a desire for continued DoEE engagement and support. The NSW LLS submission to this Review states that 'LLS are well equipped to enhance the delivery of the EPBC Act in agriculture in New South Wales. Ongoing cooperation between the Australian Government and LLS will enable LLS officers to assist with the delivery of outreach, advice and guidance, and assist with due diligence under the EPBC Act'.²⁶

In light of these promising early signs, the costs and benefits of engaging at the local level in this way should be considered. If the benefits of improved awareness and understanding are found to be significant, the DoEE-NSW LLS model should be expanded to other regions in New South Wales and in other jurisdictions.

The NSW LLS submission to this Review made 6 key recommendations to support further state-federal cooperation through a risk-based approach to identifying significant impacts on MNES on agricultural land in New South Wales.²⁷ The Review largely endorses these recommendations and suggests they be considered as potential models for state-federal cooperation in other jurisdictions (with the exception of their recommendation 5, advising earlier consideration of 'set asides' (environmental offsets) as mitigation measures, which undermines DoEE's preference for avoiding impacts on MNES as a first resort).

4.3.2. Outposted DoEE staff

The NFF member survey found a preference for regionally-based officers and industry associations as the principal source of information about the EPBC Act and farmer obligations.²⁸ The Ecological Society of Australia made the following recommendation:²⁹

Provide clear, timely and practical advice to farmers and other members of the community to assist them in their interactions with the EPBC Act, for example by creating 'Extension Officer' roles.

Multiple respondents thought that the previous practice of having a DoEE officer outposted to the NFF to provide advice on EPBC Act obligations was a useful initiative, with one referring to it as a 'valuable service'. Professor Helene Marsh, Chair of the Threatened Species Scientific Committee (TSSC), stated in her submission:³⁰

I understand that funding for a joint position between the Department and the [NFF] was withdrawn several years ago, despite the NFF asking for a second such position. I think that reinstating such position(s) could go a long way towards overcoming the present problems.

Another member of the TSSC also commented that improved communications on the operations of the EPBC Act as they affect the agriculture sector could be efficiently achieved through 'the

²⁶ Public submission no. 12

²⁷ Public submission no. 63

²⁸ Public submission no. 62

²⁹ Public submission no. 38

³⁰ Public submission no. 38

³⁰ Public submission no. 9

reinstatement of a former position whereby a DoEE staff member was seated at the offices of the [NFF] and was available to assist farmers with negotiating aspects of the EPBC [Act], including the referral requirements'.³¹

However, one representative of an environmental non-government organisation (NGO) did not support the 'NFF out-posted officer model' and instead endorsed the notion that DoEE establish an outreach team of regional officers similar to that maintained by the Murray-Darling Basin Authority (MDBA). The MDBA currently has 'regional engagement officer' hosting arrangements in place with five organisations across the Murray-Darling Basin and is planning to build a network of seven officers who will work part-time in their regions (MDBA, n.d.).

A representative of the Queensland Department of Natural Resources, Mining and Energy (DNRME) also shared an example of an 'extension officer' model run through DNRME that has reportedly received a positive response from the community. The service is called 'Veg Hub' and consists of a call centre located in Charleville, where a team of staff respond by phone to vegetation management enquires with the intention of providing timely specialist advice to callers. This has been particularly valuable given the recent changes to native vegetation legislation (DNRME, 2018).

As discussed above, the main disadvantage of an outposted DoEE staff model is that there is not presently a large enough number of referrals from the agriculture sector to justify the likely expense. However, the model has some advantages in relation to others, principally due to DoEE maintaining the ability to better safeguard the accuracy and quality of advice offered to farmers by outposted officers.

4.3.3. Contracting locally based and trusted agricultural experts

A final option for an outreach facility for farmers is to directly contract locally based and trusted agricultural experts to provide advice on EPBC Act obligations and processes. Though it is unlikely that this would prove effective if implemented as the sole means of DoEE outreach, given difficulties in controlling the quality of advice and establishing a new network of advisers where one has not previously existed, such targeted contracting may prove beneficial where there are particularly well qualified individuals able to serve communities not otherwise reached by alternate outreach models canvassed here. Natural resource management organisations may be a fruitful source of such advisers.

The approaches described above would be supported by ensuring that DoEE builds appropriate agriculture sector expertise within its Environment Standards Division, potentially by developing a sector specialisation so that referrals from the agriculture sector are handled by one or more individuals with an appropriate understanding of the relevant issues affecting that sector. Such a specialisation could support existing geographical specialisations within the Division. The benefits of developing sector specialisations for sectors other than agriculture could be considered through the 2019 statutory review of the Act.

Recommendations 3 and 4 below echo those of the Productivity Commission's *Inquiry Report on the Regulation of Australian Agriculture*, which recommended that 'Australian, state and territory governments should review the way they engage with landholders on environmental regulations, and make necessary changes so that landholders are assisted in understanding the environmental regulations that affect them, and the actions required under those regulations'. The Productivity Commission's Recommendation 3.3 advised that this should be assisted by doing more to 'recognise and recruit the efforts and expertise of landholders and community-based natural resource

³¹ Public submission no. 42

management organisations' and 'build the capability of, and landholders' trust in, the organisations that administer environmental regulations' (Productivity Commission, 2016).

Recommendation 3

It is recommended that an outreach facility (with an initial focus on the agriculture sector) be developed to enable face-to-face interaction with farmers on the implementation of the EPBC Act. Options (which should be monitored and evaluated) for establishing this facility include:

- assessing the effectiveness of current collaboration between the Department of the Environment and Energy and New South Wales Local Land Services, and considering further expansion of this model in other states and territories if the benefits are found to outweigh the costs.
- outposting Department of the Environment and Energy staff.
- contracting suitably qualified locally based and trusted agricultural experts.

Recommendation 4

It is recommended that the Department of the Environment and Energy consider the costs and benefits of developing an agriculture sector specialisation within the Environment Standards Division.

4.4. Providing tailored guidance on agriculture sector referrals

As described in Chapter 3 of this report, engaging with the EPBC Act's environmental impact assessment process requires proponents to follow three steps:

1. Determine whether the activity represents an instance of 'continuing use' – if no, proceed to the next step.
2. Identify whether there a MNES is present – if yes, proceed to the next step.
3. Assess if the activity will or is likely to have a 'significant impact' on a MNES – if yes (or unclear), refer the action to DoEE under the Act.

Many farmers expressed frustration and concern about their inability to determine whether or not they need to refer under the EPBC Act, including because of difficulties in determining whether their proposed action meets the 'significant impact' and/or 'continuing use' tests. A representative from Regional Development Australia Far North Queensland and Torres Strait Inc commented that the level of assumed knowledge about EPBC Act processes is high. One farmer pointed out that the EPBC Act requires self-referral 'if the landholder thinks' an activity will have a significant impact but questioned whether it is reasonable to expect landholders to consider MNES and whether they have the required information to do so. One project proponent stated that they did not have a 'clear strategic view of where development could actually occur'.

This lack of understanding partly reflects the fact that, unlike other sectors that regularly engage with the EPBC Act such as mining and property development, most farms are not in a position to employ or contract dedicated compliance officers, and many farmers are likely to encounter the EPBC Act only once or twice in their farming lives. The relatively low likelihood of farms needing to interact with the EPBC Act is largely due to the continuing use exemption, which applies to a significant amount of Australian agricultural activities. Many submissions were received from individuals who were upset about a lack of guidance. For instance, one farmer commented that 'there is no clear guidance on if savanna fire management projects should be referred under the Act, which places unfair burden on

project proponents, particularly pastoralists, who lack ecological knowledge to determine if referral is required and/or don't have financial resources to support full EPBC assessment'.³²

The Review heard that farmers and land managers generally do not find the existing guidance materials, such as conservation advices and guidelines, practical or accessible. There is a general perception that the materials do not clearly specify, in non-technical terms, what to do, to whom to speak, or how to get clarity from DoEE around 'significant impact' and 'continuing use' (on conservation advices, see also Chapter 5 of this Review). Some farmers are concerned that significance is hard to determine and worry that actions perceived to be low-impact in nature may require extensive scientific assessment and bureaucratic process to ensure compliance with the EPBC Act. DoEE efforts are underway in relation to some specific issues. For example, DoEE is currently working to improve clarity around the issue of paddock tree management, including by providing guidance on when the clearing of paddock trees would not trigger the EPBC Act. However, comments expressing confusion around 'significant impact' were heard from respondents in multiple regions: 'significant impact is so poorly defined that it could mean anything' (Victoria); 'what is the level of significance? How can you determine what a significant impact is?' (New South Wales); and 'the significant impact test under the EPBC Act is difficult to self-assess' (New South Wales).³³ Comments expressing uncertainty around 'continuing use' include: 'There is a need for a clear definition of use and criteria for determining if an action is a continuing use'.³⁴ The observations on condition thresholds cited in the case study above are also relevant here.

This commentary suggests that farmers often require context-specific guidance on whether their activity is subject to the EPBC Act. One way to ensure that this guidance is available is to appoint individual DoEE case officers to each potential agriculture sector referral that is brought to DoEE's attention. This approach could assist individuals who have not yet made a referral under the Act but are in the process of considering whether or not they need to do so. For those that do make a referral, this case support service could be ongoing throughout the referral and assessment process as required. Although this is broadly similar to existing DoEE practice, as advised by DoEE during the course of this Review, this practice is not adequately reflected in the claims made by farmers and other proponents. There is a need to ensure case officer allocation is consistent and communicate clearly to proponents and potential proponents regarding the fact that there is a single point of contact that they can call on as needed.

Recommendation 5

It is recommended that individual case officers, including from among outposted officers (if applicable), are appointed within the Department of the Environment and Energy to manage referrals from the agriculture sector.

4.5. DoEE communication channels

At present, DoEE primarily engages with the agriculture sector on the EPBC Act through online or postal communications, rather than face-to-face. This has, in part, promulgated the perception of DoEE as an uncollaborative regulator (as discussed in Chapter 4.1 and Chapter 4.3). Consultations conducted for this Review suggest that while the DoEE website contains a lot of relevant information, it is not reaching farmers who are potentially impacted by the EPBC Act, because it may be difficult to find on the DoEE website and not all farmers use or have access to the internet. The Pastoralists and

³² Anonymous submission no. 50

³³ Public submission no. 63

³⁴ Public submission no. 41

Graziers Association of Western Australia noted that many members do not have a computer or reliable internet connection. The Queensland DNRME commented that their experience in Queensland demonstrates that information on a website is not a sufficient resource. Comments that reinforce dissatisfaction with DoEE communication methods include: 'There's all this talk about consultation, but no one comes out here to consult with me' and 'Governments talk a great deal about consultation, but all they ever do is advise'.³⁵ This relates to concerns about education and outreach not being targeted at farmers to ensure that they are aware of their obligations. DAWR noted:³⁶

Active information campaigns are required to inform farmers of the obligations and the potential impact of their future actions on MNES, and of what actions may have significant impacts on a MNES.

For these reasons, the recommendations discussed above have largely focused on increasing face-to-face communications and interactions. However, given the growing use of technology and the internet, it is important that appropriate information can also be accessed online.

While some farmers in particularly remote areas stated that they do not use or access the internet, the Review also heard from many respondents who do use the internet, and DoEE's website and online materials in particular, to access information about their EPBC Act obligations. Despite having internet access, some users felt that it was difficult to find and access useful information about biodiversity, threatened species and MNES that may be present on their land. Information on DoEE's website is usually framed as general information rather than specific guidance for farmers, which users reported to not find particularly helpful. Farmers and others also expressed the view that the structure of the website is difficult to follow and that many pages and layers are required to be consulted before finding the information being sought. The Queensland Department of Agriculture and Fisheries submitted:³⁷

The [DoEE] website requires considerable time spent searching and navigating extensive and sometimes circular information, referrals to other websites, as well as requiring an understanding of what is being searched for, such as locations and scientific species names.

NRM Regions Australia, the representative body of Australia's national resource management (NRM) organisations' Chairs, suggested revising website content to group information by sector (including search functions for EPBC Act referrals to help farmers find similar examples), and developing sector-specific checklists with hyperlinks to useful practical information and tools (e.g. protected matters search tool, guidance on exemptions, links to state and territory resources).³⁸ Environmental Defenders' Offices of Australia (EDOs of Australia) recommended the development of a compliance pro-forma for farmers to record clearing actions with future reporting and enquiries; resources like this could be made available online with instructions about when to use them.³⁹

Another concern is an inability on the part of some farmers to interpret the information provided. This includes technically worded conservation advices, which are discussed in more detail in Chapter 5 of

³⁵ Confidential submission no. 19

³⁶ Public submission no. 60

³⁷ Public submission no. 76

³⁸ Public submission no. 56

³⁹ Public submission no. 39

this Review.⁴⁰ Submissions and consultations emphasised that information should be clear, simple and relevant to users.⁴¹

DoEE has been investing in reforming and upgrading its information and communication technology platforms and has appointed a Digital Innovation Officer to support innovative user-centric design (DoEE, 2016d). However, more should be done. It would be beneficial to target these efforts toward improving the organisation and accessibility of information on the DoEE's website, as well as improving the way in which the information is presented. In general, there is a need to review and restructure web content with end users in mind. User testing will further enable structure and content to be refined to ensure online materials are meeting user needs.

Furthermore, while DoEE states that it employs a Customer Relationship Management (CRM) system already, information provided to the Review suggests that the system requires further development to be fully functional for recording and organising all interactions with proponents. This CRM would align with the online tool for self-assessment (see Recommendation 13 in this Review) and would record interactions at all stages of the customer engagement process. It would also provide continuity for customers in the event of a case officer changing, assist in identifying patterns/issues arising across multiple referrals, and capture details not currently automated, including the number of referrals, types of referrals and outcomes from referrals. Importantly, the use of an improved and updated CRM would need to be encouraged across all relevant teams in DoEE to ensure that a culture of use is developed.

Recommendation 6

It is recommended that relevant existing information on farmers' obligations under the EPBC Act is organised on a single webpage (or collection of pages) on the website of the Department of the Environment and Energy. Content for this webpage should be drafted by an individual with experience communicating with farmers, and the webpage should be promoted through hyperlinks on the websites of the Department of Agriculture and Water Resources, the National Farmers' Federation and other government agencies and peak bodies as necessary.

Recommendation 7

It is recommended that the Department of the Environment and Energy's Customer Relationship Management (CRM) system be functionally improved and updated to record all interactions with customers and potential customers of the Department who refer, or require assessment and approval of conditions and monitoring, under the EPBC Act. The system should also be searchable.

⁴⁰ The Review recognises that a range of factsheets are available online to supplement technical materials and support understanding of ecological communities. However, these are either not widely accessed or understood by agriculture sector stakeholders.

⁴¹ Public submission no. 56, no. 59 and no. 76

5. Listing and delisting of nationally threatened species and ecological communities

Ch. 4	Awareness and understanding of EPBC Act obligations		
Ch. 5	Listing and delisting of nationally threatened species and ecological communities	Ch. 6	EPBC Act environmental impact assessment processes
Ch. 7	Strategic approaches and new initiatives		

The EPBC Act provides for the listing of nationally threatened species and ecological communities. Any native species or ecological community can be nominated for inclusion in the list (*EPBC Act 1999* (Cth), Ch. 5, Pt. 13). Under the Act, the Minister must assign the species and ecological communities on the list into one of the following categories (*EPBC Act 1999* (Cth), Sec. 178):

- extinct (species only)
- extinct in the wild (species only)
- critically endangered
- endangered
- vulnerable
- conservation dependent (species only).⁴²

Nominations of species and ecological communities are sought annually and any person may make a nomination. Nominations must be submitted within the advertised period and must satisfy the EPBC Regulations ([Environment Protection and Biodiversity Conservation Regulations 2000](#)). Valid nominations are referred by the Minister to the TSSC, which prepares a Proposed Priority Assessment List (PPAL). Strategic considerations in the preparation of the PPAL include:

- the level of threat to the species or ecological community
- the effects of listing the species, ecological community or key threatening process, for example in terms of legislative protection and threat abatement
- the capacity to effect recovery of the species or ecological community, or to abate the key threatening process
- the degree to which the nomination considers the national extent of the species, ecological community or key threatening process
- the species or ecological community as a component of biodiversity

⁴² Note that extinct and conservation dependent species and vulnerable ecological communities are not MNES under the Act.

