NRM REGIONS AUSTRALIA: ENVIRONMENTAL BIOSECURITY WORKSHOP

NRM REGIONS AUSTRALIA

Workshop outcomes

1. Senior NRM officials equipped with a more in-depth understanding of what biosecurity is, the challenges and successes
2. Identified opportunities where the NRM organisations can assist in surveillance and responses to environmental biosecurity incursions
3. Established high level communication networks between biosecurity system participants and NRM organisations

Prepared by Thunderbird Consultancy, June 2019

NRM Regions Australia: Environmental Biosecurity Workshop

WORKSHOP OUTCOMES

1. **SENIOR NRM OFFICIALS EQUIPPED WITH A MORE IN-DEPTH UNDERSTANDING OF WHAT BIOSECURITY IS, THE CHALLENGES AND SUCCESSES**
2. **IDENTIFIED OPPORTUNITIES WHERE THE NRM ORGANISATIONS CAN ASSIST IN SURVEILLANCE AND RESPONSES TO ENVIRONMENTAL BIOSECURITY INCURSIONS**
3. **ESTABLISHED HIGH LEVEL COMMUNICATION NETWORKS BETWEEN BIOSECURITY SYSTEM PARTICIPANTS AND NRM ORGANISATIONS**

INTRODUCTIONS

Welcome to Country – Kate Andrews, Executive Officer (EO) NRM Regions Australia.

EO welcomed the Chief Environmental Biosecurity Officer (CEBO), Ian Thompson and members of the Department of Agriculture & Water Resources (DAWR) team Heleen Kruger and Natalie O'Donnell. Participants from most jurisdictions across Australia were represented, with apologies from the ACT. EO outlined that the workshop is an opportunity to identify the pathway for NRM organisations to work together to become more involved in the opportunities within environmental biosecurity. The facilitators, Jo McGoldrick and Melissa McLeod were introduced. The CEBO gave a short introductory message which pointed to the opportunities and the synergies between environmental and agricultural biosecurity and the capacity in NRM regions.

EO reminded participants about the NRM Regions Biosecurity working group and encouraged members that were interested to put themselves forward participate on the working group.

Facilitator Jo McGoldrick opened the workshop and commenced the discussions.

Participants introduced themselves and outlined their background and understanding of biosecurity.

Regional Case Study 1; Justin Bellanger WA

Southcoast Natural Resource Management – community-based biosecurity

Video: **The State Phytophthora Dieback Management and Investment Framework. A link to the framework and associated information can be located at**
http://www.dieback.net.au

Justin outlined the operational objectives of the framework, namely to;

- Identify 100 Priority Protection Areas (PPA)
- Prioritise targeted investment
- Implement, monitor and evaluate (Manage)

Humans, animals and machinery are all vectors for Phytophthora and so the framework is designed to reign in the spread of the disease using a multi-pronged approach. The biosecurity principles inherent in the framework make it a useful case study for environmental biosecurity. Some of the strategies outlined during the presentation included;

- Establishing a hazard dispersion model
- Developing DIDMS which is a Dieback Information Delivery Management System for WA
- Risk reduction planning process
- Capacity building – green card training, DIDMS training, hygiene training, dieback planning workshops
- Awareness raising – publications, multimedia, behaviour change practices, adoption of technology, standardisation – noted the app which is good but feels maps are better for biosecurity awareness. Kept a single message
- Response capacity – erecting hygiene infrastructure, installing signage, access control phosphate spraying, green bridging and road upgrades

The dieback issue has impacted not only on environmental assets but is a threat to commercial interests and is seen as something that impacts the whole community.

The establishment of local area reference groups enabled those groups to take responsibility in their localities. Funding came from the State to bridge gaps along with some of the bigger utility companies also being involved. The project team identified early on that the process around the disease was siloed by virtue of responsibility however it needed to be broadened if the treatment was to be effective. Broadening contributed to breaking down some of the duplication which in turn saved money that could then be applied to the treatment. In terms of progress there is optimism that the spread of the disease appears to be reducing.

