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Review of draft National Environment and Community Biosecurity Research, Development and Extension Strategy 2014-2017

The Invasive Species Council is grateful for the chance to provide comments on the draft National Environment and Community Biosecurity Research, Development and Extension Strategy (RD&E) 2014-2017. This strategy is an important initiative that fills a significant gap in the setting of priorities for research on invasive species impacting on the environment and the community in Australia. We support the overall direction of the strategy.

The Invasive Species Council promotes reforms to better protect the natural environment from invasive plants, animals, pathogens and other organisms, with a strong focus on prevention. We draw heavily on science and have strong connections with community groups.

This submission may bear some resemblance to the submission by the Council of Weed Societies of Australasia since we have provided input to their submission.

1. Strategy foundations

General comments

There is some debate within biosecurity circles about whether RD&E priorities and strategies for environmental biosecurity are best developed in a standalone strategy or integrated with those for agricultural biosecurity. Both sides recognise the need for much greater focus on environmental RD&E priorities.

There is widespread acknowledgement, including in the 2008 Beale review, that RD&E for environmental biosecurity lags behind that for industry. We think that gap is very large – the resources (from both public and private sources), programs, institutions etcetera dedicated to

agricultural biosecurity priorities far exceed those for environmental biosecurity despite the greater number and scale of invasive species impacts on the natural environment.

The 'integration' view is that there are more advantages and efficiencies to be gained by pursuing priorities in common with agricultural biosecurity and promoting environmental priorities within the one framework; and that pursuing a separate R,D&E strategy risks greater sidelining of environmental priorities.

ISC agrees that there are many priorities in common that should be pursued but we strongly endorse the need for a 'standalone' environmental strategy. As outlined in the draft strategy, there are distinctive features of environmental biosecurity such as ecological complexity and lack of knowledge that give rise to different priorities and warrant different approaches. Solutions should be pursued within an ecological framework. In many biosecurity processes, the environment is an add-on to processes dominated by agricultural priorities, experts and thinking, and we consider that pursuit of an integrated R,D&E strategy would perpetuate that. (For that reason, we strongly oppose the proposal that Plant Health Australia take on environmental tasks.)

So, we strongly endorse the development of this standalone environmental and community strategy and recommend that there be processes to promote joint approaches where this is consistent with environmental and community priorities (as proposed in objective 2.2).

Vision

We recommend that the vision be revised. The proposed vision is focused primarily on how to deliver the benefits of R,D&E (through collaboration) rather than on what we seek to realise through improved R,D&E. It suggests that the primary goal is to be a world-leader, implying that we would measure its success by comparisons with other countries, rather than in terms of outcomes for the environment and communities. It also implies that Australia is already doing a good job in this area and that maintaining the current trajectory is sufficient.

We propose that the vision be focused on R,D&E contributing to preventing and reducing the environmental and community impacts of pests. It could include: Research into reducing the impacts of pests, weeds and diseases on the environment and community is well coordinated, directed at national priorities and delivered through stakeholder collaboration.

Goals

These could be reworded slightly to state what we want to achieve; as written, they are closer to being strategies.

Objectives

We support the proposed objectives.

We recommend that the objectives also identify a leadership role for government in implementing the strategy, consistent with section 7.2 (page 40), which states that 'government recognition of [the strategy's] importance and national leadership in its delivery under the IGAB … is necessary

to provide the long term stability, commitment and continuity required to implement the Strategy and ensure outcomes are delivered.'

Scope

The proposed scope includes over-abundant native species, as well as native species introduced into new areas. The latter group should definitely be included (as the drivers and impacts are similar to those for non-Australian invaders) but we question whether over-abundant native species should be included for they are not considered a biosecurity issue.

If over-abundant native species are included, a rationale should be provided and they should be distinguished from invasive species as traditionally defined. We suggest that the term 'overabundant indigenous species' is used to distinguish them from native species introduced by humans outside their native range. Clearly, there is some blurring of distinctions between overabundant and invasive native species when native species move into new areas due to anthropogenic changes. From an ecological perspective, there are advantages in pursuing research on the conditions that both facilitate invasions and foster overabundance and management to reduce the impacts of both. However, this could be included in the scope of research without overabundant native species being a primary focus.