- the availability and relevance of information on which an assessment can be based
- the conservation theme/s, if any.

The PPAL is submitted for consideration by the Minister, who may make changes before confirming a Finalised Priority Assessment List (FPAL), which is published on DoEE's website. When the FPAL has been published, the TSSC commences assessment of each nomination on the list against the listing criteria, and invites public comment on its conservation advice and/or listing advice for each nomination. Having considered submissions received during this period of public consultation, the TSSC provides advice to the Minister, who decides whether to list the species or ecological community and in which category. The Minister then notifies the TSSC and the nominator of the listing decision, and information on the new listing is published on DoEE's website. This process is shown in Figure 6, where blue boxes represent the current process.

It is important that the scientific integrity of this process is maintained and that listing decisions are transparent and trusted. The Review does not support any significant changes to the listing criteria as they presently stand, especially where these changes would introduce formal requirements to consider factors that do not directly relate to the present status of the species or ecological community, such as the potential social and economic impacts of a listing decision. However, it is clear that there is a range of stakeholder concerns that relate to the process for listing threatened species and ecological communities. Most comments heard during this Review relate to:

- transparency of the nomination process
- membership of the TSSC, including absence of representation from the agriculture sector
- consideration of social and economic impacts in listing decisions
- development and implementation of conservation advices.

Louise Gilfedder, of the TSSC, suggested that bilateral processes to ensure more efficient listing and delisting and reduced duplication between state and federal processes could increase efficiency without undermining scientific integrity, for example, strategic assessments of species groups (i.e. frogs, orchids, etc.).⁴³

The focus of this report is significantly on threatened species and ecological communities, as this was the type of MNES most frequently raised by the individuals and organisations consulted for this Review. Data held by DoEE shows that threatened species and ecological communities account for the majority of the controlled action decisions made on the 80 Category 1 agricultural actions (see Table 1) referred since the inception of the EPBC Act. Of the 76 proposed actions for which a controlling provision is recorded, 40 were cited as affecting at least one listed threatened species or ecological community. The next most common controlling provision that applied to this group of proposed actions was impact on at least one listed migratory species, which applied to 13 of the proposed actions. As such, it is reasonable to expect that the listing and delisting process for species and ecological communities will continue to be of interest to farmers who are or may be affected by the Minister's decisions in this regard.

5.1. Nomination process

The Act provides for the public to participate in the threatened species assessment process by nominating species in the annual public invitation and by responding to draft listing/advice/draft

⁴³ Public submission no. 42

assessment advice released for public consultation (DoEE, 2018h).⁴⁴ DoEE calls for nominations, advises of assessments open for comment and listing changes via news banners on multiple pages of its website. The call for nominations is also advertised in national newspapers. The Chair of the TSSC⁴⁵ explained that one of the TSSC's primary roles is to provide rigorous scientific review and input into the draft listing and delisting advices prepared by specialist Departmental officers, which take into account public submissions. A current member of the TSSC stated:⁴⁶

This is a resource-intensive process but provides a strong evidentiary basis for the listing process, something that should reassure and give confidence to stakeholders.

However, consultation conducted for this Review reveals that further transparency in the nomination process and additional opportunity for public input would enhance stakeholder confidence in the process and provide opportunities for developing a more robust and accepted process. One farmer noted that the agriculture sector finds out about listings in an inconsistent manner – by accident and without proper consultation or time to prepare – which means farmers are not adequately prepared to respond to the implications of the listings for their agricultural activity.

The visibility, transparency and accessibility of information that supports nominations would be improved by the inclusion of an additional step in the legislated nomination process. Specifically, all nominations of species and ecological communities, and all supporting information for those nominations, could be made publicly available for comment for a period of 30 business days after DoEE has confirmed that the nominations comply with EPBC Regulations. This would occur before the TSSC prepares the PPAL. The purpose of this step is to promote greater transparency in decision-making and improve public accessibility of nomination information. It is also recommended that the TSSC is granted an additional 20 days (60 days instead of 40 days) to prepare the PPAL, acknowledging the increased volume of information to be considered with the inclusion of a step for public comment as described above. These recommended changes are set out in the orange boxes in Figure 6.

⁴⁴ The majority of nominations received by the TSSC are submitted by the Australian Government, in collaboration with the states and territories (to align assessment processes and listing outcomes through the Common Assessment Method) or from expert reviews of taxa. Species from these reviews are prioritised concurrently with consideration of public nominations. Public nominations account for a relatively small proportion of all nominations.

⁴⁵ Public submission no. 9

⁴⁶ Public submission no. 42



Source: Based on the process as described in the EPBC Act.

Note: Blue boxes signify current steps in the process for listing threatened species, ecological communities and key threatening process under the EPBC Act. Orange boxes signify new or altered steps, as recommended by the Review.

Figure 6 Suggested changes to listing process for threatened species and ecological communities

Noting that similar listing and delisting processes also exist for other MNES under the Act, there may be opportunities to apply these transparency enhancements to processes and timelines for listing and delisting of, for example, national heritage places and Commonwealth Heritage places. These opportunities could be considered during the statutory review of the Act due to be conducted in 2019.

Recommendation 8

It is recommended that the EPBC Act be amended to:

- require that nominations of species or ecological communities for listing under the Act, and all supporting information, be made publicly available for comment for a period of 30 business days, between confirmation by the Department of the Environment and Energy of those nominations that comply with the EPBC Regulations and the referral of those nominations by the Minister to the Threatened Species Scientific Committee for consideration.
- extend the time available to the Threatened Species Scientific Committee to prepare the Proposed Priority Assessment List for the Minister from a maximum of 40 business days to a maximum of 60 business days.

5.2. Threatened Species Scientific Committee membership

Section 502 of the EPBC Act establishes the TSSC as a statutory committee with responsibility to advise the Minister in relation to the following (*EPBC Act 1999* (Cth)):

- the amendment and updating of lists of threatened species, threatened ecological communities and key threatening processes
- making and adopting of recovery plans and threat abatement plans
- approval of conservation advices
- other matters relating to the conservation of threatened native plants and animals at the Minister's request.

While there is no legislated number of members of the TSSC, there are currently ten people on the TSSC, appointed by the Minister. These experts are acknowledged as appropriately scientifically qualified for membership of the TSSC by agriculture sector stakeholders. The NFF endorsed the current ten members of the TSSC in its submission, stating that they are 'undoubtedly highly qualified individuals and together seem to meet their outlined scope'.⁴⁷

However, some people consulted for this Review were critical of the fact that farmers were not closely involved in the listing process, resulting in a lack of transparency of the process and its outcomes amongst farmers. As mentioned in the case study in Chapter 4.3, landholders in the Monaro were critical of the fact that there was limited consultation with farmers prior to and after the listing of the Natural Temperate Grassland of the South Eastern Highlands, resulting in 'a significantly low level of awareness of the listing'⁴⁸ and driving a 'wedge of distrust between regulators and agricultural producers'.⁴⁹ A member of an environmental organisation consulted expressed a view that the listing process is somewhat opaque and suggested that farmers would have a difficult time understanding how it works. Professor Helene Marsh, current Chair of the TSSC, agreed 'that stakeholder trust in

⁴⁷ Public submission no. 62

⁴⁸ Public submission no. 44 and confidential submission no. 74

⁴⁹ Public submission no. 51

the Committee needs to be strengthened’ and that ‘trust could be improved if the TSSC appointment process were made more transparent’.⁵⁰ She suggested that there would be value in a more formal, staggered and transparent process for appointments and replacements. The Review concurs.

The NFF recommended in its submission that ‘the scope of the TSSC expertise be amended to include at least two representatives with formal qualifications and practical experience in productive landscape management’.⁵¹ It also recommended that consultative mechanisms be introduced to enable greater public input into the TSSC processes. These recommendations are supported by the Australian Forest Products Association.⁵² A number of non-farmer submissions and individuals consulted also expressed support for an appropriately qualified farmer member. For instance, one representative of an environmental science organisation commented that a person with knowledge of the farming business who could participate in TSSC debates but also improve understanding of the process within farming communities would be useful. The inaugural chair of the TSSC noted that the TSSC previously had a scientifically qualified farmer as a member, which reportedly made a positive difference to farm sector attitudes regarding outcomes of TSSC processes. The appointment of a TSSC member with practical experience in productive landscape management (and formal qualifications in science) would not only improve the TSSC’s appreciation of the interactions between farming practices and species and ecological community conservation practices but would also enhance communication of TSSC processes and outcomes to agricultural stakeholders. Enabling the inclusion of an appropriately qualified new member of the TSSC through an amendment to the Act would ensure that the role is not later omitted from the make-up of the TSSC.

Recommendation 9

It is recommended that the EPBC Act be amended, and appropriate resourcing provided, to expand the membership of the Threatened Species Scientific Committee to include an individual with formal qualifications in science and practical experience in productive landscape management. It is recommended that this be implemented immediately, prior to the change being formalised through an amendment to the Act.

5.3. Impacts of listing decisions on the agriculture sector

Concerns exist in some sections of the agricultural community regarding the actual and potential impacts of listing decisions on agricultural development. Some respondents displayed scepticism and disapproval of the fact that reviews of listings are conducted by the same committee (the TSSC) that recommended the original listing. The NFF characterised this process as the TSSC ‘marking their own homework’.⁵³ Additionally, some submissions⁵⁴ expressed a view that listing decisions should take account of social and economic impacts, though others stated that the listing process should be purely scientific. Numerous submitters expressed anger at specific listing decisions which they regarded as having significant social or economic impacts within the agriculture sector, while regarding the environmental benefits of the decision as minimal or unjustified. This perception may be related to the issues in the nomination process outlined in Chapter 5.1, and a result of a lack of public engagement and understanding about the listing process. One submitter expressed the view that ‘the information underpinning the listing submission was vague at best and there should have been some

⁵⁰ Public submission no. 9

⁵¹ Public submission no. 62

⁵² Public submission no. 61

⁵³ Public submission no. 62

⁵⁴ Public submission no. 36

time and resources spent assessing what the full current extent of the [MNES] was'.⁵⁵ Although not directly related to the listing decision, a similar sentiment was expressed by the NFF when it recommended that 'in developing conservation advice, social equity and economic considerations, consistent with the principles of Ecological Sustainable Development, be applied'.⁵⁶

It is evident that failing to consider and address social and economic impacts associated with listing decisions can negatively impact community confidence in and support for the listing process, listing criteria under the Act notwithstanding. However, Professor Helene Marsh states:⁵⁷

The TSSC makes scientific recommendations to the listing and delisting of species and ecological communities under the Act. The Act is prescriptive about the categories and criteria to be used and the TSSC scrupulously follows those requirements in their assessment using a rigorous, scientific, evidentiary approach.

Maintaining the scientific rigour of the listing and delisting process is essential to its credibility and no changes to the prescriptions in the Act are recommended.

However, given the potential impacts of listings, it is recommended that the Minister receive Departmental advice as to the likely location and extent of impacts on the agriculture sector associated with listings, and then, where these might be viewed as material, advice on options to mitigate any likely significant social and economic impacts of a listing decision. This advice should be received concurrently with the listing brief on the relevant species or ecological community. Options for impact mitigation that the Minister could receive advice on may include the provision of funding through a Trust tied to the EPBC Act (see Recommendation 20 in this Review).

The Minister should have discretion as to how this advice on impacts and options for mitigation is shared more broadly with sector peak bodies, state, territory and local governments or the general public, if at all, noting that there may be opportunities for such advice to inform or be informed by proactive planning, including regional planning, for management of MNES in the context of the agriculture sector. Development of similar advices could also be considered for other MNES, such as wetlands of international importance and national heritage places, where new designations or listings occur with relevant frequency and may also impact upon agricultural interests.

Recommendation 10

It is recommended that the Minister receive advice, concurrently with the listing brief on the relevant species or ecological community, as to the likely location and extent of impacts on the agriculture sector associated with the listing, and, where these might be viewed as material, options available to mitigate any likely significant social and economic impacts of a listing decision.

5.4. Conservation advices and guidelines

When a species or ecological community is listed as threatened under the EPBC Act, conservation advice is developed to guide the recovery process. Conservation advice directs immediate recovery and threat abatement activities to protect the species or ecological community. This includes practical on-ground activities undertaken by groups such as local communities, natural resource management

⁵⁵ Public submission no. 30

⁵⁶ Public submission no. 62

⁵⁷ Public submission no. 9

groups or individuals, as well as broader management actions by organisations acting at a regional level, such as local councils, government agencies and non-government organisations.

Several farmers and state government officials consulted for this Review expressed frustration with the practicality and readability of existing conservation advices and guidelines.⁵⁸ There is a widespread view among those in the farming community who have interacted with conservation advices that they are often not easily understood and are impractical or impossible to implement.⁵⁹ A view was also expressed that conservation advices are not achieving desired conservation outcomes. Only one positive case – *Pezoporus occidentalis* (Night Parrot) – was mentioned during the consultation process, suggesting that a conservation advice is achieving positive results in terms of protecting a species, including because farmers have been able to understand what the critical needs of the species are and are acting accordingly. A majority of respondents believed that conservation advices are not achieving conservation outcomes, and attributed this, at least in part, to difficulties in interpretation. It should be noted that there are many other factors which may prevent conservation outcomes from being achieved, including inadequate parallel effort to meet threats such as over-grazing, land clearing, weeds and feral animals.

Many users of conservation advices reported that they did not understand the practical operation of the definitions and language used in the advice.⁶⁰ It was suggested that those who write conservation advices are writing for a specialist audience, meaning that advices may assume a high level of technical qualification or may be challenging or impractical to apply on a farm. For example, conservation advices could include instructions to spot spray weeds until the weeds cover 50 per cent of the area under consideration, at which point they can be sprayed, but the paddock is likely to be lost to productive use by this stage. One individual stated that the Australian Government should seek advice on providing information pitched in a manner useable by farmers, while another said farmers require a specialist to interpret the requirements in the conservation advices and these specialists are not generally known to farmers and may not be readily accessible in all regions. The NFF summarised the outcome of these concerns as follows:⁶¹

It is clear that there is ongoing concern with the way that the conservation advice is developed and interpreted on the ground... When the conservation advice is poorly defined, it creates confusion, mistrust and concern.

Further frustration for some farmers and state government officials relates to a view that the application of scientific parameters or condition thresholds developed for the conservation advices do not reflect real-life conditions and are meaningless and dysfunctional ‘in the paddock’. Some respondents stated that conservation advices may not advance the conservation objectives of the listing itself.

Noting that DoEE has made considerable efforts to engage with farmers in the Monaro region and clarify the conservation advice relating to this particular ecological community, including by consulting with NSW LLS officers in the region in 2016 to revise the conservation advice, it remains the case that several individuals and organisations consulted for this Review expressed a view that guidance needs to be better tailored to specific regions and should be prepared in collaboration with local farmers and land managers. A representative of an environmental NGO stated that conservation advices should be prepared by experts but that those experts could benefit from being informed by practical advice as to what is achievable.

⁵⁸ Confidential submission no. 74, no. 44, no. 51 and no. 63

⁵⁹ Public submission no. 51

⁶⁰ Public submission no. 12, no. 44, no. 51 and no. 63

⁶¹ Public submission no. 62

Statements made during consultation for this Review suggest that consultation with local state or territory government officers alone is not sufficient for producing conservation advices that can be readily interpreted and implemented by farmers and land managers. There is probably an inevitable element of legislative defensiveness in advices penned by bureaucrats and further ‘ground-truthing’ with practitioners of conservation advices is required, as is the development of further supplementary guidelines to accompany the conservation advice. While a range of online factsheets have been published as a starting point for understanding how to manage ecological communities and conform with EPBC Act requirements, statements received during consultation suggest these are not currently meeting farmers’ needs for accessible, targeted and implementable guidance, as outlined in Chapter 4.4. DoEE has acted on this finding by conducting an on-farm visit in the Monaro to improve its officers’ understanding of the application of the conservation advice in the region and of the issues surrounding that application. Following that visit, DoEE has been developing ‘plain English’ advice for the region that incorporates land use history and pasture type into the identification of grasslands protected under the EPBC Act (DoEE, 2018f; DoEE, 2018a).