Take home message – Environment scale biosecurity incursions benefit from a multi-pronged effort; all contributions are equal.

SUMMARY POINT

Well thought out frameworks contribute to broadening the way the various players can work together, reduce duplication and address the problem at an environment scale. Leadership by Southcoast NRM was the critical factor.

Regional Case Study 2: Andrew Triggs, Kangaroo Island, SA

Biosecurity Strategy for Kangaroo Island. The island is comprised of 4,500 square kilometers and 4,500 people. The economy is comprised of 50% agriculture and 50% tourism.

Link www.naturalresources.sa.gov.au/kangarooisland/plants-and-animals/Biosecurity

Andrew was employed under NLP 1 to improve biosecurity protection on the island and a key milestone was the development of the strategy and associated material to engage the local community and create awareness with the travelling public. The strategy intent was to better educate and inform the public of the risks that bringing various items to the island poses for the livelihoods of residents both in an agricultural industry context and generally. A key consideration was engaging with the island residents who rely on being able to transport goods and services on and off the island. A pertinent example was the risks associated by bringing in honey which was a massive risk for local bee industry. Over time through the tools and actions within the strategy, the awareness levels have improved dramatically. A particularly effective tool has been the pocket card that is displayed and provided on ferries and planes titled Too Good to Spoil (see picture). When supplemented by biosecurity checks on the ferries and airport including signage it has an impact on tourists.

Fundamental points from the case study were;

- Value in awareness raising
- Risk assessment processes are critical
- Monitoring and surveillance are needed to maintain momentum
- Creating ownership of the strategy in the community was vital

The strategy has been designed to reach the island residents and the tools and promotional material are aimed at the visitors. Having the residents engaged meant that they became an extra 'line of defense' after the formal biosecurity systems.

Take home message - Getting the community engaged and taking ownership means helping them to understand that incursions and diseases impact their livelihoods.

SUMMARY POINT

NRM organisations are effective at reaching communities. Communities are effective at taking an interest in and defending their livelihoods. If they are properly engaged in understanding the impact of the threat, they will take on the 'shared responsibility' message in biosecurity.

Regional Case Study 3: Darren Marshall, Southern Queensland Landscapes, Qld

Community engagement strategies for improving feral pig management Darren.marshall@sqlandscapes.org.au

Darren explained how he is working to change the way the community sees feral animal control, in particular for feral pigs, and the capacity building needed when the community is divided over the way to handle and treat feral animals

Feral pig management is a massive problem that cuts across community, environment and the economy, particularly because of the challenges in sustaining their motivation to participate in control. The work being undertaken is about sharing knowledge on feral pig ecology, the impact on production, environment and importantly the impact of disease as a biosecurity threat. Much of the effort includes how to train people to implement control methods properly because feral pig management relies on a 70% being destroyed to have an impact on the population.

Feral pigs are a key environmental biosecurity issue because they destroy the floodplains and waterways due to their need to wallow. The project works WITH landholders, not ON them, or FOR them. The aim is to catch 'iconic' pigs, sedate them, GPS collar them and track movement. The data is then provided back to the community to help them implement control strategies. Darren talked about the methodology for control that needs to change. The community need to be better engaged and understand the pest they are dealing with and the way to do this is to provide them with the knowledge.

The lesson learned in the project has been addressing the lack of engagement with hunters who proved to be a big obstacle in achieving full engagement because of their interest in hunting as a recreational activity. A focus will be helping hunters to understand that they can't get the knockdown of numbers that is needed for effective pig control through hunting alone and their efforts in the 'mop up phase' after aerial shoots and baiting programs is a valuable contribution.

Take home message – Managing feral pigs, like many established pest species, is really about managing the people.

