



## SUBMISSION TO DISCUSSION PAPER OF THE NEBRA REVIEW

### Submission summary

The South Australian Government welcomes the opportunity to comment on the Discussion Paper of the National Environmental Biosecurity Response Agreement (NEBRA) Five Year Review.

The Primary Industries and Regions South Australia (PIRSA) and the Department of Environment, Water and Natural Resources (DEWNR) have contributed to the South Australian Government response to the Discussion Paper, which is structured around the general intent of the NEBRA and key themes for consultation.

In general, the NEBRA appears to be a suitable mechanism to respond to environmental biosecurity threats and the decision making framework seems appropriate. Activities conducted under the NEBRA appear to reflect its purpose and achieve its outcome.

The following key suggestions and improvements are identified in our submission:

- There is a need to develop surveillance and incursion preparedness plans for high priority environmental pests and diseases.
- A national agreement for environmental biosecurity emergency response is needed for the future of NEBRA.
- Stakeholders need more clarification from NEBRA for the following areas:
  - under what legal authority (which Act) environmental biosecurity responses are being made and when NEBRA will be applied;
  - definitions with specific reference to the various types of incursions where appropriate; and
  - defining the concepts of private beneficiaries and risk creators.
- The transition to management and cost sharing under the NEBRA framework, with the goal of containment rather than eradication, should be considered in the review.
- Development of process based decision-making tools to provide guidance and remove the ad-hoc aspects of decision making, during the initial stages of an incursion.
- Jurisdictions would benefit from mechanisms that provide external technical support, particularly with administrative tasks to assist in enacting the NEBRA without impacting early response actions.
- The NEBRA administrative group taking a more active role in assisting jurisdictions during incursion events.
- That the sharing of training and resources among jurisdictions and non-government stakeholders be further encouraged.

## Introduction

Environmental biosecurity is a cross-cutting issue and various aspects are managed across three government agencies in South Australia. Primary Industries and Regions South Australia (PIRSA), predominantly through the Biosecurity SA division, integrates state-level leadership on protecting the environment and social amenity from the impacts of invasive animals, plants and diseases. PIRSA takes a partnership approach with the Department of Environment, Water and Natural Resources (DEWNR), which has the operational lead for weed and pest animal management (on behalf of the eight regional Natural Resources Management boards). DEWNR also has a state-level focus on wildlife health and biosecurity risks to native plants. SA Health leads on zoonotic diseases (e.g. mosquito-borne viruses) and food safety (in collaboration with inspections undertaken by Biosecurity SA and local governments).

As owners and managers of land parcels, various state government agencies (including DEWNR, SA Water and the Department for Planning, Transport and Infrastructure) and local governments undertake pest control activities for environmental biosecurity purposes (e.g. public health, community amenity and/or biodiversity protection). There is a close working relationship on environmental biosecurity between PIRSA and DEWNR, facilitated through a Memorandum of Understanding (MoU) between the agencies that details respective policy and operational roles in invasive plants and animals and emergency management. This MoU is being reviewed in 2017.

In general, the NEBRA appears to be a suitable mechanism to respond to environmental biosecurity threats and the decision making framework seems appropriate. Activities conducted under the NEBRA appear to reflect its purpose and achieve its outcome. For example, a red imported fire ant incursion at Yarwun has been eradicated and the incursion at Port Botany is expected to be eradicated in the near future.

The following sections, based on the structure of the NEBRA discussion paper, raise issues and give suggestions for further improvement.

### 1. Purpose of the NEBRA

- Greater clarity is needed on the purpose of the NEBRA with regards to expected applicability of the business activity impacts provision in the NEBRA. At the initial stages of the red witchweed incursion in Queensland there was some debate amongst jurisdictions over the applicability of the NEBRA to enable a cost-shared response. This related to the NEBRA's business activity national significance criterion (Schedule 3 s4) in tandem with its capacity to enable contributions by private beneficiaries (s7.9).
- Whilst the NEBRA should retain its focus on eradication, it should be noted that there are often particular technical challenges with invasive species. These include persistent dormant phases (e.g. long-lived weed seedbanks), presence across a wide range of land uses (as opposed to a tight host-parasite/pathogen relationship which regularly occurs in animal and plant health) and efficient long-distance natural dispersal mechanisms. This can make time to achieving eradication in the order of decades rather than years. Time required needs to be taken account of in preparing and costing a response plan to commence an eradication program.
- Transition to cost-shared containment, with a view to eradication, could be considered as a potential provision in a revised NEBRA. For example, for nationally significant marine pests, where total eradication in open waters is rarely going to be technically feasible yet