In general, conservation advices need to be tested and developed on the ground through engagement with local farmers and land managers to ensure that they are able to be practically understood and implemented. DoEE could consider options to engage with relevant local experts and land managers to assist in this ‘ground-truthing’ process, particularly in regions that are relatively new to consideration of the interactions between the EPBC Act and the agriculture sector, but where further expansion is expected (e.g. northern Australia). Importantly, this ‘ground-truthing’ should occur prior to the formalisation of conservation advices. As processes are tested and improved in relation to threatened species and ecological communities, guidance documents relating to other MNES (e.g. migratory species, national and world heritage places, and wetlands of international importance) could also be reviewed to ensure information is appropriately pitched to an agriculture sector audience.

Recommendation 11

It is recommended that risk-based ground-truthing of conservation advices and recovery plans for listed species and ecological communities be undertaken, with the involvement of local practitioners and technical experts, prior to the formalisation of that advice.

6. EPBC Act environmental impact assessment processes

Ch. 4	Awareness and understanding of EPBC Act obligations	
Ch. 5	Listing and delisting of nationally threatened species and ecological communities	Ch. 6 EPBC Act environmental impact assessment processes
Ch. 7	Strategic approaches and new initiatives	

As described in Chapter 3, the environmental impact assessment process established by the EPBC Act is, at present, the principal point of interaction between the Act and the agriculture sector. This process is based on self-referral.

The number of referrals under the EPBC Act from the agriculture sector has remained consistently low. As such, most farmers have never engaged with the environmental impact assessment process. Despite this, there is a strong view among those in the agriculture sector, and in some environmental and other groups, that the process is not conducted in a consistent and timely manner, leading to slow, expensive and poorly implemented processes. Concerns relate in particular to how the Act is perceived as making it difficult to achieve efficiency improvements in agricultural practices and effectively manage native vegetation on farms.

This chapter considers these issues relating to the environmental impact assessment process established under the EPBC Act, including the referral and assessment process and the approval and compliance process (which includes compliance with conditions on approvals and implementation of environmental offsetting programs where there are residual impacts on a MNES due to an action being taken).

6.1. Referrals and assessments

A recurring comment among farmers was that they experience a lack of clarity around time and cost associated with referrals and assessments.⁶² For instance, the Review received several comments suggesting that farmers have been deterred from referring actions under the Act because they expected time and cost commitments to be high. Stakeholders expressed a desire for greater clarity on how long processes would take and what costs would be involved before engaging. This reflects consistent feedback that lack of understanding about the EPBC Act and what it means for farmers, as discussed in Chapter 4, is a major barrier to farmers fulfilling their obligations. One farmer commented that environmental regulation ‘is so rigid that it contributes to landholders’ distrust of government, and limits their voluntary participation in environmental programs’.⁶³ Another individual noted that farmers might not refer an action (and either proceed with the action unlawfully or not proceed with the action) because they think the cost is not worth a potential negative referral outcome. There is a general sense that EPBC Act obligations protect a public good at a personal cost (a financial cost, but also a time cost) to farmers.

⁶² Public submission no. 40

⁶³ Public submission no. 18

During the course of this Review, DoEE acknowledged that the cost to the landholder in understanding whether they have a MNES on their property can be substantial, which can be a deterrent for compliance with the Act. One individual described farmers who did not perform due diligence because of cost as acting in 'rational ignorance'. Many people suggested that most farmers simply do not have the financial resources required to understand and undertake their obligations under the Act, due to a lack of scalability of referral and assessment processes (i.e. a perceived 'one-size-fits-all' approach to environmental impact assessment). The concern is that the referral and assessment process is a standard approach where the scale of administrative processes do not reflect the scale of actions on farms. The Gingin Private Property Rights Group stated:⁶⁴

Individual farming projects unlike single mining projects do not amount to billion dollar projects, with the ability to engage teams of staff to wade through a very complex, complicated and fluctuating piece of legislation.

Representatives from the Pastoralists and Graziers Association of Western Australia noted that many small farming businesses do not have the resources to undertake due diligence, and that contracting consultants to do that work does not represent a positive cost-benefit outcome in the short term. Individuals from Western Australia and the Northern Territory similarly stated that while large companies may undertake referrals frequently and have the resources to support specialised roles, small businesses do not have this capacity. Submissions noted that small farming operations are at a disadvantage compared to large corporations (from the agriculture and other sectors) when interacting with the EPBC Act. One farmer suggested that small land owners may have less engagement in consultation processes than large industry players who may be seen as more significant stakeholders, resulting in small land owner interests not being accounted for.⁶⁵ Another farmer recounted challenges during legal disputes with a large mining corporation due to the vastly different resources available to individuals and large companies.⁶⁶

This perception that there are considerable financial and time implications from engaging with referral and assessment processes, as expressed by those who have not actually engaged with the process, may be related to stories of lengthy and costly processes experienced by farmers who have formally engaged with the Act in the past (see boxed text).

Case study: Accounts of lengthy and costly assessment processes heard during consultations for this Review

One cattle farmer reported significant financial losses caused by a prolonged assessment process, during which DoEE purportedly exceeded the standard review period by 81 days. This resulted in significant opportunity costs and having to sell cattle early as they could not be held during the assessment process, on top of application and assessment fees claimed to total over \$400,000. Another farmer submission recounted a four-year referral and appeal process involving state and federal governments, during which they were unable to perform property maintenance which could affect the claim, such as burn offs. The farmer experienced significant delays while their case was referred through several government offices and officers. A representative of the Western Australia Government noted that farmers have natural (i.e. seasonal) timeframes in which to undertake certain actions and opportunities to undertake actions have been missed in the past due to engagement with the EPBC Act.

The Review heard several accounts of procedures such as soil sampling and species observation being repeated due to misalignment of Australian Government and state and territory government

⁶⁴ Public submission no. 26

⁶⁵ Public submission no. 4

⁶⁶ Confidential submission no. 14

requirements (i.e. not due to inconclusive tests/surveys or new actions being undertaken).⁶⁷ This required farmers to hire multiple consultants over a long time period.⁶⁸ A confidential submitter provided an observation of the process for one proponent:⁶⁹

State government has done assessments and has determined property is acceptable to thin or clear regrowth, but EPBC requires they pay for an additional Flora Survey before proceeding. They are confused by the 'exemption conditions' outlined for them, doesn't recognise state process.

In other cases, inconclusive or contradictory surveys and difficulties in identifying suitable surveyors have resulted in undesirable time and cost implications for farmers. Some surveys have returned inconclusive results or results of insufficient quality, requiring additional surveys to be undertaken. One farmer, in his quest for state and Australian Government approvals, has conducted three separate surveys over four years in an attempt to determine the presence or absence of a particular species; all of these have returned what were described as 'inconclusive results', at a total cost to that point of over \$70,000. Another farmer has paid for 'extensive flora and fauna assessments' to be undertaken by independent botanists, and has not in the meantime utilised the relevant areas for 'fear of failure to comply to the requirements of the EPBC Act'.⁷⁰

6.1.1. Accreditation for environmental professionals to undertake flora and fauna surveys

It is evident that agricultural proponents are deeply dissatisfied with the time and cost requirements of the current process, and that efforts should be considered to address this dissatisfaction where possible. Members of the Pastoral and Graziers Association of Western Australia discussed proponents' desire for a streamlined process that results in quick decisions to enable proponents to move onto the next activity in a timely fashion.

Given concerns relating to the difficulty in securing the services of appropriate environmental surveyors and achieving certainty in survey outcomes, the Review recommends DoEE take steps to provide greater certainty about what is required of farmers and how to access appropriate services. The Review recommends that DoEE promote greater certainty by specifying survey parameters prior to the work being undertaken. As well, the Department could assist by providing improved guidance on how to procure appropriate survey services in support of referrals and assessments. One way to do this would be to establish a single professional association to accredit environmental professionals to undertake these surveys. The Environment Institute of Australia and New Zealand Inc. (EIANZ) is an existing organisation that may be an appropriate accreditation body. EIANZ allows experienced environmental professionals to apply to be a Certified Environmental Practitioner. This is the first accreditation scheme designed exclusively for environmental practitioners in Australasia. Accrediting an organisation like EIANZ to accredit practitioners who can undertake surveys in support of EPBC Act referrals and assessments could help to remove uncertainty among project proponents in relation to the commissioning of surveys of acceptable quality to support referrals of actions under the Act. Clarity on necessary survey parameters and having a list of 'acceptable' consultants should help reduce the occurrence of survey repeats and speed up the referral and assessment process. If this approach were adopted, it would be important to regularly audit the association to ensure that high standards of accreditation were maintained.

⁶⁷ Public submission no. 5

⁶⁸ Public submission no. 5

⁶⁹ Confidential submission no. 22

⁷⁰ Public submission no. 43

It is not suggested that DoEE close the market for environmental professionals entirely. Under this model, surveys could still be undertaken by professionals not accredited by the relevant association, but the list of accredited providers would serve as a helpful resource for individuals seeking to identify, for the first time, suitably qualified professionals competent to complete particular types of surveys.

Recommendation 12

It is recommended that the Department of the Environment and Energy set out what constitutes an acceptable survey method to be undertaken by a proponent prior to the proponent undertaking the work. Additionally, it is recommended that the Department accredit, and regularly audit, a single professional association (e.g. Environment Institute of Australia and New Zealand) to in turn accredit relevant environmental professionals to undertake flora and fauna surveys in support of referrals, noting that individuals may still employ the services of non-accredited individuals.

6.1.2. Faster, automated processing for ‘not controlled action’ decisions

As detailed above, the time, cost and uncertainty of the referral process may lead some people not to refer when they should. There is another group of people who refer small, low-risk actions (that are ultimately classified as ‘not controlled actions’) simply to ensure their compliance with the Act. This group undergoes the same sometimes lengthy, costly and uncertain process as those proposing actions that are ultimately determined to be controlled actions. Regardless of the individual case, it is clear from submissions and consultations that proponents are generally seeking a relatively quick decision on a referral that can provide them with legal certainty as they undertake their action.

A representative of a state government commented that the approach to referrals and assessments needs to be scalable and risk-based, so that the process can be faster and less costly for farmers that meet specific criteria (i.e. proponents of small-scale low-risk projects). To some extent, the Act is already risk-based and scalable as it provides for different assessment methods with varying degrees of complexity. However, there is still scope for improved risk management in relation to actions not likely to have a significant impact on MNES. The NFF recommends ‘establishing a less onerous referral process that recognises the low level of risk associated with most farming activities’.⁷¹

One approach to reducing the burden on farmers associated with referring actions that are relatively unlikely to have significant impacts on MNES is to further automate the referral process. Tasmanian Irrigation stated that ‘more online automation is needed, so that a project can’t be called in once a simplified decision is made’.⁷² Tasmanian Irrigation specifically recommends that:⁷³

...an automated online process be developed that can make a final determination based on clearly definable thresholds on whether an action is likely to have a significant impact on a MNES and therefore require referral for assessment under the EPBC Act... If such a process is implemented, and the process demonstrates that a particular action is not required to be referred for assessment, there [should] be a guarantee that external persons cannot request that the action be called in for referral at a later date.

The Review endorses this suggestion and recommends that a process be established to enable a quick, codified and automated referral decision for no/low-risk proponents. Those that refer on a cautionary basis, who do not believe that their action will have a significant impact on a MNES but

⁷¹ Public submission no. 62

⁷² Public submission no. 33

⁷³ Public submission no. 33

would like to gain the legal surety of a 'not controlled action' decision, should have access to a tool that they can utilise to quickly complete the self-assessment process online. This would enable automated processing of 'not controlled action' decisions, allowing a quicker referral process for many small-scale, no/low-risk projects and providing legal certainty through receipt of a decision certificate. This 'not controlled action' referral decision should be a statutory decision and constitute a defence for the proponent to allow security in undertaking appropriate actions. Similar to a tax self-assessment, individuals would be required to declare that the information they submit is truthful and accurate; this is required by the Act in any case through the course of existing referral and assessment processes. As stated in the 2009 Hawke review, 'it is reasonable to have an 'if in doubt refer it' policy' (Hawke, 2009b, p. 162); a codified tool would enable this kind of approach while also reducing the time and cost associated with DoEE's handling of referrals.

The objective of this recommendation is to:

- reduce real or perceived subjectivity in the EPBC Act referral process
- provide legal certainty to project proponents regarding their compliance with the EPBC Act
- enable self-assessment to increase the speed of decision making under the EPBC Act and allow DoEE to focus on assessing the likely impacts of controlled actions
- reduce the associated time and cost burden for proponents and for DoEE
- enable a codified assessment of 'not controlled action' to be used as a defence under the provisions of the Act and Regulations

Recommendation 13

It is recommended that an online tool be established under the EPBC Act to enable individual landholders, or Commonwealth officers or authorised individuals working with landholders, to access automated processing of 'not controlled action' decisions where there is no significant impact on matters of national environmental significance. This tool should be formalised through an amendment to the Act.

6.1.3. Detailed analysis of potential for improved alignment between state and federal processes

There is substantial concern among farmers and peak body representatives that duplicative regulatory requirements established by state and federal governments are causing issues for farmers referring actions under the EPBC Act and for those wishing to understand if they need to refer. The Australian Government environmental offsets policy acknowledges that most actions requiring approval under the EPBC act also require approval under state or territory legislation.

Several consultations and submissions touched on issues of state-federal misalignment, overlap in both legislation and process, and an apparent absence of information available at the state level regarding Australian Government legislation and process. There is a consistently expressed view that this is contributing to confusion and frustration among farmers. This is discussed in more detail in Chapter 4.3 above.

In its written submission to this Review, NSW LLS stated, 'Helping landholders deal with their additional (and in many cases overlapping) obligations under the Australian Government's EPBC Act is a key priority. However, the dual regulatory system is currently unnecessarily complex, onerous and

potentially costly for landholders'.⁷⁴ The Kimberley Pilbara Cattlemen's Association cited issues with 'the [WA] State [Government] and Commonwealth deeming magnitudes of impact differently and with the Commonwealth issuing controlled actions based on a level of potential impact on MNES that are not demonstrably significant'.⁷⁵ Tasmanian Irrigation⁷⁶ stated:

As all [Tasmanian Irrigation] applications are referred under the EPBC Act, and comprehensively address both State and Federal Government environmental requirements, confusion has occurred at times as to who the responsible regulator is to oversee their implementation and to gain approval for any changes. For example, conditions on the various EPBC Act NCA PMs [Not Controlled Action – Particular Manner] have over time been transposed to Environmental Protection Notices issued by the Tasmanian Environmental Protection Agency and conditions of permits, approvals and licences administered by DPIPWE [Department of Primary Industries, Parks, Water and Environment]. Conflicting advice has been received at times from both the DoEE and the relevant state regulator as to who is ultimately responsible for the requirement, and who to apply to, to vary conditions.

In the time available, this Review was not able to undertake a forensic examination of each state and territory's legislation in relation to the EPBC Act. However, there is a clear need for further analysis of specific opportunities to improve harmonisation of their operations. It is recommended that, following the Australian Government response to this report, DoEE monitor and report back to the Meeting of Environment Ministers on progress against implementation of the recommendations and the success of the recommendations in enhancing harmonisation between the operation of the EPBC Act and each state and territory's existing environment protection and land management legislation. Ongoing cooperation between the Australian Government and individual state and territory governments, of the kind described elsewhere in this report in relation to DoEE-NSW LLS cooperation, should be promoted to ensure consistent messaging in relation to farmers' obligations.

Recommendation 14

It is recommended that, following the Australian Government response to this report, the Department of the Environment and Energy monitor and report back to the Meeting of Environment Ministers on progress against implementation of the recommendations and the success of the recommendations in enhancing harmonisation between the operation of the EPBC Act and each state and territory's existing environment protection and land management legislation.

6.2. Approvals and compliance

Once actions have been assessed, they are either approved, not approved, or approved with conditions. This approvals process and associated compliance activities are described in more detail in Chapter 3.

Given the comparatively low number of controlled actions proposed by agriculture sector proponents since the EPBC Act came into force (see Table 1), the consultation process conducted for this Review revealed little about how agriculture sector approvals have been enforced. Two aspects of approvals and compliance that received attention during the Review are conditions on approvals and environmental offsets (which are a type of condition on approvals).