SUMMARY POINT

The drivers for effective feral pest control require authentic community engagement and in the case of feral pigs, the realisation that they are more than a production problem they are an environmental problem as well. Community engagement and awareness raising to solve these kind of environmental biosecurity problems are principles that are aligned well with NRM regions and the work they do.

SESSION 1: UNDERSTANDING BIOSECURITY

This session was designed to set the context for the days discussion and help participants understand the framework for biosecurity at the national scale.

Chief Environmental Biosecurity Officer (CEBO), Ian Thompson: CEBO Role and an introduction to the national biosecurity arrangements

(The entire presentation is attached to the report.)

A precise of the presentation is as follows;

An introduction to environmental biosecurity, protecting the natural environment, the amenity and our livelihoods. Environmental biosecurity matters. The creation of the CEBO role is an important progression that demonstrates the environment is as important as agriculture. It puts the environment on an equal footing with animals and plants in a biosecurity context.

<u>The role of the Chief Environmental Biosecurity Officer is to:</u>
• Enhance understanding and oversight of environmental biosecurity risks
• Perform a national policy, engagement and leadership role including major source of advice to the Commonwealth on environmental biosecurity matters
• Ensure Australia's environmental and community biosecurity risks are better defined and prioritised
• Improve the maturity of Australia's environmental biosecurity preparedness, surveillance and response capacity
• Support effective responses to detections and incursions of environmental pests and diseases.

The biosecurity system in Australia has many players and is complex. It is also evident gaps remain within the overall framework of government policy and processes as relates to environmental biosecurity.

<u>Environmental biosecurity in comparison with animal and plant biosecurity</u>
• Work has started but there is still a long way to go
• Effective biosecurity extends from overseas intelligence, through pathway analysis, research on pests, host and vectors and impact, risk analysis, and response
• It needs an institutional framework for this
• Some of this exists for the environment but there are many gaps. Biosecurity reflects its origins in ag. A lot to do to put the environment on not just the same structural footing but also a practical one
• Work in progress by National Biosecurity Committee's Environment and Invasives Committee and others includes – priority pest list, response awareness and training, preparedness work (i.e. develop identification protocols for priority

Biosecurity 101: A modern name for an age-old problem. In Australia, key biosecurity principles include:

- Appropriate level of protection
- Maximum return on investment
- Partnerships and shared responsibility

Historically, biosecurity used to be about used to be about quarantine, then animal health became included and later the inclusion of plants. Now biosecurity is so much broader, it incorporates the environment. Biosecurity is really about partnerships and responsibility. In recent years governments have reached the understanding that they cannot manage the risks alone – they need the community.

Shared responsibility is something that governments at all levels have agreed to however sharing that message with communities is complex. Making the decision is key and sometimes achieving the decision takes a massive effort. Scarce resources often mean government and community sometimes don't agree and there is a push pull process about where responsibilities sit.

Managing biosecurity risks is becoming more challenging as we deal with increased trade and tourism, climate change and the complexity of global supply chains. Biosecurity in Australia is embedded in a strong trade related context. Managing the risks is a critical function in biosecurity. These risks are assessed on the basis of scientific information. A gap exists for research and development into the impacts pests and diseases have on the environment.

There is a great deal of information available within the presentation attached to the report which looks at the structures and processes for biosecurity. Additional information can be obtained directly from the CEBO web page at www.agriculture.gov.au/biosecurity/environmental/cebo

Environmental Biosecurity Definition "The management of risks to the environment, and to social amenity, of pests and diseases entering, emerging, establishing or spreading in Australia". (IGAB Review 2017)

SUMMARY POINTS

- **The animal and plant biosecurity arrangements in Australia are mature and environmental biosecurity is still maturing in a system that is very complex.**
- **In terms of the total biosecurity system in Australia, NRM regions don't need to recall every detail of the structures but instead appreciate that it exists and is there for a range of circumstances.**
- **The value of involvement in passive surveillance by NRM organisations should not be underestimated.**
- **The gap that exists with Research and Development for Environmental Biosecurity would be enhanced by understanding the impacts of pests and diseases on the environment, much work is needed.**

SESSION 2: OPPORTUNTIES TO ASSIST WITH SURVEILLANCE

Short discussion about 'silos' in systems within biosecurity and the facilitator advised that sometimes these can also happen for the benefit of responses.