It is incorrectly implied that weeds and pest animals impacting on primary industries are addressed in the National Plant Biosecurity & Animal Biosecurity RD&E Strategies; as listed in the Appendices, weeds are included in the Plant Biosecurity RD&E Strategy only as a brief mention and invasive animals are not included in the Animal Biosecurity RD&E Strategy.

We question the inclusion of this statement in the strategy – 'The scope of the Strategy is based on human perceptions of value and harm' – for, while true in a self-evident way, it implies a subjective approach to priorities. There are many biases in funding based on human preferences for particular species or habitats that we should strive to avoid in environmental priority setting.

Stakeholders

The section on stakeholders lists investors first. We recommend that those representing the public interest in the environment and the community should be listed first.

High-level outcomes

We recommend that the first high-level outcome refer to contributing to meet Australia's international obligations to conserve biodiversity.

2. Situational Analysis

Australia's biosecurity system overview

P21, Section 4.3, para 3 – It may be worth clarifying that Plant Health Australia does not address weeds (pest plants) and Animal Health Australia does not address pest animals. It is incorrect to imply that PHA and AHA holistically address primary industry biosecurity.

The National Primary Industries R&D Framework is missing form Figure 2, p22.

Biosecurity of the environment

This section does not do justice to the extent and severity of the threat to the natural environment. We recommend that invasive species threats to biodiversity be briefly summarised – including by reference to analysis such as by Evans et al. 2011[1] showing that invasive species threaten more nationally listed species than any other threat category apart from habitat loss. We recommend that reference is made to the *Australian State of the Environment 2011*. For example it confirms that 'Invasive species and pathogens represent one of the most potent, persistent and widespread threats to Australian biodiversity,' and says that pressures from invasive species are major and have been growing worse over the past decade.

There should be reference to the Biodiversity Convention and the Australian Biodiversity Conservation Strategy 2010-2030 and its invasive species target: 'By 2015, reduce by at least 10% the impacts of invasive species on threatened species and ecological communities in terrestrial, aquatic and marine environments.'

We also recommend that there be acknowledgement of the large community contribution to invasive species management. A survey of 800 organisations tackling invasive species conducted by the Invasive Species Council in 2013 measured volunteer effort valued at $76 million per year and paid effort at $92 million. Of the survey respondents, there were 485 community organisations, and their effort was valued at $61 million per year. Based on the estimated size of the sector in Australia, the contribution of the community in tackling invasive species in Australia is in the order of $1.2 billion.

We appreciate reference to our proposal for Environment Health Australia. It would be an ideal body for fostering collaboration and coordinating research priorities for invasive species impacting on the environment.

Sectoral subcommittees

It should be noted that no sectoral subcommittees presently (or historically) include any NGO participant representing environmental or community interests.

The Australian Weeds Committee and the Australian Pest Committee do generally deal equally with threats to primary industries and the environment. It should be noted that the Plant Health Committee and Animal Health Committee focus primarily on industry pests.

Sectoral strategies

No existing sectoral strategies were developed with meaningful involvement of any NGOs representing the environment or the community.

[1] Evans et al. 2011. The Spatial Distribution of Threats to Species in Australia. BioScience 61(4):281-289

It is noted that there is a proliferation of industry biosecurity strategies for each industry sector. This approach appears to create multiple systems, many of which could be aligned and integrated.

In contrast, there is no national environmental biosecurity strategy.

Government trends

There is a statement in the strategy (page 30), 'From a government perspective, biosecurity is a multi-sector partnership with a focus primarily on trade security and human health.' While we agree that trade security and human health are the dominating foci, we suggest that the sentence should be modified to acknowledge that environmental concerns are also a focus, particularly in some states..

It would be worth noting some of the impediments to effective environmental biosecurity arising from the disparate nature of government decision making across agricultural and environmental agencies, with most policy in the hands of departments and ministers that are primarily concerned with primary industry interests. (The federal agricultural department doesn't mention the environment in its mission statement.) There is greater government investment in primary industries R,D&E in part as an incentive for industry to provide funding. There is no similar financial motivator on offer for the environment.

NGO Trends

Page 30,31: This sentence 'These include agencies that are directly targeting species issues' should say: 'These include bodies [or organisations] that are directly targeting the environmental impacts of invasive species'. Agency is normally a term used for government departments. This revised wording clarifies that the interest is usually in relation to the many impacts of invasive species, not 'species issues'.

Australia Wildlife Conservation should be Australia Wildlife Conservancy. World Wildlife Fund is WWF-Australia (long-hand version no longer used).