⁷⁴ Public submission no. 63

⁷⁵ Public submission no. 40

⁷⁶ Public submission no. 33

6.2.1. Varying conditions on approvals

As described in Chapter 3, the Minister may attach a condition to the approval of an action if he or she is satisfied that the condition is necessary or convenient for protecting, or repairing or mitigating damage to, a MNES. One of the concerns with the current status of conditions under the Act is that an approval holder (for the purposes of this Review, a farmer) cannot simply gain a variation on a condition attached to that approval for a revision unrelated to the protection of the MNES. There are at least two reasons for an approval holder to seek such a variation:

- to modernise data capture techniques (e.g. through the adoption of satellite technologies or camera traps) to reduce reliance on more time-consuming manual methods
- to align an EPBC Act condition with a state condition that might have changed (e.g. under the New South Wales *Biodiversity Conservation Act 2016*) since the original EPBC Act condition was granted.

In both situations, a prescriptive condition attached to an EPBC Act approval is unlikely to have the requisite flexibility to enable these adjustments and so a variation to the condition would be required. Although Section 143 of the EPBC Act states that the Minister ‘may, by written instrument, revoke, vary or add to any conditions’ attached to approvals (with some exceptions), this ability is largely restricted to changes that expand protection of MNES, rather than pragmatic changes that seek to maintain current levels of protection by alternate means. Although the Act allows an approval holder to request a variation to a condition, it is not clear that the Minister has any authority to vary a condition for the purpose of replacing an existing prescriptive condition with a condition that adopts more modern or accurate and lower-cost methods for fulfilling the terms of that condition.

There is an opportunity for the Act to be amended to more clearly enable conditions on approvals to be added, varied or revoked where the condition is no longer relevant, is establishing a perverse outcome, or cannot reasonably be undertaken due to changing circumstances or new information. The requirements associated with some conditions may have been relevant at the time that the condition was put in place but can become onerous and outdated over time. Importantly, any amendment should be drafted such that variations to conditions continue to require substantiation by the Minister, based on advice provided by DoEE on the extent to which the proposed variation would enhance or maintain the satisfaction of the intent of the condition. DoEE’s stated desire to move toward more outcomes-based conditions (DoEE, 2016b) will also strengthen the general ability of approval holders to adhere to conditions in a way that also allows holders to respond to advances in science and technology and changes in state and territory legislation.

Recommendation 15

It is recommended that the EPBC Act be amended to allow the holder of an approval to request the Minister, in writing, to revoke, vary or add conditions for environmental approvals granted under Part 9 of the EPBC Act, where an existing condition is no longer relevant, is establishing a perverse outcome, cannot reasonably be undertaken due to changing circumstances or new information, or could be undertaken in a more cost-effective manner.

6.2.2. Environmental offsets

Sometimes, measures to avoid and/or mitigate the significant impacts of a controlled action on a MNES are not able to account for all impacts. Residual impacts of an action on the environment may remain. In such instances, environmental offsets are sometimes used to compensate for these residual impacts, and are included as a condition of approval under Section 134 of the Act. These residual impacts must be considered acceptable in order for the environmental impact assessment

process to proceed to consideration of environmental offsets. This process is described in more detail in Chapter 3.

Environmental offsets were mentioned by many individuals consulted for this Review and were referred to in numerous submissions, particularly regarding time and cost implications for farmers. Time and cost implications arise not only from the immediate cost of setting aside or purchasing the environmental offset, but also from maintaining land over time and from managing differences between national and state/territory schemes. One submitter noted that farmers incur the upfront costs for assessment of a potential offsetting arrangement, as well as the costs of maintaining the offset in perpetuity.⁷⁷ Environmental offsets are not a one-off cost and can require significant ongoing rate payments and maintenance. It was noted that national and state/territory offsetting schemes can differ significantly. The Review heard examples where these inconsistencies caused uncertainty for farmers. One expert group stated that landholders are likely to be confused about what the potential value of their environmental offset might be under different schemes. A clear and consistent approach that drives behaviour toward protecting high-value environmental assets is needed. Consistent with the 2009 Hawke review, it is recommended that harmonisation of environmental offset assessment methods between jurisdictions is improved, either by developing a common assessment method for environmental offsets or a national standard for environmental offset assessment methods that states and territories can choose to meet by seeking accreditation (Hawke, 2009a).

Uncertainty regarding availability of environmental offsets and ability to access those that may be suitable was another recurring theme. One academic discussed the need to inform farmers of environmental offset opportunities at the state/territory level, as opportunities are not being adequately pursued. One farmer was required to hire a consultant to advise on which environmental offset options were feasible for their property. It was stated that multiple consultants were hired to conduct surveys during the referral and assessment period, and this was just one more consultant that was required to make progress within the environmental impact assessment process. Another respondent stated that trying to wade through options for environmental offsets when there are multiple options available can be frustrating. DoEE should consider options for providing targeted guidance to the agriculture sector relating to when (and which) environmental offsets are or are not appropriate to manage residual impacts on particular plants and animals. Additionally, DoEE should consider establishing a public list of approved environmental offsets and providing regular reporting on the results of monitoring and evaluation of conservation outcomes associated with environmental offsets.

Complexity in environmental offset calculation methods was another point of contention raised on multiple occasions during consultation. The Review heard from one respondent who was required to do an environmental offset in the order of 300-350 hectares based on an 'inconclusive' survey result relating to the presence of a particular species. In this case, the respondent claimed that the land area of the environmental offset was required to be double that of the land that they were seeking to clear, but the respondent was confused about how this ratio was calculated. They were not sure if there was any correlation between the number of species 'potentially' identified and the environmental offset requirement. One submitter commented:⁷⁸

Under the offset scheme, we have become price takers, not price setters. The government decides the value of the biodiversity, which seems to be inflated or devalued in favour of the government.

One observer identified a need to codify decisions around environmental offset metrics, and to make these metrics more transparent, as the current process results in outcomes that are perceived to be

⁷⁷ Confidential submission no. 48

⁷⁸ Confidential submission no. 48

inequitable, perhaps related to the variable ratios adopted for calculating offset areas. It was also stated that DoEE does not publish the information used to determine metrics for environmental offsets. Based on offsets cases heard throughout the course of this Review, it is possible to conclude that DoEE does not have a standard approach to determining environmental offset conditions or approvals and that there is no formal mechanism to ensure consistency across cases. The Review recommends that in addition to targeted guidance as to when and which environmental offsets are appropriate, guidance should also be provided on how offsets are calculated.

Case study: Farmer perceptions of onerous offsetting requirements

Some stakeholders reported that they believe the conditions on a controlled action to be onerous. For example, one farmer consulted in the horticultural industry owns a 120-hectare property in a region in which the state government encourages horticulture. He wanted to expand his productive area from 70 hectares to 100 hectares, leaving 20 hectares of bushland uncleared. The required environmental offset was determined to be 150 hectares, which, should he proceed, he would be required to acquire and manage. The producer felt that this was an excessively large area and significantly disincentivised further horticultural development.

Another point of contention is the way in which ‘perpetuity’ is defined. A couple of farmers stated in submissions that environmental offsetting schemes should be for a designated length of time, rather than in perpetuity.⁷⁹ One landholder stated:⁸⁰

The offset schemes in perpetuity makes the land of no value – If it doesn’t turn a profit, it is a cost. It devalues the property.

Furthermore, farmers are sceptical as to how environmental offsets are contributing to the protection of threatened species.

Recommendation 16

It is recommended that the policy for EPBC Act environmental offsets on private lands be reformed following a review of environmental offsets including by considering options for:

- working toward improving harmonisation of environmental offset assessment methods between jurisdictions, either by developing a common assessment method for offsets or developing a Commonwealth standard for offset assessment methods that states and territories can choose to meet by seeking accreditation.
- providing guidance targeted at agriculture sector stakeholders on how environmental offsets are calculated and when an offset is and is not an appropriate mechanism to manage significant impacts on matters of national environment significance.
- developing a voluntary register of parcels of land containing matters of national environmental significance that may be eligible to be purchased as environmental offsets in future.
- establishing a public register of approved environmental offsets established under the Act, and providing regular reporting on the results of monitoring and evaluation of conservation outcomes.

⁷⁹ Confidential submission no. 52, no. 53 and no. 54

⁸⁰ Confidential submission no. 46

7. Strategic approaches and new initiatives

Ch. 4	Awareness and understanding of EPBC Act obligations	
Ch. 5	Listing and delisting of nationally threatened species and ecological communities	Ch. 6
		EPBC Act environmental impact assessment processes
Ch. 7	Strategic approaches and new initiatives	

Through its assessment of the EPBC Act as it is presently applied to regulate the agriculture sector, this Review has identified several improvements that could be made to existing processes. In addition to these, there are several new initiatives that could be undertaken to enhance the protection of MNES and to reduce the regulatory burden on the agriculture sector while maintaining environmental standards. These go beyond existing practice and are new activities to provide greater certainty to regulated entities, provide an alternative to regulation and incentivise cooperation and compliance, interrogate options for reform, and help make an asset out of a set of obligations that is largely viewed by farmers to be a liability. Such strategic approaches and new initiatives include non-regulatory tools, where the Review has identified that the EPBC Act's regulatory protections for the environment could be enhanced by other mechanisms. This reflects the findings of the Productivity's Commission's *Inquiry Report* (Productivity Commission, 2016):

When reviewing regulation it is essential to revisit the objectives of the regulation — that is, to establish that there is a clear and valid rationale for the regulation. Even if regulation was initially appropriate, changes can occur in markets and technologies and in people's preferences and attitudes over time... Regulation is just one policy option, so the cost-effectiveness of other policy tools must also be considered.

7.1. Data collection and access

In the course of implementing the EPBC Act, DoEE collects, reviews and publishes a large volume of data, relating to the status of MNES and to individual actions. DoEE also engages with numerous proponents and concerned members of the public, many on a repeat basis. Despite this, DoEE does not have a consistent ability to collect data in forms that can be easily manipulated, shared and integrated into larger datasets. Supporting data for many referrals and assessments is provided by proponents in forms (e.g. PDF) that cannot be manipulated. There is also limited capacity to compare changes in datasets over time. For example, digital information (including mapping) submitted at the referral stage may vary at the assessment stage and could vary again at the approval stage. In practice, these distinctions are often lost and there is no dataset that maps cumulative conditions on approvals or notes environmental offset locations for multiple decisions made under the Act. Any census on environmental offsets, for example, would need to be done manually.

A report commissioned by CSIRO acknowledges that the value of proponent data has not been quantified or well described to date, and the degree to which proponent data is captured by state or territory governments is not yet well documented (Box, Hansen, Bradsworth, & Kostanski, 2018). The report also states that DoEE anticipates that having reliable access to data used by proponents to develop their proposal reports would enable:

- well-informed assessment decisions and approval conditions

- improved monitoring and enforcement of approval conditions, based on access to original proponent data
- sharing, exchange and reuse of data across a range of environmental decision making and policy areas within and beyond DoEE.

The key findings from the report are summarised in Figure 7.

Many individuals consulted expressed dissatisfaction with online data, mapping and tools available for identifying potential MNES on their properties, and related protection obligations. Limitations of DoEE's Protected Matter Search Tool regarding the ability to identify the location of threatened species and ecological communities were acknowledged. Representatives of environmental NGOs endorsed the notion that more focused mapping would help landholders to better understand which threatened species are highly likely to exist on their property. The Australian Conservation Foundation recommends:⁸¹

improving the information and mapping of habitat areas for threatened species and threatened ecological communities [as this will] send important signals to farmers and other sectors as to the likelihood of significant, acceptable and/or unacceptable impacts.

In addition to mapping of habitat areas, the NFF recommends the development of accurate, multi-jurisdictional mapping that reveals the layers of environmental legislative requirements at the site scale, accessible through an online portal.⁸²

Case study: Concerns with current maps and data heard during consultations for this Review

One farmer from New South Wales pointed out errors and inaccuracies in the mapping available to them online, and also stated that many farmers were unaware that the maps were available.⁸³ Another stakeholder submitted that the EPBC vegetation map for his property was inaccurate; something he had discovered when attempting to use an adjacent block of land as part of an ERF project. The farmer claimed the EPBC map overlapped with the proposed ERF area so he was unable to participate in the ERF project. He also suggested that there is no straightforward and reasonably priced means of getting the map amended. These comments were not restricted to weaknesses in tools provided by DoEE; stakeholders in Western Australia identified similar concerns in relation to the state government's Nature Map tool.

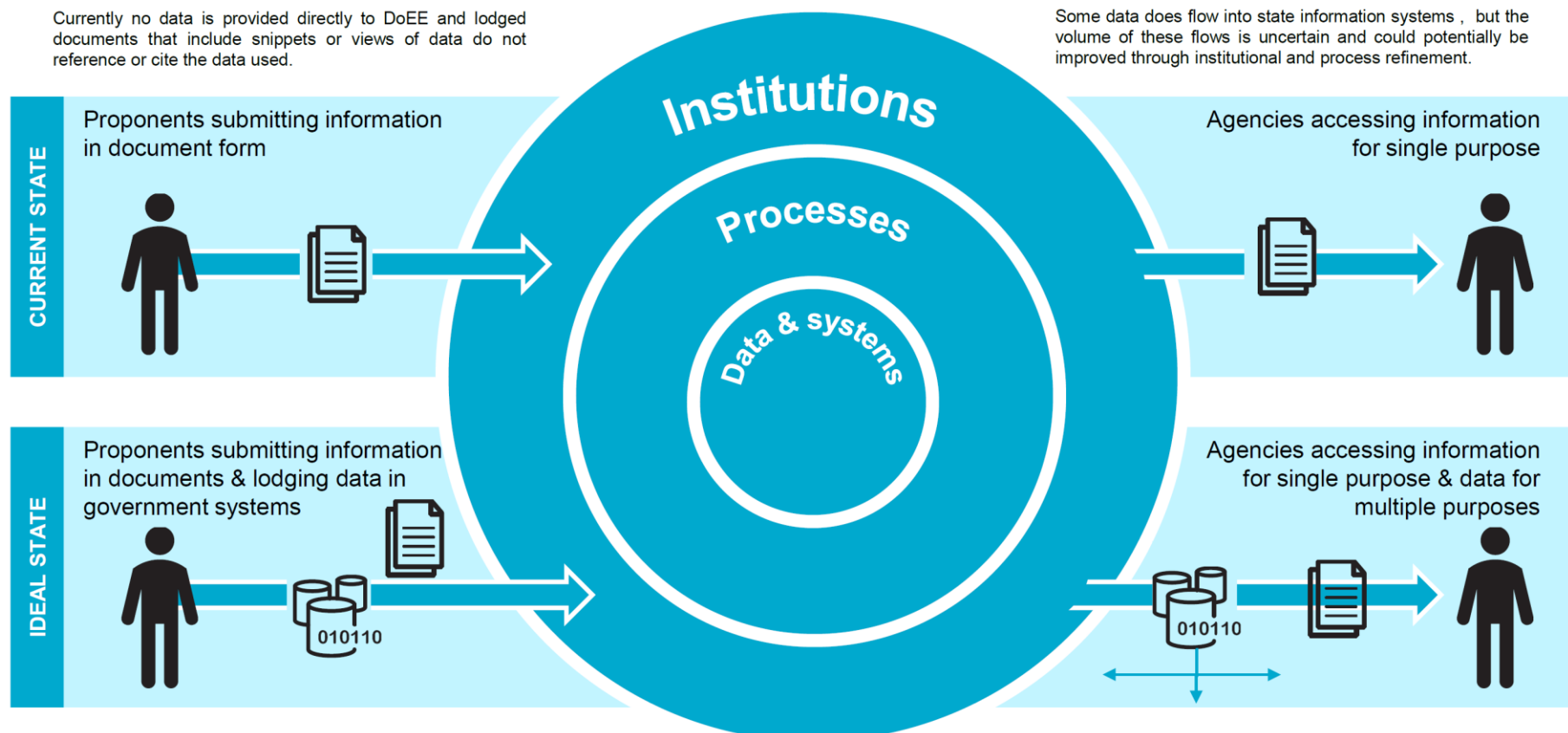
⁸¹ Public submission no. 64

⁸² Public submission no. 62

⁸³ Confidential submission no. 37

Currently no data is provided directly to DoEE and lodged documents that include snippets or views of data do not reference or cite the data used.

Some data does flow into state information systems, but the volume of these flows is uncertain and could potentially be improved through institutional and process refinement.



In order to move from submission of documents with views of data, to submission of data to relevant government systems, a complex data ecosystem with a variety of institutional arrangements (legislative, contractual, normative) wrapped around the data as well as technical challenges (systems and standard for data) must be navigated. Addressing the numerous barriers in the information supply chain will require time and a combination of strategies that

address: data ownership arrangements (established in environmental assessment service procurement processes); improvements in government capacity to handle lodged data and strengthening of regulation requiring data lodgement as part of broader bi-lateral assessment processes.