The group discussed how different incursions or diseases impact on either the Economy, the Environment and the Community and in many cases all three. The group looked at some specific examples such as Hendra, Khapra Beetle, Cane toads, Pigs and Brucella Suis, Deer, parthenium weed, and Red Imported Fire Ants and ants in general. Often incursions considered to be an economic problem have a significant environmental and community risk. The management of these incursions, however, will most likely not include NRM participation to any significant degree and there is a shift required to change this. Having NRM regions better represented in surveillance activities will lead to improvements in both the profile and availability of NRM expertise in planning and responses.

The group discussed;

- The notion that plant pests and disease are harder to 'prosecute' as an issue in an environmental biosecurity context than some of the more obvious, but this is attributed to a lack of knowledge and something that can be overcome.
- Often the more traditional issues such as weeds are easier to get the interests of the community as an environmental issue and tend to impact on the ability of NRM regions to allocate resources to other biosecurity activities.
- It's possible that less visible issues such as wildlife diseases are something that can get better traction for environmental outcomes, particularly if the messaging is handled well.
- The World Health Organisation (WHO) thinks the next major issue for humans will come from a vector transmitted by wildlife, this really crystalises the importance of environmental biosecurity.
- A challenge is that Australia may be using a European thinking model to deal with the issues such as deer rather than an environmental biosecurity model.
- Consider situations such as wildlife in the 'wrong location' and how this can be causing problems for the ecosystem. E.g.; Sugar gliders in Tasmania and the issues around their impact on parrots.
- The Biosecurity 'lens' can tend to be species specific rather than consider the ecological context and there is a need to look bigger picture such as system or landscape layer. E.g.; bats are a species which is eating food not specific to their diet and as a result of that they can be shedding disease.

SUMMARY POINT

NRM regions are well placed to communicate and understand the impacts of incursions on a broader environmental scale. Involvement in surveillance at various levels is an achievable goal.

Case Study & Discussion: Bellinger River Snapping Turtles

Background & Context

Located on the Mid North Coast of NSW, the Bellinger River originates from the pristine World Heritage listed area of Dorrigo National Park. In 2015 a mystery illness threated the survival of the Bellinger River Snapping Turtle, a species unique to this river.

Following a local resident reporting the concern of sick turtles to authorities, a multi-agency response was initiated to undertake surveillance activities. Hundreds of dead and dying turtles were found in a matter of days. Diagnostics work was quickly undertaken to try and determine the cause of the illness. It was later identified an unknown virus was responsible for the deaths.

In the absence of a CEBO or formal Environmental Biosecurity arrangements, authorities were required to negotiate an appropriate command hierarchy, including the lead agency. This proved to be anything but straight forward given was no precedence set and the involvement of multiple government agencies.

The turtle species was saved thanks to the combined efforts of the NSW Department of Primary Industries, National Parks & Wildlife Services, Taronga Zoo, Local Land Services, Bellingen Council and most importantly the support of the local community.