there is a high national benefit:cost of containment. Similarly, it is more likely that an incursion involving an environmental disease (more so than a pest) may not be eradicated from the natural environment (as has been the case for myrtle rust). Any potential containment provisions in the NEBRA should be with a view to preventing an incursion getting worse until tools are eventually developed to achieve future eradication.

- Clarity around the scope of pest and disease organisms within scope of the NEBRA would be beneficial to stakeholder understanding. A good indication of this scope is given in Table 3 of the National Environment and Community Biosecurity RD&E Strategy.
- South Australia has not initiated any responses under the NEBRA. The state would seek to initiate a response under NEBRA where a response would be feasible and the plant or animal pest or disease is likely to affect a key/iconic/threatened species (not common species) or ecological community. For example, a response was not initiated in the case of the death of at least 42 Indo Pacific Bottlenose dolphins (a common species) in 2013. There was initial uncertainty about the cause of death, which turned out to be dolphin morbillivirus, a disease already established in Australia. However, the key reason for not invoking the NEBRA at the time was that it is not feasible to eradicate or manage a disease in the marine environment due to the transient movement of dolphins.

## **2. Roles and responsibilities under the NEBRA**

- The Australian Government is both the custodian of the NEBRA and an active participant in NEBRA decisions, which can lead to some confusion as to what role it should be playing. As custodian, is the Australian Government's role to provide executive officer/secretariat support, or should it go further in terms of the NEBRA having consistent supporting structures in place to foster incursion preparedness, detection and information sharing? For example, an updated interpretive guide for the NEBRA has remained in draft for many years.
- There also needs to be clarity regarding the role of the secretariat versus intergovernmental biosecurity committees (e.g. Invasive Plants & Animals Committee [IPAC]) in driving the strategic and operational policy of NEBRA.

## **3. Decision making and governance**

- The two tiered decision making framework – with the NBMCC providing technical advice and the NBMG making decisions – is a good arrangement. It is important to have consistency with both animal (EADRA) and plant (EPPRD) deeds.
- It has been noted that the NEBRA decision-making processes can be complicated in practice. The time lag between the administrative activity required and the action commencing may lead to the best opportunity for eradication having passed.
- One of the strengths of the EPPRD and EADRA is that parties to a response are identified in advance and are members of PHA and AHA respectively, and so have a seat at the table in decision making. If we were to use the NEBRA as the basis for responses to weeds and perhaps marine pests with economic rather than environmental impacts, we would also need to consider how these stakeholders will be engaged (e.g. could Plant Health Australia and Animal Health Australia be parties to the NEBRA in some situations?).

- There is merit to having non-government stakeholders involved in the decision making process as part of the National Biosecurity Management Consultative Committee (NBMCC). For example, in providing specialist scientific advice, or providing an industry or community perspective on the practical feasibility and social acceptability of initiating an eradication program.
- Greater clarity is required on what constitutes a nationally significant range expansion to which the NEBRA can be applied. For example, discussions in the marine biosecurity sector have flagged that long-distance human-mediated movement may qualify for NEBRA, but natural long-distance dispersal may not. However, no policy position has been made in this regard.