Source: Box, Hansen, Bradsworth, & Kostanski, 2018.

Figure 7 Overall insights from CSIRO EPBC Proponent Data Project

Improved DoEE datasets – in terms of data quality and public accessibility – should be integrated into an end-to-end information technology (IT) system to support environmental impact assessment as recommended in the final report of the Regulatory Maturity Project, which defines an ‘ideal IT system’ as including the following functions (Woodward, 2016):

- end-to-end workflow management (pre-referral to compliance)
- automatic extraction of data from source databases
- quality assurance checks throughout the process, including trigger points for specialist advice and checks for appropriate delegations
- online links to relevant policies and guidance material and training at appropriate points in the process
- the ability to compile briefing material
- time management with prompts
- archival storage and access
- an ability to share and mine data using multiple search criteria (both internally and externally)
- better tools for intelligence gathering and data analytics.

Since documents lodged with DoEE as part of the environmental impact assessment’s referral, assessment and monitoring processes often include significant volumes of data, encouraging discoverable, accessible and reusable environmental information should remain a priority for DoEE (Box, Hansen, Bradsworth, & Kostanski, 2018). It is recommended that datasets developed in support of referrals and assessments, and to monitor approval conditions, should be consistently conditioned to Australian Government standards to help enable the ‘ideal IT system’ described above. Data transparency is also important, except where there is an unacceptable risk that revealing the location of species or ecological communities may result in their collection or destruction. In such instances, DoEE’s sensitive data policy should apply.

In sum, improvements to data collection and access could realise considerable benefits for end users in relation to:

- improved, simpler and more reliable communications with DoEE, based on a CRM that holds current information about a referral, including its current assessment stage and records of correspondence and discussions with the proponent
- greater consistency of environmental impact assessment processes and outcomes, including because data from other like cases can more readily be drawn upon to inform decisions on new referrals
- costs savings for businesses engaged in preparing EPBC Act referral (and other) materials and for the Australian Government as administering preparation and review of that material becomes faster and easier.

Recommendation 17

It is recommended that datasets developed in support of referrals and assessments be conditioned to Commonwealth standards to enable relevant data to be incorporated into national datasets in a timely fashion and made publicly discoverable, accessible and reusable. Where there is an unacceptable risk that revealing the location of these species or ecological communities may result in their collection or destruction, the Department of the Environment and Energy’s sensitive data policy should apply.

7.2. Priority research to support improved implementation

Under the existing National Environment Science Program (NESP), the Threatened Species Recovery Hub has funded 22 projects (since 2014) with a total investment of \$30 million.⁸⁴ The Hub brings together leading ecological experts to conduct research into the management of threatened species. A number of projects undertaken by the Hub have practical application to the implementation of the EPBC Act. However, under the next round of the NESP or its successor, such a Hub could provide even greater assistance to the implementation of the EPBC Act if that were its primary purpose. Submissions reported a need for greater collaboration, and resourcing, at a national level. Birdlife Australia's submission identified the need for improved long-term monitoring and data management to deliver large-scale environmental stewardship.⁸⁵ NSW DPI encourages Australian Government support for conservation and management initiatives and improved research and understanding, pointing to the issue of flying foxes' impact on farmers.⁸⁶ NSW DPI identifies a role for national investigation into appropriate assessment and management, which aligns with the NESP's current and potential capacity. In addition to providing advice to DoEE on specific issues in relation to the implementation of the Act, initial priorities for research could relate to cumulative impacts on MNES, regional approaches to conservation of MNES, long-term monitoring of MNES health in regions where interactions with agricultural developments do or will occur, and environmental offsetting schemes. Special consideration could be given through this research work to regions which are expected to emerge as new sites for more intensive interaction between the EPBC Act and the agriculture sector, such as northern Australia.

Recommendation 18

It is recommended that a priority area for funding in the next round of the National Environmental Science Program or its successor be aimed at providing advice regarding the implementation of the EPBC Act. In addition to providing the Department of the Environment and Energy with responses to specific questions related to the EPBC Act, research priorities could include:

- a national review of approaches to EPBC Act environmental offsets and advice on their effectiveness in achieving stated objectives.
- development of a common assessment method for EPBC Act environmental offsets (see Recommendation 16 in this Review).
- development of a coordinated regional approach to conservation management of MNES and, in particular, threatened species and ecological communities.
- assessment of approaches to long-term monitoring of threatened species and ecological community health in regions where interactions between environment protection objectives and agricultural development activities already occur or are likely to occur in future.
- best-practice approaches for assessment of cumulative impacts on MNES.

7.3. New approaches to regional planning

The need for a more proactive approach to protecting MNES in regions where agricultural development does or will impact upon MNES health was a recurring theme in consultations undertaken for this Review. Reactive assessment and approval of multiple individual actions in a

⁸⁴ Based on information provided by DoEE.

⁸⁵ Public submission no. 34

⁸⁶ Public submission no. 6

single area is unlikely to be an appropriate strategy to ensure the long-term viability of agriculture in that region, nor will it necessarily result in the conservation outcomes sought through the EPBC Act. There is a need for a new approach to planning that involves local communities and is targeted toward regions where interactions between agriculture and MNES are most likely.

The ability to prepare plans, both statutory and non-statutory, was raised as an important part of national environment protection and biodiversity conservation efforts by multiple respondents. Statutory plans, referred to as bioregional plans under the Act, can provide certainty to landholders about the important ecological values in a particular region, the strategies and actions developed to achieve conservation objectives (noting bioregional plans have not previously been developed for terrestrial regions) (*EPBC Act 1999* (Cth), Sec. 176). Non-statutory plans can provide direction on what can be achieved for MNES, offering opportunities for collaborative objective-setting among different sectors of the community and enhanced consideration of cumulative impacts.

Of particular concern is that the Act itself, and hence the approach to its implementation, cannot adequately account for the cumulative impacts of multiple individual projects, and so is driving isolated decision making rather than landscape-scale decision making. The Wentworth Group of Concerned Scientists submitted:⁸⁷

By themselves, individual developments may have an insignificant impact on the environment, but when combined, their cumulative impact can result in long-term damage to Australia's land, water and marine ecosystems.

The Wildlife Preservation Society of Queensland noted:⁸⁸

Cumulative effects within a region rather than impact on a single property is not readily accessible and cannot be always taken into consideration. Such information may be required to determine if a proposed action is significant.

The Nature Conservation Society of South Australia also noted the 'lack of consideration of the cumulative impact of many individual actions' as a concern about EPBC Act implementation, which they also submitted to the 2009 Hawke review.⁸⁹ This and other similar claims made during consultations conducted for this Review are consistent with the following observation made in the Hawke review (Hawke, 2009b, p. 54):

A recurring theme in public comments throughout the Review has been the Act's perceived failure to manage adequately the cumulative environmental impacts of actions or threatening processes (including climate change) at a landscape or ecosystem scale.

Comments received from one farmer from Western Australia expressed concern that a focus on agricultural expansion is a barrier to maintaining constant, 'across-the-board' natural capital and achieving the principles of economically sustainable development.⁹⁰ A focus on cumulative impacts on MNES is viewed by many as an appropriate role for the Australian Government in environment protection. Although case law has established that the EPBC Act does not create any obligations on the Minister to consider the consequences of other actions in the course of considering referrals under the Act,⁹¹ some stakeholders have expressed the view that this does not allow the achievement

⁸⁷ Public submission no. 13

⁸⁸ Public submission no. 31

⁸⁹ Public submission no. 41

⁹⁰ Public submission no. 11

⁹¹ In *Tarkine National Coalition v. Minister for the Environment* [2015], the Full Federal Court of Australia found that, under the law established by the EPBC Act, the Minister is 'under no obligation to take account of the

of the objects established under the Act. EDOs of Australia suggested that a stronger evidence base for identifying nationally significant clearing is needed, as ‘this data is essential to identify trends and cumulative impacts of clearing, and to provide the baseline data to support risk-based regulatory approaches’.⁹² DoEE’s engagement with the agriculture sector would benefit from further clarification of the overall objectives of regulating the sector’s engagement with Australia’s environment and the extent to which a forward-looking proactive regulatory posture is pursued by DoEE.

At present, there is an interest among some agriculture sector stakeholders to receive clearer advice on where development activity is likely to be able to occur and where it is not. Conservation agreements (which are different from conservation advices) detail, among other things, activities that are not considered likely to have a significant impact on MNES. A non-statutory regional plan could incorporate this kind of prescription for entire farming regions, including by indicating areas in which agricultural activities can continue, areas in which certain activities (or a certain extent of an activity – for example, ploughing once a year) can continue under stated conditions, and areas which will be completely set aside for conservation. These regional plans would build on the advances in data availability and collation made possible through other recommendations of the Review, and could also draw on datasets developed by other state and territory governments to help target decisions on where certain activities may and may not be allowed. The development of such non-statutory regional plans should be considered for priority areas where there are known agricultural development pressures and concerns relating to cumulative impacts. They could also be proactively developed for regions where interactions between the Act and the agriculture sector are anticipated to intensify, such as northern Australia. These plans should be supported by proactive engagement with local landholders to provide relevant advice and pursue protection objectives. Protection could then be achieved by the most appropriate statutory or non-statutory means.

The first of two regions in which this non-statutory approach to regional planning could be piloted is the Monaro region of New South Wales. As previously described, this region is the focus of the listing decision relating to the Natural Temperate Grassland of the South Eastern Highlands ecological community. The second region where a pilot could be undertaken is around Walgett in north-west New South Wales. The Walgett region differs from the Monaro in that it contains a number of listed ecological communities. There are eight ecological communities that make up the Eastern Australia Woodlands, a number of which occur near Walgett, including the endangered Weeping Myall Woodlands and Coolibah – Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions.

There is a concern among farmers in both regions that the current approach of isolated individual referrals and approvals for actions impacting ecological communities (and the uncertainty associated with when these referrals are and are not required) is not delivering positive outcomes for DoEE or for farmers in the regions. According to these farmers, landholders are seeking an ‘answer’ on presence and significant impact that is applicable to everyone, not just to an individual farmer. Given high levels of engagement among farmers, and the presence of state government (NSW LLS) staff seeking to facilitate positive interactions, these regions are highly prospective for a non-statutory regional planning approach. Such an approach would allow DoEE, over time, to improve consideration of the cumulative impact of singular approvals of agricultural projects on a MNES, while also providing certainty to landholders.

The relatively small land area affected on the Monaro supports it being a higher priority if the two trials cannot be undertaken concurrently.

consequences of any other action, present or anticipated’ (Tarkine National Coalition v Minister for the Environment, 2015).

⁹² Public submission no. 39

In order to be comprehensive and effective, these plans should be jointly developed with the involvement of the Australian Government and relevant state or territory governments and local NRM organisations. They should be integrated with existing local and state/territory land use plans and regional natural resource management plans where possible. In respect of the two areas above, the NSW Government has made a well-resourced offer to work with the DoEE to test the alignment of approvals under the NSW Land Management Codes and the EPBC Act. While the final details should be worked out between the parties, this represents an opportunity to greatly improve the approvals process and the experience of farmers seeking such approvals.

Regional plans were endorsed by the Wentworth Group of Concerned Scientists in their submission and they provided a list of additional safeguards that should underpin these plans as a stipulation for funding.⁹³ These include the establishment of long-term monitoring to guide changes to the plan, and clear mechanisms to review and update plans to deal with future impacts and new information. These safeguards are endorsed, and review of the non-statutory plans every ten to 15 years in response to new scientific or other knowledge, the impacts of climate change, and other contextual developments would be prudent.

While it is recommended that non-statutory regional plans are developed (and piloted in the Monaro and Walgett regions as discussed above), it is also recommended that this non-statutory approach is supported by legislative amendment to the Act to improve the capacity of the existing bioregional planning mechanism to support improved outcomes in agricultural regions. An amendment as outlined below – from ‘bioregional plans’ to ‘regional plans’ – would overcome difficulties associated with the definition of a bioregion and support planning related to the EPBC Act’s objects within established administrative land boundaries (Hawke, 2009a). Finally, to improve the Australian Government’s ability to engage at the landscape scale, it is proposed, consistent with Hawke, that the Australian Government be enabled to develop statutory regional plans, noting that the requirement that these be developed in cooperation with state/territory governments (unless the land is entirely within an Australian Government area) has contributed to a tendency not to do so in the past. However, in practice, DoEE should encourage that these plans are designed and implemented collaboratively with states, territories and natural resource management organisations.

Recommendation 19

It is recommended that the Department of the Environment and Energy work with regional natural resource management organisations or other appropriate groups to develop non-statutory regional plans in regions where interactions between environment protection objectives and agricultural development activities are likely to be challenging or extensive, to:

- identify priority matters of national environmental significance within each region and proactively engage with local landholders to provide relevant advice and pursue appropriate statutory and/or non-statutory protection objectives.
- provide for review of the plan (e.g. every ten to fifteen years) in response to new scientific or other knowledge, the impacts of climate change, and other contextual developments.

It is recommended that non-statutory plans in relation to the listed ecological communities of the Monaro and Walgett regions be undertaken as potential pilots for this approach.

Recommendation 20

It is recommended that the EPBC Act be amended to provide for bioregional plans to:

- change the terminology from ‘bioregional plans’ to ‘regional plans’ to better align with existing regional administrative boundaries.

⁹³ Public submission no. 13

- allow the Commonwealth to develop regional plans (while encouraging in practice that these plans are designed and implemented collaboratively between states/territories/regional natural resource management organisations and the Commonwealth).

7.4. Incentivising environmental protection

The EPBC Act's existing environmental impact assessment mechanism is designed to support the protection of MNES by prohibiting actions that have had or will have a significant impact on a MNES, where that impact cannot otherwise be avoided, mitigated or offset. As a regulatory mechanism, it is largely punitive and based on the prohibition of actions detrimental to the health of MNES rather than the incentivisation of actions that maintain or improve MNES health. In general, there is an opportunity for the Australian Government, through DoEE, to do more to incentivise positive behaviour that supports achievement of the objects of the Act. As the Productivity Commission's *Inquiry Report on the Regulation of Australian Agriculture* noted, while farmers have a 'strong incentive to conserve the environment where doing so benefits their farming operations (for example, by maintaining or improving the productivity of the land)... there are also clear public benefits in conserving native vegetation, biodiversity and threatened species and ensuring there is healthy soil and clear air and water (hence a role for government)' (Productivity Commission, 2016). The *Inquiry Report* further noted that 'farmers can bear a disproportionate share of the financial burden of conservation for the benefit of all Australians'.

The Review recommends the greater adoption of market-based approaches that incentivise farmers to protect and maintain MNES. Market-based approaches can incentivise proactive management of environmental outcomes for broad public benefit. Used appropriately, they can complement the regulatory approach of the EPBC Act by providing additional management strategies and means to on-ground environmental managers such as farmers. Market-based approaches should be aimed at producing public benefits through private actions supported by public funds (i.e. government funding), with the understanding that any additional private benefits are not part of the funding case. This approach accords with the Productivity's Commission's recommendation that 'the Australian, state and territory governments should continue to develop market-based approaches to native vegetation and biodiversity conservation. Governments could achieve desired environmental outcomes by buying environmental services (such as native vegetation retention and management) from private landholders' (Productivity Commission, 2016).

There is already precedent for such market-based approaches to generate public and private benefits to support regulatory requirements. Water buybacks undertaken by the Australian Government in support of the Murray-Darling Basin Plan, for example, delivered public benefits through the improved management of water resources to meet environmental objectives. However, buybacks also provided an immediate private financial benefit to farmers, many of whom also received assistance from the Australian Government to implement on-farm efficiency improvements, which have likely contributed to significant uplift in property value in some regions. The Australian Government's water recovery purchases to help achieve the objectives of the Murray-Darling Basin Plan between 2007-08 and 2016-17 have totalled \$2.36 billion dollars (DAWR, 2017). These payments have occurred not as a replacement for, but in support of, regulated requirements established by the Plan.