Fundamental points;

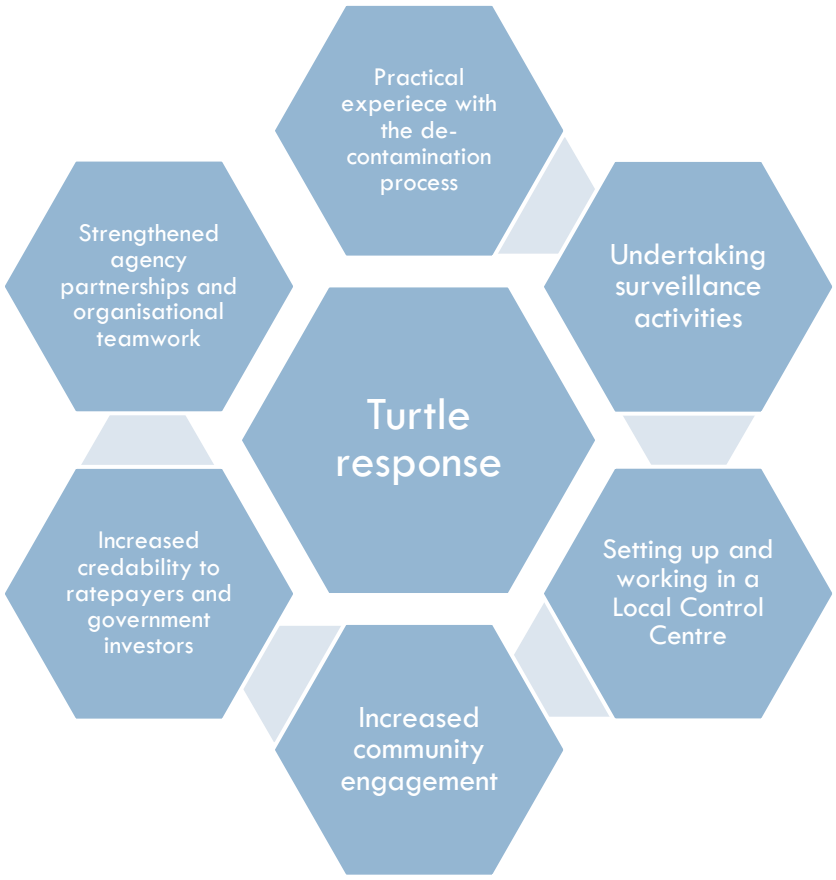
- The success and challenges of working in partnership with multiple agencies and community organisations in a multifaceted response
- The absence, or confusion surrounding the appointment of a lead agency initially hampered the response. The appointment of a Chief Environmental Biosecurity Officer post this event will greatly assist in future wildlife diseases responses
- Citizen science played a critical role in the response and continues to monitor the river's health through the Bellingen Riverwatch.

One Organisations' involvement:

National Parks & Wildlife Services requested North Coast Local Land Services (NCLLS) assistance with surveillance activities in the initial days of the response. Surveillance consisted of canoeing down the river and searching for affected turtles. Involvement was initially questioned however the positives outweighed the concerns. The decision to devote resources was based on:

- The organisation recently had its responsibilities around biosecurity responsibilities expanded
- The river was located within the regional footprint of responsibility
- It was interesting work – were the deaths due to river contamination, was it a mystery disease?
- NPWS, the requesting agency, was one which NCLLS worked closely with on other projects and it was imperative to support interagency relationship.

The organisation remained involved for several weeks, and during this time, the benefits were substantial. Staff awareness and experience was increased in several key areas and are highlighted below:



Take home messages – Organisations, their staff and volunteers should take advantage of any opportunity to become involved in a biosecurity response regardless of the scale. They may not have the all the skill sets for a response but local knowledge, local networks and any relevant technical expertise will be welcomed, and the professional development experience gained outweighs any inconvenience. Hands on experience in an emergency response will always trump desktop training.

SUMMARY POINTS

NRM regions are critical for bringing citizen science and community groups together in a response situation or the surveillance process.

The local knowledge and citizen science awareness of species and their locations is often superior to the agency or government personnel handling the response.

Group discussion - Bellinger River Turtle case study

The group discussed that often, trust with government is low and communities, groups need someone to bring them together for the benefit of environmental outcomes. Often NRM regions can fill this void and bring people together particularly in connecting local knowledge with the response situation.