Actually WWF-Australia has no on-ground programs that manage the impacts of invasive species as is suggested. It might be more useful to also mention Greening Australia, Conservation Volunteers Australia and the many smaller landcare, bushcare and 'friends of' groups.

Another important NGO trend is increased community-led biodiversity surveys and biodiversity monitoring. This may involve the use of camera traps, in-field weed and feral animal GPS logging and volunteers undertaking traditional scientific surveys using traps, collections (plants) and other tools. New tools are emerging to make this simpler including inexpensive motion-detection digital cameras and collaborative databases such as the national Atlas of Living Australia.

Governance and institutional arrangements around biosecurity RD&E

We agree that current research and development for biosecurity relating to impacts on the environment and community is poorly coordinated (introduction, page 10).

While some research is coordinated though the work of the Invasive Animals Cooperative Research Centre (CRC) and under the National Primary Industries RD&E Strategy (2010) and its sub-strategies, the National Animal Biosecurity RD&E Strategy and the National Plant Biosecurity RD&E Strategy, there are large areas of current and potential RD&E outside these strategies. This lack of prioritisation means that research effort is not currently directed to the most important priority areas.

Cooperative research centres (CRCs) are an important means for coordinating and delivering RD&E. This beneficial role of CRCs has not been adequately acknowledged in the strategy. The Invasive Animals CRC has been recognised, but greater emphasis could be given to the advantages and weaknesses of this model.

The former Weed Management CRC, that ceased to operate in June 2008, played an important coordinating role for RD&E relating to weeds. The absence of the Weeds CRC has made the need for the coordination of weed research at the national level more pressing.

Governments should play an important role in representing the public interest in the environment and the broad community, and fulfilling national and international obligations that require protection of the natural environment. The Federal government should therefore take a lead role in implementing the RD&E strategy. This leadership has been lacking, partly because of the split responsibilities for environmental biosecurity at the federal level. The agricultural department has statutory responsibility for environmental biosecurity but limited ecological expertise and willingness while the environment department has limited statutory responsibility and biosecurity expertise.

3. Priority areas

We support the research priorities identified in the draft strategy as identified by stakeholders. Research for biological control is of immense importance.

This strategy should confirm these priorities rather than just referring to them as the result of a process.

4. RD&E capability

Loss of capacity

Downsizing of governments and CSIRO in biosecurity R&D has led to a serious decline in R&D capacity across Australia at the state and federal levels. This will greatly compromise biosecurity and requires new resources and long-term effort to rectify. This decline in capacity needs to be reversed and should be addressed in this strategy.

Identifying roles

Page 35 states that the roles identified in the National Primary Industries RD&E strategy cannot be identified (major, supporting, linkage). It is important that an attempt is made to identify these

roles because clarity about roles will improve the ability to achieve coordination. The complexity of the sector undertaking RD&E relating to invasive species impacting on the environment and community sector does not make it any less important to identify or allocate roles. We believe that the perceived complexity of the sector reflects the low priority given to engaging with the sector and thus a lack of familiarity with the sector and a poor understanding of its structure.

The proposed Environment Health Australia would be an ideal body to take a lead in coordinating RD&E relating to the environment and community. Meaningful input from the non-government, non-industry sector is essential. We do not believe this role can be fulfilled by Plant Health Australia or Animal Health Australia given the narrow objectives of their deeds, their lack of environmental and community representation and their focus on primary industries.

The strategy could consider establishing one or more bodies specifically tasked to undertake and coordinate research effort relating to invasive species impacting on the environment such as weeds. A CRC could be one model, but a major weakness is that funding for CRCs is not guaranteed longer than five years. A body based on the industry research and development corporations is another model. Governments should be investing at least as much in dedicated environmental biosecurity RD&E as they do for industry research and development programs.

5. Recommendations for implementation

The Invasive Species Council supports the recommended approach for the strategy's implementation:

- The establishment of a national coordination committee to oversee the strategy's implementation. Such a body is needed to maintain a focus and bring diverse but committed stakeholders together on a regular basis. This should be presented in the final strategy as a priority action, not a proposal.

- A stronger role for the non-government sector in the implementation of the strategy. As mentioned in the draft strategy, this involvement must be properly resourced.

- Involvement of NGO representatives as members of the 'National Implementation Committee (NIC)', as recommended by the strategy.

Yours sincerely

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