Market-based mechanisms appeal to farmers (Simson, 2018). The Review heard multiple requests for public funding to produce what farmers consider public goods on private land. Farmers generally welcome a proactive conversation on conservation, recognise the value of environmental protection, desire to understand what the government aims to achieve, and are eager to play a role in supporting

environmental protection outcomes. However, it was acknowledged that farmers need support for achieving the desired outcomes. John Tucker submitted:⁹⁴

Good environmental outcomes should be rewarded through the offering of financial incentives, instead of the current fear driven, 'big stick' approach.

Nelson Quinn expressed a similar sentiment, stating that farmers will benefit from incentives and rewards for participating in collaborative action supporting environmental improvement that contributes to the objects of the EPBC Act.⁹⁵ Suggestions made in farmer submissions included increased federal funding for environment protection and biodiversity conservation.⁹⁶

Many stakeholders within the Australian agriculture industry are already improving their practices to directly address environmental threats. For instance, grazing and sugarcane farmers in Queensland have adopted best management practices to 'halt and reverse the effects from pollution (i.e. sediments, fertiliser, chemicals) entering the World Heritage Great Barrier Reef Lagoon' (DoEE, 2018b). Further incentivising such behaviour through market mechanisms could significantly increase the scale of MNES protection efforts across the country.

Greater acknowledgment of the public benefit of conserving MNES with increased use of market mechanisms is likely to be instrumental in helping to reduce the trepidation with which farmers approach engagement with the EPBC Act. While some farmers may have the view that taxpayers should fund the totality of conservation activities,⁹⁷ most farmers accept that there are also private benefits from such activities.

The Productivity Commission's *Inquiry Report* (Productivity Commission, 2016) found that:

Requiring governments to fund conservation helps discipline governments' demand for conservation on private land (rather than risk treating it as a 'free good' where more is always better). Importantly, where governments choose to allocate land for conservation, they should provide adequate funding to meet the objective of conservation (this should include to control weeds and feral species which can affect adjoining properties).

The Australian Government has funded initiatives for more than 25 years that attempt to incentivise landholders to adopt sustainable production and protect the natural environment, beginning with the Decade of Landcare in 1989. The Natural Heritage Trust (NHT), which was established in 1997, continues to be the main source of funding for natural resource management. From 2008 to 2013, NHT funding supported the 'Caring for our Country' program, which was replaced in 2014 with the first phase of the National Landcare Program. Projects have operated at local, regional and national levels. Activities funded have included grants to landholders for revegetation, fencing to protect habitat, control of pest plants and animals, and promoting better practices on farm to improve the condition of soils and reduce sediment and nutrient loss.

The Australian Government is investing around \$1 billion in the next phase of the National Landcare Program, with the majority of funding to be delivered over five years from July 2018 to June 2023. The largest component is the \$450 million Regional Land Partnerships program (RLPs) to procure services from regional natural resource management bodies. Of the six outcomes for RLPs, four relate to protecting MNES including Ramsar wetlands, threatened species, World Heritage properties and threatened ecological communities. Two RLP outcomes support sustainable agriculture.

⁹⁴ Public submission no. 43

⁹⁵ Public submission no. 8

⁹⁶ Public submission no. 18

⁹⁷ Public submission no. 57

Since 2007-08, some landholders have been contracted by the Australian Government to maintain and improve the condition of MNES on private land through the Environmental Stewardship Programme (ESP) (DAWR, 2018b). Under the ESP, seven market-based competitive funding rounds have occurred in New South Wales, South Australia and Queensland specifically targeting protection of individual threatened ecological communities. Participating farmers and landholders are contracted for a maximum of 15 years to conduct activities to protect the condition of threatened ecological communities on their land. For instance, land managers have been paid as part of a stewardship program to protect the White Box - Yellow Box - Blakely's Red Gum Grassy Woodlands and Derived Native Grasslands (often known as box gum grassy woodland) listed ecological community through grazing management, weed and pest animal control, and maintenance of buffer zones. Over the last four years the Australian Government has mobilised some \$255 million for 1,200 projects supporting threatened species outcomes.

DoEE's Threatened Species Strategy acknowledges the importance of supporting farmer and private landholder contributions toward the conservation of Australia's native plants and animals through funding programs and acknowledges the environmental benefits that these programs have achieved in the past. It states that (Commonwealth Government of Australia, 2015b):

Conservation trusts and conservation covenant programmes have been pivotal for securing populations of key species and habitats, guaranteeing protection and best practice management over the long term in many instances.

Bush Heritage Australia provided an example of where this has worked in practice in their submission, discussing the development and outcomes of the Midlands Conservation Fund in Tasmania.⁹⁸ Participating landholders are delivering conservation outcomes specified in a jointly developed management plan in return for stewardship funding. The submission concludes that 'this type of program provides an example of how appropriate, efficient and effective support and incentives can help support farmers who have ecological communities that require protection under the EPBC Act but which need active management to maintain or improve their condition'.⁹⁹ Another example that was identified as delivering biodiversity conservation outcomes by supporting private land conservation was the Biodiversity Conservation Trust in New South Wales, which sits within the portfolio of the New South Wales Minister for the Environment (Biodiversity Conservation Trust, 2018). The New South Wales Government, through the Office of Environment and Heritage, has also established a market-based approach to addressing the cumulative loss of habitat associated with new development through a biodiversity banking and environmental offsets scheme (BioBanking), complementing existing initiatives for biodiversity conservation. It enables 'biodiversity credits' to be generated by landowners who commit to enhance or protect biodiversity values on their land through a biobanking agreement, and these credits can be sold to generate funds for management of the site (Office of Environment and Heritage, 2017b).

The NFF recognises the benefit that positive incentives for the agriculture sector produce and recommends that the Australian Government commit further to supporting the protection of endangered and critically endangered 'public biophysical assets' by investing \$20 billion over the next 10 years through establishment of an Environmental Stewardship Fund.¹⁰⁰ The Review endorses investment in the establishment of a National Trust fund explicitly tied to the EPBC Act which would explicitly acknowledge to a greater degree the public benefit in protection of MNES. The Trust should be given the capacity and authority, through Trust governance, to:

⁹⁸ Public submission no. 55

⁹⁹ Public submission no. 55

¹⁰⁰ Public submission no. 62

- provide independent decision-making regarding investment in biodiversity conservation generating a public benefit on private land (i.e. BioBanking-type agreements)
- hold environmental offset contributions from referrals under the EPBC Act for investment in private land and public land to achieve strategic (rather than reactive) offsetting outcomes
- provide strategic advice to, and negotiate on behalf of, the Australian Government on the purchase of land under the National Reserve System
- establish a philanthropic fund to deliver better coordinated private land biodiversity agreements
- work cooperatively with state Trusts (e.g. New South Wales Biodiversity Conservation Trust) to achieve national environmental outcomes
- compensate farmers when significantly burdened by the unexpected influx of a mobile threatened species into a non-native crop causing financial hardship
- approve, or at least provide guidance on, supplemental environmental offset activities (e.g. research projects into threatened species).

Ideally, such a Fund would provide benefits to, and achieve EPBC Act objectives in partnership with, multiple sectors, not just the agriculture sector. As such, further consideration of the structuring and resourcing of a Fund could be provided through the course of next statutory review of the Act, schedule to occur in 2019. Importantly, allocation of funding from the Australian Government should not be regarded as the sole source of resources for the Fund; there are also opportunities to generate revenue through the ‘cashing out’ of referral environmental offsets and through philanthropic contributions to the Fund.

The Review recommends that market-based approaches be delivered through a package of funding to ensure program alignment and alignment with the EPBC Act. One of the activities that could be supported under a National Biodiversity Conservation Trust fund is adaptation to changes in the location of threatened species. The Review heard cases of farmers or landholders who have suffered financial hardship due to the unexpected influx of mobile threatened species. As an example, EPBC-listed flying foxes have previously moved into new areas opportunistically sourcing food. Some horticultural producers have suffered significant economic impacts when large populations of this species have taken roost in commercial orchards.¹⁰¹

Case study: Impacts of Carnaby’s black-cockatoo mobility on pine plantations in Western Australia

There have also been cases of the listed Carnaby’s black-cockatoo (*Calyptrorhynchus latirostris*) suddenly migrating onto properties where they previously did not exist following tree clearing in Western Australia. The Australian Forest Products Association submitted that Carnaby’s black-cockatoos have moved into planted pine forests to feed as their native habitat dwindles.¹⁰² While harvesting of the pines was not originally anticipated to be an action subject to assessment and approval under the EPBC Act, there is now a real prospect of landholders being disadvantaged due to an inability to harvest, with impacts also on local sawmill businesses and individuals reliant on the plantations for employment. While a stakeholder advised that there are some state subsidies available for protective netting to prevent roosting on the pines, such netting is presumably useful for chronic impacts only.¹⁰³

¹⁰¹ Public submission no. 42

¹⁰² Public submission no. 61

¹⁰³ Public submission no. 9

Some respondents suggested that agricultural stakeholders whose business has been significantly and unexpectedly impacted by threatened species as a result of factors beyond the landholder's control should be compensated. Louise Gilfedder submitted:¹⁰⁴

Some form of compensation where significant burden is documented would seem reasonable and would enhance the implementation of the EPBC, reducing potential conflicts.

Should the Australian Government support the establishment of a National Biodiversity Conservation Trust fund to support purchases of publicly beneficial environment protection and biodiversity conservation outcomes through partnerships with farmers, there is likely to be considerable value in the government generating an early discussion about the proposal with the farm sector. This would ensure that there is an understanding that conservation generates both private and public benefits and where the public contributes to the cost of conservation on private land, decisions on the actions required are shared decisions, not solely the preserve of the landholder. Such an approach will assist in appreciation of a regulatory approach being complemented by a more cooperative approach to conservation.

Recommendation 21

It is recommended that an initial allocation of \$1 billion over four years be provided to establish a National Biodiversity Conservation Trust fund explicitly tied to the EPBC Act to support the public benefits of protection, including by farmers, of matters of national environmental significance through the adoption of a market-based approach that incentivises farmers (and others) to protect and actively manage matters of national environmental significance outside of legislated requirements. Where there is a public benefit, the Fund should have the capacity and authority to, inter alia:

- support the purchase of private land management agreements acquired under Australian Government environmental offsetting programs.
- directly purchase environment protection and biodiversity conservation outcomes through the acquisition and active management of land, based on a strategic and proactive long-term investment plan.
- make payments to accredited state and territory Trusts that deliver actions in the long-term investment plan.
- compensate landholders affected by the influx of a mobile threatened species into an area causing significant financial burden.

It is further recommended that the Department undertake some preliminary work to develop an approach to assessing public benefits and regularly monitoring, evaluating and publishing the results of the Trust's activities.

7.5. Resourcing

The scope of the EPBC Act is such that it requires substantial resources to effectively manage environmental outcomes.

The most substantial analysis of the cost-effectiveness of the EPBC Act conducted to date examined the Act's management of environmental threats and realisation of environmental achievements

¹⁰⁴ Public submission no. 42

between July 2000 and June 2008 (Macintosh, The Environment Protection and Biodiversity Conservation Act 1999 (CTH): An Evaluation of its Cost-Effectiveness, 2009). The Hawke review refers to Macintosh's earlier work reviewing the EPBC Act in 2003 and 2005, which found that the environmental impact assessment regime was 'far from a cost-effective means of addressing key environmental issues'. The review found that the operation of the EPBC Act captured only a small proportion of the actions posing the greatest threat to the environment, that regulated actions under the Act achieved little beyond what was required under other regulatory processes (for example, state/territory regulations), and that administrative and compliance costs had been 'substantial' (Macintosh, 2009). The estimated average annual cost of the EPBC regime between 2000 and 2008 was between \$17 million and \$28 million.

An estimate of the current cost of implementing the EPBC Act was not within the scope of the Review and cannot be determined from DoEE's Portfolio Budget Statements, as implementation of the Act is not individually costed (DoEE, 2018). Under Outcome 1,¹⁰⁵ three programs (1.2, 1.4 and 1.5)¹⁰⁶ appear to contain budget elements involving the protection, including administration of the referrals process, of MNES. Of the three, Program 1.5 (Environmental Regulation) contains budget elements, although this program also includes the administration of the *Environment Protection (Sea Dumping) Act 1981* and the *Environment Protection (Alligator Rivers Region) Act 1978*.

While the total administered expenses for the EPBC Act for 2018-19 is unclear, the allocated budget for Program 1.5 is \$259,000 to administer the Water Resources Amendment and Departmental expenses of \$50,084,000 for a budgeted total of \$51,193,000 for the current year.

If implemented in full, the package of recommendations proposed in this report will deliver a range of benefits for agricultural development and environment protection in Australia, including by enabling:

- more effective and efficient delivery of the objects of the EPBC Act
- more effective DoEE outreach
- improved DoEE systems
- enhanced clarity for farmers around when to refer actions and when not to refer actions
- faster and more consistent DoEE decision making
- more proactive and strategic regional planning to support protection of MNES (as opposed to reactive project-by-project assessment of impacts)
- enhanced incentivisation of protection of MNES by farmers through the establishment of market mechanisms.

The recommendations are designed to deliver a reduction in the burden of Australian farmers' regulatory obligations under the EPBC Act without reducing the appropriateness, effectiveness and efficiency of the Act in realising its objects. They provide options for realising existing objectives for regulation of the agriculture sector (and other sectors) established by DoEE. These include objectives established through DoEE's acceptance of the majority of the recommendations contained in the final report of the 2016 Regulatory Maturity Project and through the One-Stop Shop initiative for approvals, launched in 2013. The aim of the One-Stop Shop initiative is to simplify the approvals process for

¹⁰⁵ Outcome 1: Conserve, protect and sustainably manage Australia's biodiversity, ecosystems, environment and heritage through research, information management, supporting natural resource management, establishing and managing Commonwealth Protected areas, and reducing and regulating the use of pollutants and hazardous substances.

¹⁰⁶ Program 1.1: Sustainable Management of Natural Resources and the Environment
 Program 1.4: Conservation of Australia's Heritage and Environment
 Program 1.5: Environmental Regulation

businesses, contribute to swifter decisions and improve Australia's investment climate while maintaining high environmental standards (DoEE, 2014a). If implemented, the recommendations in this report will contribute to achievement of these objectives, including by allowing project proponents to more quickly understand and fulfil their obligations and by harmonising the operations of state, territory and federal governments where there is the possibility to improve alignment without engaging in complex and contested legislative change.

To achieve these benefits, an increased funding commitment from the Australian Government is required, supporting environmental impact assessment processes as well as listing and delisting activities and associated assessments. While some front-ending of this commitment will be needed to meet higher initial costs, an efficiency dividend can be expected in the medium and long term as the overall cost associated with management of the interaction between the EPBC Act and the agriculture sector is reduced. This will free up government resources to contribute to other priorities, such as stewardship payments, to achieve national environmental outcomes.

From the data available to the review, there is a correlation between DoEE budget and DoEE practice, with decreasing budgets correlated with slower decision making. Between 2012 and 2017, the percentage of late statutory decisions has grown by an average of 1.9 per cent per year, with 22 per cent of decisions made late in 2012-13 and 29.6 per cent of decisions made late in 2016-17 (DoEE, 2018c). A reduction in resources has led to a reduction in staff, which appears to have restricted DoEE's ability to conduct strategic work and assessments and has led to a focus of resources on referrals (which is still not producing ideal results). Louise Gilfedder commented on the cuts to listing and recovery plan staff in the past few years, noting:¹⁰⁷

The DoEE are dedicated and hard-working but are seriously constrained in their ability to deliver the necessary work required to facilitate delivery of the requirements of the Act. These [budgetary] cuts have had a significant impact on delivery, as well as staff morale. The role of the staff is to help provide information to proponents, but in recent years they are seriously constrained in their ability to support stakeholders in a timely and effective way. This contributes to the perceived 'burden' of the Act on the agricultural sector.

During consultation, it was widely recognised that DoEE does not have the resources necessary to provide efficient and effective assistance to proponents. One representative of an environmental NGO consulted for this Review acknowledged that DoEE is aware of these issues and motivated to improve engagement and education around the Act but lacks the appropriate resources. A farmer in New South Wales expressed the opinion that the failings of DoEE and the EPBC Act to protect MNES are primarily a result of poor resourcing.¹⁰⁸ Multiple respondents across government departments, agriculture sector peak bodies, environmental groups, university academics, and individual landholders and farmers expressed a need to increase investment in DoEE's capability to deliver on the objectives of the EPBC Act. For example, the NSW LLS recommends:¹⁰⁹

The Australian Government should provide resources to support better extension of EPBC Act requirements to landholders.