It is agreed that NRM regions have a lot to offer Environmental Biosecurity including; the ability to garner community networks, the expertise and the ability to speak collectively on issues that are impacting the greater good.

The Bellingen Riverwatch group, an ongoing community driven effort that grew out of the turtle incident is an impressive outcome from the disaster that impacted the turtle population. The group includes community members and scientists who are collaborating to ensure that the river is monitored in an ongoing way including ecology surveys.

Group work: Active vs passive surveillance and NRM organisations

Groups were asked to consider how they could participate in surveillance and outline some of the realistic opportunities for NRM regions to become better engaged with environmental biosecurity through surveillance. A summary of the answers is as follows;

- Environmental Biosecurity principles should be embedded in all work carried out in the region
- Raising awareness of biosecurity issues and controls
- On farm via facilitating biosecurity planning and workshop/field days with a biosecurity focus particularly in regions where there is a small farm focus and an absence of state driven processes
- Incentives – how do you engage with large land holders i.e.; the challenges involved in doing this in an environment with competing priorities
- Partnering with industry to get ahead of environmental problems and improve their social license
- Having a culture of asking questions about new observations in the region
- Being better at connecting the dots between the community and the broader biosecurity issues
- Thinking about simple communication rather than the complex e.g.; awareness style road signage in remote areas
- Acknowledging the capacity that is accessible by the NRM regions to assist with surveillance and doing skill gap analysis to understand what exists
- Improving awareness and education programs through the regular communication methods
- Closing the loop by picking up the tasks of monitoring and feedback
- Sharing knowledge and awareness across the organisations

The group then discussed a series of key points including, citizen science, coordination and NRM in responses, culture change, social license, climate change and changing community awareness about biosecurity.

OPPORTUNITIES highlighted from the session

CREATING AWARENESS

- **Raising awareness of the priority plant pests and diseases and making sure that regions know these and incorporate these into the regional planning process.**
- **Improving the culture within NRM regions to recognise the value of environmental biosecurity.**
- **NRM regions take a role in biosecurity education either on farm or as part of normal activities and field days i.e. kits for sale and training and workshops.**
- **Recognise through local planning where the NRM organisations can sometimes sit between agriculture (or aquaculture) and the environment.**

STRATEGIC COMMUNICATION

- **Having NRM regions represented on response teams or where appropriate coordinating committees, is a strategic goal. The suggestion is during responses state level is enacted first and NRM regions can tap into state processes far easier than the national structure. Remaining involved and connected is critical.**
- **Mapping the environmental systems for biosecurity which allows NRM organisations to actively participate in the process and see where they best fit.**
- **Growing capacity and mapping roles and responsibilities – a foundational piece of work that needs to be done to enable NRM regions to determine involvement in biosecurity. Locating the knowledge first is key but then carrying out a process to disseminate it.**
- **Seek to have resourcing for environmental biosecurity included under the broader climate adaptation program which links climate change becoming a vector for biosecurity incursions.**
- **Seek to have biosecurity outcomes included in the national program information as a key threatening process.**

RISK MANAGEMENT

- **Identifying the key biosecurity risks at a regional scale via a risk mapping or management process to plot future issues and prepare communities.**
- **Embed risk mapping in the local plans for NRM regions.**

FOUNDATIONAL TRAINING

- **Develop a foundational knowledge training package with support from CEBO which would enable regions to access introductory training with an NRM focused skills development program.**
- **Provide opportunities within this program for NRM Regions to help develop content to ensure it respects the varied structures and circumstances of the regions.** The group agreed that foundational training was vitally important, but they really stress the importance of the complexity around the diversity of NRM regions and how that training could occur.