#### **4. Delivery of response activities**

- Generally, it would be a very rare occurrence where a proposed eradication response that is judged to be technically feasible to prevent a nationally significant impact would not have a favourable benefit:cost ratio. This is especially the case where only a tiny fraction of the potential distribution has been invaded to date.
- The model type and input data used in potential distribution modelling can give quite different outcomes of area at risk. Restricting the model to be used to CLIMATCH risks, using an outdated approach, does not reflect current best practice. Greater modelling flexibility should be enabled in Schedule 5.
- There is a high degree of uncertainty in applying the national significance criterion for environment with regards to likely impacts on particular species or places. NEBRA interpretative guides produced for vertebrate pests and weeds (by the previous Vertebrate Pests Committee and Australian Weeds Committee) recommended focusing on the 'Extensive impacts' criterion (Schedule 3 s2.6) to assess national significance. South Australia uses a comparative pest risk assessment model to prioritise species' potential impacts. Such an approach could be used at the national level to aid NEBRA decision making.
- Jurisdictions face significant costs in the early stages of an environmental biosecurity event before the NEBRA criteria can be addressed. Pre-populated templates for assessing risk, cost-benefit and feasibility would save significant initial time allowing focus on managing eradication efforts. In addition, national co-ordination of administrative tasks for NEBRA-enacted eradications would assist smaller states in focusing on on-ground response efforts.
- Threatened species (also key and iconic species) and ecological communities listed under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) or South Australia's *National Parks and Wildlife Act 1972* that are at risk from a pest or disease incursion could be considered in terms of prioritising responses. However, the NEBRA does not give guidance on whether the quantum of native species at risk is a factor in prioritising the need for a response.

#### **5. Information sharing**

- It would be beneficial to establish an information sharing network for NEBRA-related matters, such as through an e-mail list moderated by the secretariat. This would aim to

share information on management responses to existing incursions and new or potential threats. The Australian Wildlife Health newsletter provides an example.

- It would be valuable to develop a tool (possibly web-based) for identifying where the technical expertise lies for various types of pests and diseases to assist jurisdictions in preparing emergency response plans.
- The Invasive Plants and Animals Committee compiles new vertebrate detection data from all jurisdictions on an annual basis. This is through distributed spreadsheets, but a central web-based database would improve the efficiency, consistency and timeliness of reporting.

## 6. Preparedness

- The operationalisation of the NEBRA has been hampered by a lack of national surveillance and preparedness plans for high priority environmental pests and diseases (e.g. a national plan was not available when myrtle rust was detected).
- There is much scope to develop further national preparedness plans and training materials for environmental and social amenity biosecurity incursion scenarios. For example, the Invasive Animals Cooperative Research Centre's National Incursions Response Facilitator has produced the *Incursion Response Plan for Terrestrial Snakes*. Plans are needed for other types of vertebrate pests, such as birds, amphibians and fish. The development of an invasive species equivalent of the AUSVETPLAN would take considerable resources and time, but would provide an implementation framework to operationalise NEBRA.
- Preparedness plans should include under what legal authority (i.e. which jurisdictional Act) an environmental biosecurity response can be made (e.g. response to disease incursion affecting native animals only). This may identify current legislative gaps.
- National emergency response scenario training exercises are needed to ensure preparedness of all stakeholders, including understanding of their respective roles, application of the Australasian Inter-Service Incident Management System (AIIMS) framework to environmental biosecurity emergencies, testing legal instruments, and rapidly mobilising access to expertise and services.
- It is important to involve community and industry stakeholders in training exercises for emergency response, but with a view to their expected level of operational involvement. In many instances a discussion exercise on how a scenario would broadly play out would be sufficient, rather than a mock control centre exercise.
- The use and function of lists of priority environmental pests and diseases need to be clearly defined, at strategic, policy and operational levels. The focus should not be on the species per se, but rather examples of scenarios that can be used as a basis for awareness, surveillance and preparedness planning. This is the approach being taken with priority lists being developed for marine pests (Marine Pests Sectoral Committee) and for vertebrate pests (IPAC).

## **7. Funding arrangements**

- There is a need to clearly identify risk creators and consider their cost-recovery to be incorporated into the NEBRA. Private beneficiaries and risk creators could be better identified by defining these concepts in the NEBRA.
- Many pest and disease incursions pose environmental, social and economic costs. For the latter, there is scope in the NEBRA to identify specific industries at risk and apply clause 7.9.

## **8. Managing the NEBRA**

- Consistency amongst response deeds is important in making a case for long-term investment in a national cost-shared response.