The Centre for Ecosystem Science at the University of New South Wales commented on the need for funding and investment to support a range of processes and initiatives, including for outreach, compliance, and monitoring.¹¹⁰ The submission states that 'it is essential that funding be provided to

¹⁰⁷ Public submission no. 42

¹⁰⁸ Public submission no. 25

¹⁰⁹ Public submission no. 63

¹¹⁰ Public submission no. 27

track risks to threatened ecological communities and species and build the information base for biodiversity’.

In addition to this requirement for resourcing to support basic existing functions of DoEE in administering the EPBC Act, new initiatives proposed by this report will require additional resources to be allocated. For example, the National Biodiversity Conservation Trust fund referred to in Recommendation 21 will require \$1 billion in new investments over four years. In some instances – again, the fund provides a good example – there may be opportunities to leverage new government funding allocations to attract philanthropic funding.

Recommendation 22

It is recommended that the Commonwealth provide the Department of the Environment and Energy with the appropriate additional resources required to implement the recommendations in this Review and achieve associated long-term efficiency improvements in the regulation of the agriculture sector under the EPBC Act.

8. Implementing recommendations and understanding the benefits

The Review urges the Australian Government to adopt the 22 recommendations included in this report in full. However, some of the recommendations included in this report will be easier to implement (or can be implemented more quickly) than others, and some recommendations will realise more significant benefits for the agriculture sector than others.

For the purposes of establishing a workplan for implementation, the recommendations can be assessed in three dimensions:

1. Issue being addressed
2. Requirement for (or desirability of) legislative change to support implementation
3. Timeframe for implementation (short-, medium- or long-term)

Table 2 sets out a preliminary workplan for implementing the recommendations made in this Review by categorising the recommendations based on these three dimensions.

The length of time required to implement the recommendations varies. For recommendations which entail ongoing processes, such as Recommendation 10 regarding advice to the Minister on the impacts of listings on the agriculture sector, the timeframe shows the point at which the recommendation should be fully operational. The time periods correspond to the following durations of time:

- Short-term: fully implemented within six months
- Medium-term: fully implemented within one year
- Long-term: fully implemented within three years

Table 2 **Timeframe for, and benefits from, recommendation implementation**

Issue / problem	Short-hand recommendation description (number)	Legislative change required?	Timeframe for implementation	Benefits for farmers, the environment and/or DoEE
There is a lack of awareness of the EPBC Act among farmers, and insufficient understanding about its applicability and operation among those aware of its existence	Outcome vision (1)	No	Short	<ul style="list-style-type: none"> Improved support for the EPBC Act among farmers Improved ability of DoEE to deliver on the objects of the Act through cooperation with farmers
	Expert collaboration (2)	No	Medium	<ul style="list-style-type: none"> Enhanced foresight capacity in DoEE relevant to the agriculture sector Formalised regular interaction between DoEE decision makers and agriculture sector experts
	Outreach facility (3)	No	Medium	<ul style="list-style-type: none"> Increased trust in DoEE among farmers Increased awareness and understanding of the EPBC Act among farmers
	DoEE agriculture specialisation (4)	No	Short	<ul style="list-style-type: none"> Enhanced contemporary knowledge within DoEE of issues affecting farmers Improved ability to respond to farmers' requests and issues
	Case officers (5)	No	Short	<ul style="list-style-type: none"> Increased consistency (real and perceived) of communication with individual farmers Increased trust in DoEE among farmers Increased awareness and understanding of the EPBC Act among farmers
	DoEE website (6)	No	Medium	
	DoEE CRM (7)	No	Medium	
The listing and delisting process for nationally threatened species and	TSSC preparation and public comment (8)	Yes	Short	<ul style="list-style-type: none"> Enhanced transparency of listing/delisting process

ecological communities is insufficiently transparent and does not adequately link with options for understanding, and mitigating, the actual and potential negative socio-economic impacts of listing decisions on agriculture	TSSC membership (9)	Desirable	Short	<ul style="list-style-type: none"> Increased trust in DoEE and the TSSC among farmers Enhanced ability of the TSSC and DoEE to consider/respond to the interactions between listing decisions and the agriculture sector
	Minister's listing impact advice (10)	No	Short	
	Risk-based ground-truthing (11)	No	Medium	<ul style="list-style-type: none"> Increased engagement with farmers on listing matters Increased appropriateness of conservation advices and recovery plans to local conditions
The environmental impact assessment process established by the Act is hard to understand, sometimes costly to engage with and time-consuming for farmers, most of whom have rarely or never engaged with it	Survey methods and accreditation (12)	No	Short	<ul style="list-style-type: none"> Enhanced ability among farmers to engage confidently with EPBC Act processes
	Online tool (13)	Yes	Long	<ul style="list-style-type: none"> Faster decisions on 'not controlled action' projects Increased willingness to engage with EPBC Act processes among farmers
	Reporting on legislation operation harmonisation (14)	No	Medium	<ul style="list-style-type: none"> Increased awareness of duplication and inconsistencies between state and federal legislation
	Revoke, vary or add conditions (15)	Yes	Short	<ul style="list-style-type: none"> Increased ability for farmers to adaptively respond to new information and adopt new technologies to efficiently protect MNES
	Offsets review and reform (16)	No	Long	<ul style="list-style-type: none"> Increased trust in DoEE and EPBC Act processes among farmers Increased ability of farmers and DoEE to strategically use environmental offsets

Implementation of the EPBC Act, and many of the provisions in the Act itself, is insufficiently strategic and forward-looking and so is not efficiently or effectively meeting the objects of the Act	Dataset conditioning (17)	No	Long	<ul style="list-style-type: none"> Enhanced DoEE ability to protect MNES in the long term and provide rapid and accurate advice to farmers
	NESP funding priority (18)	To be determined	Long	<ul style="list-style-type: none"> Enhanced long-term, forward-looking and strategic MNES protection and cooperation between DoEE and farmers
	Non-statutory regional plans (19)	No	Medium	<ul style="list-style-type: none"> Increased preparedness for, and ability to respond to, regional-level environmental change, including through expanded or qualitatively different agricultural development practices
	'Bioregional' amendments (20)	Yes	Short	<ul style="list-style-type: none"> Improved alignment between EPBC Act processes and planning and existing administrative units/boundaries
	National Biodiversity Conservation Trust (21)	Yes	Medium	<ul style="list-style-type: none"> Enhanced strategic procurement of public benefits from MNES protection through long-term targeted cooperation with farmers Improved ability of DoEE to engage with the agriculture sector outside the constraints of the environmental impact assessment process
	Implementation resources (22)	Yes	Medium	<ul style="list-style-type: none"> Enhanced ability of DoEE to provide efficient and effective services to farmers and to protect MNES Long-term efficiency improvements in the regulation of the agriculture sector under the EPBC Act

Notes: Short-term = achievable within 6 months; medium-term = achievable within 1 year (budget cycle); long-term = achievable within 3 years (election cycle).
Recommendation 9 has both legislative and non-legislative components.

9. Conclusion

The aim of this Review has been to assess the impact of the implementation of the EPBC Act on agriculture and identify potential improvements to how agriculture is regulated under the Act. Through a targeted regional consultation process and a call for written submissions, the Review was able to respond to a wide range of views on both positive and negative aspects of current interactions between the agriculture sector and the Act. While some positive steps are being taken by DoEE and other stakeholders to improve the way that agricultural development is regulated under the Act, there is scope for these measures to be strengthened and better communicated and for new initiatives to be designed and implemented.

It is reasonable to expect that the combined impacts of climate change and ongoing agricultural development in Australia will result in more rather than fewer points of interaction between agriculture sector interests and environment protection objectives. The future of Australia's valuable environmental assets and important agriculture industry depends on careful risk-based management of these interactions.

The 22 recommendations proposed in this report represent a coherent package of regulatory and operational reforms to improve outcomes from the regulation of agriculture under the EPBC Act. If implemented in full, they will result in immediate and long-term reductions in the regulatory burden faced by Australian farmers while maintaining environmental standards.

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Appendix 1 – Terms of Reference



Australian Government

Department of the Environment and Energy

Review of the interaction between the *Environment Protection and Biodiversity Conservation Act 1999* and agriculture and food production

Terms of reference

The Australian Government recognises that the sustainable development of a productive and internationally competitive agriculture and food production sector is vital to our economy and regional communities, and is committed to reducing barriers to its growth.

The *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) promotes the ecologically sustainable use of natural resources, and provides a regulatory framework to manage and protect matters of national environmental significance.

The Review is to examine the interaction between the EPBC Act and the agriculture and food production sector, in order to identify regulatory and non-regulatory improvements to assist this sector while maintaining environmental standards.

The Review will be carried out by an independent person with relevant experience in the agricultural industry, law and public administration. The Review will:

1. Undertake targeted consultation to identify concerns and areas of potential efficiencies.
2. Provide an overview of the appropriateness of current regulatory settings of the EPBC Act in regard to their impact on the agriculture and food production sector with consideration to the objects of the EPBC Act.
3. Outline options to improve how the agriculture and food production sector is regulated under the EPBC Act and reduce the regulatory burden faced by farmers and applicants, including but not limited to:
 - a. making recommendations in relation to environmental referrals, assessment and approval requirements, and listing and delisting processes for species and ecological communities under the EPBC Act;
 - b. identifying opportunities for harmonisation between the EPBC Act and each state and territories' native vegetation management regimes; and
 - c. identifying opportunities to enhance the EPBC Act to support agriculture and food production to take advantage of domestic and international demand for sustainable agriculture, such as certification schemes and 'clean and green' foods.
4. In making recommendations and advising on new initiatives, take into account the objects of the EPBC Act.
5. As far as possible, consider the costs and benefits of the recommendations as required by the Australian Government. See guidance at pmc.gov.au/resource-centre/regulation/independent-reviews-and-ris-process-guidance-note.
6. Consider relevant material including the Productivity Commission Inquiry Report on the Regulation of Australian Agriculture, the *Agriculture Competitiveness White Paper* and *Our North, Our Future: White Paper on Developing Northern Australia*.
7. Provide a report to Government by mid 2018.

March 2018

environment.gov.au

Appendix 2 – History of the Australian Government’s role in environment protection

The EPBC Act is only the most recent legislative development in a decades-long history of Australian Government engagement in environment protection. Significant events preceding the development of the EPBC Act are summarised below and illustrated in Figure 8.

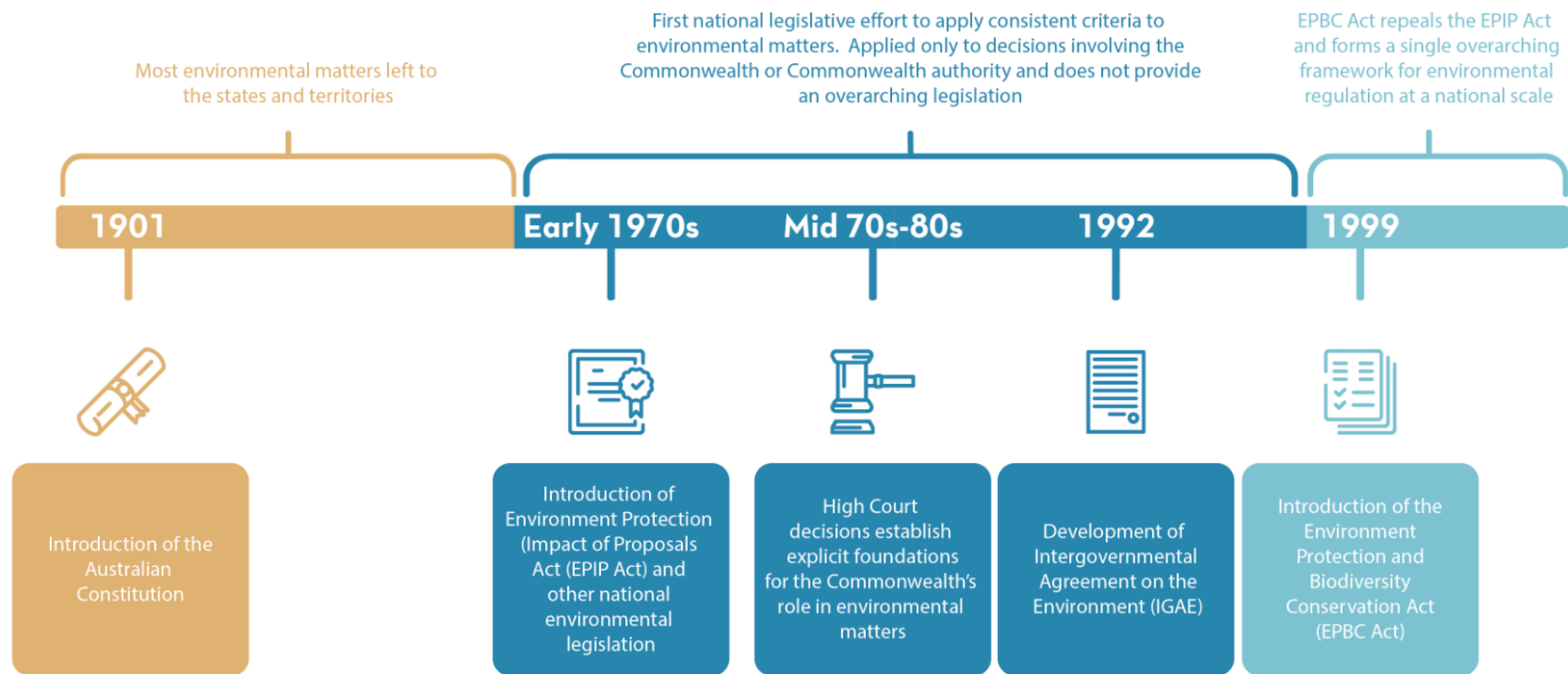
After Federation, the Australian Government was able to use its broader powers to impact environmental issues, including through economic powers such as trade and commerce to regulate trade in endangered species and protection of natural resources. However, regulation of most environmental matters was left to the states and territories and the Australian Government had no comprehensive agenda of environmental protection nor the powers to implement one (Hawke, 2009b).

The *Environment Protection (Impact of Proposals) Act* (Cth) (EPIP Act) introduced in 1974 was the first national legislative effort to apply consistent criteria to matters affecting the environment to a significant extent. However, it applied only to decisions involving the Australian Government or Australian Government authority and set out an entirely advisory role for the Environment Minister. The EPIP Act related to the formulation of proposals, carrying out of works and projects, agreements and arrangement, decision-making and recommendations and the incurring of expenditure. It did not provide an overarching legislation setting out the Australian Government’s involvement in environmental matters (Hawke, 2009a).

High Court judgements in the 1970s and 1980s established explicit foundations for the Australian Government’s role in environmental matters by clarifying the scope of powers in the Constitution. These judgements related to the external affairs power set out in s.51(xxix) of the Constitution. The High Court confirmed that the Australian Government has jurisdiction to make laws to implement Australia’s international obligations, including environmental protection (Hawke, 2009b). High profile environmental issues, including the Tasmanian dam case, also contributed to rearticulation of the role of the Australian Government to make laws for environmental protection (Environmental Law Australia, n.d.). These changes established the basis for the EPBC Act.

In 1992 the Council of Australian Governments developed the *Intergovernmental Agreement on the Environment* (IGAE) as a framework for undertaking intergovernmental action on environmental issues. The IGAE established that the Australian and state and territory governments would integrate environmental considerations into decision-making and pursue principles of ecologically sustainable development (Council of Australian Governments, 1992).

The EPBC Act was passed in 1999. The Act repealed the EPIP Act and also merged multiple statutes into the single overarching framework for environmental regulation at a national scale which places the Environment Minister at the centre of decision making on MNES (Hawke, 2009b). These changes from the EPIP Act to the EPBC Act reflect the role of the Australian Government in protecting MNES and regulating environmental impacts which affect the Australian Government, which includes actions by or involving the Australian Government or Australian Government Land. The EPBC Act was also supported by the *Environmental Reform (Consequential Provisions) Act 1999*, which established transitional arrangements between old legislation and the EPBC Act.



Source: Various.