SESSION 2 CONTINUED… PREPARATION FOR AND PARTICIPATION IN BIOSECURITY RESPONSES

Groups were asked to consider what they would do with an allocation of funds that could be spent on preparation for, and participation in, responses. Some scenarios were provided to provoke thinking including;

- Exotic plant pest in a word heritage site
- Aquatic disease or weed,
- Incursion of invasive pest (exotic or new to a geographical area)

In answering the question groups were asked to consider what currently exists and what the barriers are to becoming more engaged in environmental biosecurity;

Scenario Analysis

Feedback from the group exercise included;

- Understanding how to establish coordination process or control centres.
- Sampling and diagnostics knowledge and the opportunity for regions to engage through some relatively simple techniques that current staff and volunteers could participate in.
- Ensuring links with agencies that would be involved are in place and able to be called upon.
- Identified that exercises are a gap in knowledge after some discussion.
- Use existing platforms that are well embedded within NRM regions to engage with the communities.

An interesting outcome from the groups discussion was that many regions see themselves as having to physically respond or control the situation when they would mainly be a supporting agency or coordinating a step away from the standard response systems. Upon further discussion the group agreed that the lack of foundational knowledge plays a part of understanding what space they should occupy in the scenarios.

A brief situation analysis of the current capacity or perceived capacity to be involved in responses was discussed;

NSW - capability good, capacity dependent on the circumstances of the event

TAS - has capability

VIC- Yes (when its core role) and would offer up if people had expertise

WA – Has capability but are low on capacity

QLD – Capability, not funded generally though to do biosecurity and tend to come at it via vertebrate pests but act when required to do so. Qld feel they are pretty well set up though in general terms of biosecurity.

SA – Biosecurity SA tend to take the lead and have capacity and capability

NT – state biosecurity agencies exist and takes the lead, so ferals and weeds programs are covered by the government sector but feel the preparedness isn't where it needs to be for NT NRM regional orgs

Was agreed that there are some real challenges in regions like the Rangelands, NT and North Qld effectively dealing with bio outbreaks and what would work.

CEBO advised the group that the regions need to bear in mind that the issues don't work the same way as NRM processes such as timeframes. In thinking about these scenarios NRM regions can miss what they can do because there are concerns about what they can't do. People are used to talking in NRM circles about extensions and milestones but even organisations with minimal resources can help in environmental biosecurity – the conversation about what you have got is near as important as the one about what you haven't got

The scenario demonstrated that the regions tended to miss the simple and basic contributions they can make, and this is primarily due to having prepared plans and an absence of foundational knowledge and experiential reference points.

Resources:

Plant Health Australia provided a useful factsheet which will be circulated to participants and report that there are potential plans to run plant health exercises during 2019/2020 that might be suitable for some of the NRM regions.

http://www.planthealthaustralia.com.au/

From a quick assessment of the participants, most regions have never participated in any level of exercise and so accessing this sort of training would be a beneficial step to take.

Animal Health Australia also have online training to help understand how control centres and coordination and the structures works. Even though the courses are centred around Emergency Animal Diseases the principles will support the concept of Environmental Biosecurity. The courses are generally free and a range of information is available at www.animalhealthaustralia.com.au

Quote - What you can provide on a very simple scale is more important a conversation to have than what you think you can't provide or aren't able to do.

OPPORTUNITIES highlighted from the discussion

GROWING RESPONSE CAPABILITY

- **Coordinate a range of biosecurity exercises and expose NRM regions to the basics of responses to clarify where they can engage in biosecurity. It is important that regions also tap into state authorities who have structures established to run these processes for regions.**
- **Regions should prioritise the provision of staff for responses that occur, even if they are out of the region. The professional development gains from attending outweighs any inconvenience.**

SESSION 3: COMMUNICATION NETWORKS

Communication mechanisms and building capacity

Looking at national, state, regional/local, community/stakeholders. What do we want to communicate, to whom and what about i.e. investors, stakeholders, across regions? What do we want to communicate to our CEBO? What do we want to communicate with our boards?

Focus on the whole cycle of communication not just what comes out but how communications go around who is sharing knowledge and who is receiving the information.