Figure 8 Timeline of the Australian Government's involvement in environment protection

Appendix 3 – About the independent reviewer

The Review was undertaken by Dr Wendy Craik AM. Dr Craik is one of Australia's leading independent public policy advisors and is well versed in major issues facing farming businesses across Australia. Dr Craik has been Executive Director of the National Farmers' Federation (NFF), President of the National Competition Council, board member of Dairy Australia, Chair of the National Rural Advisory Council and Chair of the Australian Rural Leadership Foundation. She has previously been CEO of the Murray-Darling Basin Commission and a Commissioner of the Productivity Commission. She is currently on the boards of the Reserve Bank of Australia and the Australian Farm Institute. Dr Craik was appointed a Member of the Order of Australia in 2007 for her service to the natural resource sector and for her contributions to policies affecting rural and regional Australia. In undertaking the Review, Dr Craik was supported by a secretariat from Aither, a leading Australian natural resources management advisory firm.

Appendix 4 – Targeted consultations

Table 3 Schedule of external consultations, by date

#	Date	Name	Position	Organisation	Location
1	18 April 2018	Warwick Ragg	General Manager NRM	National Farmers' Federation	Canberra, ACT
1	18 April 2018	Bruce Tran	Policy Officer	National Farmers' Federation	Canberra, ACT
1	18 April 2018	Angus Atkinson	Committee Chair	National Farmers' Federation	Canberra, ACT
1	18 April 2018	Dale Miller	General Manager – Policy	Agforce Queensland	Canberra, ACT
1	18 April 2018	Dr Greg Leach	Senior Policy Advisor	Agforce Queensland	Canberra, ACT
1	18 April 2018	Adair Moar	Policy Director – Environment	New South Wales Farmers	Canberra, ACT
1	18 April 2018	Fiona McCredie	National Policy Manager	GrainGrowers	Canberra, ACT
2	3 May 2018	Ross Hampton	CEO	Australia Forest Products Association	Canberra, ACT
2	3 May 2018	Victor Violante	Senior Policy Manager	Australia Forest Products Association	Canberra, ACT
3	3 May 2018	Fiona McCredie	National Policy Manager	GrainGrowers	Canberra, ACT
4	4 May 2018		Sustainable Development Committee	National Farmers' Federation	Canberra, ACT
5	29 May 2018	Maitford Green	Farmer, WA		Telephone
6	11 May 2018	Malcolm Trapes	Farmer, Qld		Telephone
7	11 May 2018	Don Heatley	Farmer, Qld		Byrne Valley, Qld
8	11 May 2018	Debbie Knuth	Farmer, Qld		Telephone
9	11 May 2018	Professor Helene Marsh	Chair	Threatened Species Scientific Committee	Townsville, Qld
10	11 May 2018	Morgan Begg	Research Fellow	Institute of Public Affairs	Melbourne, Vic
10	11 May 2018	Daniel Wild	Research Fellow	Institute of Public Affairs	Melbourne, Vic

11	11 May 2018	Jenny Lau	Preventing Extinctions Program Manager & Acting Head of Conservation	BirdLife Australia	Melbourne, Vic
12	11 May 2018	Bob Phelps	Executive Director	Gene Ethics	Melbourne, Vic
13	14 May 2018	Evan Quartermain	Head of Programs	Humane Society International	Sydney, NSW
13	14 May 2018	Nicola Beynon	Head of Campaigns	Humane Society International	Sydney, NSW
14	14 May 2018	Dr John Keniry	Commissioner	Natural Resources Commission New South Wales	Sydney, NSW
15	14 May 2018	Kristian Holz	Group Director	Sustainable Land Management Unit, Local Land Services	Sydney, NSW
15	14 May 2018	Kirsty Cooper	Principal Policy Officer	Local Land Services	Sydney, NSW
16	17 May 2018	Oisin Sweeney	Senior Ecologist	National Parks Association of New South Wales	Telephone
16	17 May 2018	Cerin Loane	Policy and Research Coordinator	Nature Conservation Council of New South Wales	Telephone
17	20 May 2018	Roger Fitzgerald	Farmer, NSW		Telephone
18	21 May 2018	Nari Sahukar	Senior Policy & Law Reform Solicitor	Environmental Defenders Office	Sydney, NSW
18	21 May 2018	Rachel Walmsley	Policy and Law Reform Director	Environmental Defenders Office	Sydney, NSW
19	14 May 2018	Cameron Rowntree	Farmer, NSW		Walgett, NSW
20	14 May 2018	Mitchell Clapham	Farmer, NSW		Ilford, NSW
21	18 May 2018	David Kempton	Legal advisor		Brisbane, Qld
22	18 May 2018	Jim Groves	A/g Director Regulatory Policy and Reform	Queensland Department of Agriculture and Fisheries	Brisbane, Qld
23	18 May 2018	Lyall Hinrichsen	Executive Director, Land Policy	Queensland Department of Natural Resources, Mining and Energy	Brisbane, Qld
24	18 May 2018	Paul Ryan	Owner	Olive Vale	Brisbane, Qld
25	18 May 2018	Dr Greg Leach	Senior Policy Advisor	AgForce Queensland	Brisbane, Qld
25	18 May 2018		Academic	Queensland University of Technology	Brisbane, Qld

26	22 May 2018	Howard Charles	Farmer, NSW		Coolringdon, NSW
27	22 May 2018	Dr Stuart Burge	Agronomist		Cooma, NSW
28	22 May 2018	David Eddy	Senior officer	South East Local Land Services	Cooma, NSW
28	22 May 2018	Luc Farago	Sustainable Land Management	Local Land Services Northern Tablelands	Cooma, NSW
29	22 May 2018	Richard Taylor	Chairman	Monaro Farming Systems	Cooma, NSW
30	22 May 2018	John Murdoch	Director	Monaro Farming Systems	Cooma, NSW
31	23 May 2018	Jann Crase	CEO	Regional Development Australia Far North Queensland and Torres Strait Inc	Canberra, ACT
32	23 May 2018	James Trezise	Policy Analyst	Australian Conservation Foundation	Canberra, ACT
33	23 May 2018	Martin Taylor	Protected Areas and Conservation Science Manager	World Wildlife Fund	Telephone
34	23 May 2018	Professor Saul Cunningham	Professor, Director Fenner School of Environment and Society, Australian National University	Fenner School of Environment and Society, Australian National University;	Canberra, ACT
34	23 May 2018	Dr Jamie Pittock	Associate Professor; Director of International Programs, Australian National University	Fenner School of Environment and Society, Australian National University; UNESCO Chair in Water Economics and Transboundary Water Governance	Canberra, ACT
34	23 May 2018	Professor Andrew Macintosh	Associate Professor, College of Law, Australian National University	Australian National University	Canberra, ACT
34	23 May 2018	Dr Phil Gibbons	Associate Professor, Fenner School of Environment and Society, Australian National University	Australian National University	Canberra, ACT
34	23 May 2018	Peter Burnett	PhD Candidate, Australian National University	Australian National University	Canberra, ACT
35	28 May 2018	Nicola Morris	CEO	Tasmanian Irrigation	Launceston, Tas
35	28 May 2018	Kate Guard	Manager of Environmental Services	Tasmanian Irrigation	Launceston, Tas

36	28 May 2018	Nick Steele	Policy and Rural Affairs Manager	Tasmanian Farmers and Graziers Association	Launceston, Tas
36	28 May 2018	Peter Skillern	CEO	Tasmanian Farmers and Graziers Association	Launceston, Tas
37	29 May 2018	Allison Wooley	Acting Director Operations	Tasmanian Department of Primary Industries, Parks, Water and Environment; Tasmanian Parks and Wildlife Service	Hobart, Tas
37	29 May 2018	Andrew Harvey	Manager Planning and Evaluation	Tasmanian Department of Primary Industries, Parks, Water and Environment	Hobart, Tas
37	29 May 2018	Martin Read	Deputy Director	Environment Protection Authority Tasmania	Hobart, Tas
37	29 May 2018	Bryce Graham	Manager Water Assessment	Tasmanian Department of Primary Industries, Parks, Water and Environment	Hobart, Tas
38	29 May 2018	Associate Professor Bob Beeton	Associate Professor; Chair	School of Earth and Environmental Sciences, University of Queensland; Threatened Species Scientific Committee	Canberra, ACT
39	30 May 2018		Members Council	National Farmers' Federation	Canberra, ACT
40	30 May 2018	Peter Cosier	Board member	Wentworth Group	Telephone
40	30 May 2018	Ilona Milar	Special Counsel	Wentworth Group	Telephone
41	4 June 2018	Andrew Macintosh	Associate Professor	Australian National University	Canberra, ACT
42	13 June 2018	Karen Smith	Farmer, NSW		Telephone
43	14 June 2018	Emma White	Chief Executive	Kimberley Pilbara Cattleman's Association	Broome, WA
44	14 June 2018	Rob Cossart	Regional Manager	Department of Primary Industry and Regional Development	Broome, WA
45	18 June 2018	Tom Hatton	Chairman	Environment Protection Authority,	Perth, WA

				Department of Water and Environmental Regulation	
46	18 June 2018	Grady Powell	Executive Officer - Policy	WA Farmers	Perth, WA
47	18 June 2018	Karen Smith	Farmer, NSW		Telephone
48	19 June 2018	Doug Hall	Policy Officer - Pastoral, Property Rights and Resources	Pastoralists & Graziers Association of WA (Inc)	Perth, WA
48	19 June 2018	Ian Randles	Policy Officer	Pastoralists & Graziers Association of WA (Inc)	Perth, WA
49	19 June 2018	Tyson Cattle	National Manager	AusVeg	Telephone
49	19 June 2018	John Shannon	CEO	Vegetables WA	Telephone
49	19 June 2018	Peter Skillern	CEO	Tasmanian Farmers and Graziers Association	Telephone
49	19 June 2018	Rob Hardy	Policy Director	NSW Farmers	Telephone
50	19 June 2018	Fran Stanley	Executive Director of Conservation and Ecosystem Management	Parks and Wildlife Service, Department of Biodiversity, Conservation and Attractions	Perth, WA
51	19 June 2018	Stephen Garnett	Member; Professor	Australian Wildlife Conservancy Science Advisory Network; BirdLife Australia Threatened Species Committee; Charles Darwin University	Telephone
52	21 June 2018	Steve Morton	Member; Honorary Professorial Fellow	NESP Threatened Species Recovery Hub; Charles Darwin University	Telephone
53	22 June 2018	Karen Smith	Farmer, NSW		Telephone
54	28 June 2018	Andrew Philip	Plant Industry Developer	NT Farmers Association Inc.	Telephone
55	29 June 2018	Sally Leigo	NT Project Manager	CRC for Developing North Australia	Telephone
55	29 June 2018	Allan Dale	CEO; Professor Tropical Regional Development; Chair	CRC for Developing North Australia; James Cook University; Regional Development Australia Far North Queensland and Torres Strait	Telephone

Appendix 5 – Submissions

Table 4 Schedule of public submissions

#	Date received	Name	Organisation	Confidentiality
1	8 May 2018	Richard Sharp	Farmer	Public
2	9 May 2018	P. and F. Bucknell and O'Callaghan	Farmer	Public
3	11 May 2018	Bob Phelps	Gene Ethics	Public
4	10 May 2018	Laurie Warfe	Farmer	Public
5a	12 May 2018	Tim Payne	Farmer	Public
5b	14 June 2018	Tim Payne	Farmer	Public
6	6 July 2018	Scott Hansen	NSW Department of Primary Industries	Public
7	15 May 2018	Anonymous	Farmer	Confidential
8	18 May 2018	Nelson Quinn	Griffith University	Public
9	11 May 2018	Helene Marsh	Threatened Species Scientific Committee	Public
10	21 May 2018	Anonymous	Landcare member	Confidential
11	17 May 2018	Bill Tait	Farmer	Public
12	22 May 2018	David Eddy	Local Land Services NSW	Public
13	28 May 2018	Multiple authors	Wentworth Group	Public
14	29 May 2018	Anonymous	Farmer	Confidential
15	14 May 2018	Leigh Arnold	Farmer	Public
16	4 June 2018	Michael Toby	Costa Group	Public
17	8 June 2018	Maggie Wheeler	Individual	Public
18	10 June 2018	Steve Chamarette	Farmer	Public
19	7 June 2018	Anonymous	Farmer	Confidential
20	5 June 2018	Jim Beale	Farmer	Public
21	14 June 2018	Anonymous	Farmer	Confidential
22	14 June 2018	Anonymous	Farmer	Confidential
23	14 June 2018	Anonymous	Individual	Confidential
24	14 June 2018	David Shearman	Doctors for the Environment Australia	Public
25	14 June 2018	Michael Schien	General Practitioner/farmer	Public
26	14 June 2018	Heather Dewar	Gingin Private Property Rights Group Inc	Public
27	15 June 2018	Richard Kingsford	Centre for Ecosystem Science, UNSW	Public
28	18 June 2018	Multiple authors	Threatened Species Scientific	Public

			Committee	
29	18 June 2018	Cerin Loane	NCC NPA	Public
30	19 June 2018	Derek Walter	Individual	Public
31	18 June 2018	Des Boyland	Wildlife Preservation Society of Queensland	Public
32	19 June 2018	Matthew Cossey	CropLife Australia	Public
33	20 June 2018	Nicola Morris	Tasmanian Irrigation	Public
34	20 June 2018	Paul Sullivan	BirdLife Australia	Public
35	29 May 2018	Greg Hipper	Individual	Public
36	20 June 2018	Evan Quartermain	Humane Society International	Public
37	20 June 2018	Anonymous	Farmer	Name and state to be confidential
38	21 June 2018	Bek Christensen	Ecological Society of Australia	Public
39	21 June 2018	Rachel Whalmsey	EDOs of Australia	Public
40a	21 June 2018	Emma White	Kimberly Pilbara Cattlemen's Association	Confidential
40b	21 June 2018	Emma White	Kimberly Pilbara Cattlemen's Association	Public
41	21 June 2018	Julia Peacock	Nature Conservation Society of SA	Public
42	21 June 2018	Louise Gilfedder	University of Tasmania	Public
43	22 June 2018	John Tucker	Liberal Party Rural and Regional Committee	Public
44	22 June 2018	John Murdoch	Monaro Farming Systems	Public
45	22 June 2018	Daniel Wild	Institute of Public Affairs	Public
46	22 June 2018	Anonymous	Farmer	Name and state to be confidential
47	22 June 2018	Anonymous	Farmer	Name and state to be confidential
48	22 June 2018	Anonymous	Farmer	Name and state to be confidential
49	22 June 2018	Anonymous	Farmer	Name and state to be confidential
50	22 June 2018	Anonymous	Individual	Confidential
51	22 June 2018	Richard Taylor	Farmer	Public
52	22 June 2018	Anonymous	Farmer	Name and state to be confidential
53	22 June 2018	Anonymous	Farmer	Name and state to be confidential
54	22 June 2018	Anonymous	Farmer	Name and state to be confidential
55	22 June 2018	Rebecca Spindler	Bush Heritage Australia	Public
56	22 June 2018	Kate Andrews	NRM Regions Australia	Public

57	22 June 2018	Julia Jelbart	NSW Farmers Association	Public
58	22 June 2018	Travis Tobin	Queensland Farmers' Federation	Public
59	22 June 2018	Lyndon Schneiders	The Wilderness Society Ltd	Public
60	22 June 2018	Cindy Briscoe	Department of Agriculture and Water Resources	Public
61	22 June 2018	Victor Violante	Australian Forest Products Association	Public
62	22 June 2018	Warwick Ragg	National Farmers' Federation	Public
63	22 June 2018	David Witherdin	NSW Local Land Services	Public
64	22 June 2018	James Trezise	Australian Conservation Foundation	Public
65	22 June 2018	Ros Irwin	Friends of the Koala	Public
66	22 June 2018	Matt Granger	Forest Industries Federation (WA) Inc.	Public
67	22 June 2018	Jane Hutchinson	Australian Land Conservation Alliance	Public
68	22 June 2018	Victoria Marles	Trust for Nature	Public
69	25 June 2018	David Jochinke	Victorian Farmers Federation	Public
70	25 June 2018	Greg Leach	AgForce	Public
71	24 June 2018	Malcolm Thwaites	Farmer	Public
72				Confidential supplementary material provided by the NFF
73				Confidential supplementary material provided by the NFF
74				Confidential supplementary material provided by the NFF
75				Confidential supplementary material provided by the NFF
76	Elizabeth	Woods	Queensland Department of Agriculture and Fisheries	Public
77	Sarah	Courtney	Minister for Primary Industries and Water	Public

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