National

- Regular and systemized contact with CEBO through the NRM Regions Australia Executive Officer.
- Continued participation at Biosecurity Roundtables from regions
- Advisory committee meeting frequency increased
- Momentum could be gained through a sponsorship at a national conference such as the Biosecurity Symposium to capitalise on the opportunities there for a broader audience. Environmental Biosecurity should aim to have NRM regions participation on the steering committee and progress discussions with Centre for Invasive Species Solutions (CISS).
- Share best practice and knowledge between regions on an electronic platform. This would ideally have the ability to make subjects searchable by location and word. This would help with the issue of having limited resources.
- CEBO consider sponsoring a session at the NRM Conference and subsidise some of the smaller or remote regional areas to attend

State

- Government departments need to focus more on Environmental Biosecurity communications
- Establish a plant biosecurity reference committee whose aim is to feed information to government which would help with communicating the value proposition that Environmental Biosecurity offers.
- Agreed that state bodies are the central point of communication for pests and diseases and so NRM regions should aim to build better links where these are available.
- Establish a process for identifying risks/main plant pests in the region or the state. Group agreed this was a varied but achievable process.

Regional/Local

- A regional forum initiated which would involve all Environmental Biosecurity stakeholders to promote consistent messages across agencies, with a focus on surveillance that taps into the state authority capability
- Community networks – is a huge amount of people – raising awareness that Environmental Biosecurity exists, and this is vital to success i.e. the volunteer model is critical.

OPPORTUNITIES highlighted from the discussion

STRATEGIC COMMUNICATIONS

- **The CEBO and the NRM Regions Executive Officer exchange formal correspondence that outlines meeting a minimum of three (3) times each year.**
- **CEBO and NRM regions seek involvement on steering committees for conferences/symposiums where Environmental Biosecurity could feature more predominately.**
- **NRM Regions Australia progress discussions with Centre for Invasive Species Solutions (CISS) to establish a partnership.**
- **Establish a consistent framework and process to facilitate how regions can participate in the development of mapping biosecurity risks including plant diseases & pests, and vertebrate pests.**
- **Set up a pilot regional forum with an environmental biosecurity focus that develops consistent messaging and strategies to support surveillance activities.**

Wrap up and summary

CEBO advised that the Priority List is completed at national level however the the next strategy is to consider how to disseminate to all the regions and undertake a process to inform and engage them with this information. How to use the list is more important than what is on the list.

The group conducted a recap on the main outcomes from the workshop and agreed on the following;

1. Senior NRM Officials equipped with a more in-depth understanding of what biosecurity is, the challenges and successes – ***The group agreed that the content of the day was useful***
2. Identified opportunities where NRM organisations can assist in surveillance and responses to environmental biosecurity incursions – ***The group agreed that this has been achieved on a conceptional basis***
3. Established high level communication networks between biosecurity system participants and the NRM organisations – ***the group agreed that the process had yielded good information to take forward***

Emma Jackson (Chair) closed the meeting and thanked the CEBO and his team for joining the workshop and all the participants for their contributions throughout the day. Chair acknowledged NRM regions Australia and their efforts in bringing together the workshop.

Workshop closed at 3.54pm

It's the start of a journey, so get involved….

GLOSSARY

AHA	Animal Health Australia
ALOP	Appropriate Level of Protection
CEBO	Chief Environmental Biosecurity Officer
CISS	Centre for Invasive Species Solutions
DAWR	Department of Agriculture & Water Resources
DIDMS	Dieback Information Delivery Management System
EB	Environmental Biosecurity
IGAB	Intergovernmental Agreement on Biosecurity
LLS	Local Land Services
NLP	National Landcare Program
NPWS	National Parks and Wildlife Service, part of Office of Environment and Heritage
NRM	Natural Resource Management
NSW DPI	New South Wales Department of Primary Industries
PHA	Plant Health Australia
PPA	Priority Protection Areas
WHO	World Health Organisation