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Biosecurity Council of Western Australia

Annual Report



2021/2022

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Preface: Biosecurity in Western Australia

What is biosecurity?

Biosecurity is the protection of our industries, economy, environment and community from the impacts of pests, weeds and diseases entering, emerging, establishing or spreading. Western Australia (WA) has a reasonably successful history of preventing pests, weeds and diseases that threaten our agrifood, fibre and tourism industries.

Why is biosecurity important?

Biosecurity is fundamental to preserving and enhancing the lifestyle, livelihoods and environments unique to WA. In doing so, we can:

- maintain market access for our agrifood and fibre industries;
- maintain industry profitability, especially for our primary industries;
- preserve our existing social amenity for the enjoyment of future generations;
- sustain our environmental assets and ecosystem services; and
- maintain our all-important food security.

However, the risks to our biosecurity system are increasing.



Image 1. The Burtons – building a biosecure future for their family.

What are the key biosecurity challenges facing WA?

Excluding human-related biosecurity emergencies, WA has been in a state of biosecurity emergency since 2017. In 2021 there were six biosecurity incursions being addressed concurrently in the State. By way of comparison, there were six biosecurity incidents from 2011 to 2014 and 20 in the following six years.

Furthermore, incursions over the past five years have included several high-impact pests and diseases including polyphagous shot-hole borer, tomato potato psyllid, khapra beetle, brown marmorated stink bug and red imported fire ants, amongst others. Whilst many of these were successfully managed through the Department of Primary Industries and Regional Development, the road to recovery for affected producers can be lengthy.

The changing biosecurity risk is not just a challenge for WA. A report produced by the CSIRO, *Australia's Biosecurity Future – Unlocking the next decade of resilience (2020–2030)*, highlights increasing trends in terms of the number of incursions of pests, weeds and/or diseases into Australia from overseas. It is not just the growing number of biosecurity incursions that is a concern – it is also the increasing complexities that are putting pressure on the system.

Challenges include:

- the rapid expansion of international and domestic travel and trade;
- availability of financial and human resources;
- climate change;
- building the social licence to support biosecurity actions;
- the introduction, integration and unintended impacts of new technologies;
- changing land use; and
- declining ecological resilience.

Considering these complexities, a system re-think is necessary.

Western Australia must reposition itself to deliver a fit-for-purpose, future-focused biosecurity system. Decisive policy is needed; transparent and justifiable prioritisation is critical; and all Western Australians need to participate.

With collaboration, cooperation, communication and contribution across industry, community and government, the biosecurity of WA can be strengthened and maintained into the future.

Biosecurity Incursions in Western Australia 2012-2022



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Acronyms

BAM Act	<i>Biosecurity and Agriculture Management Act 2007</i>
BSOG	Biosecurity Senior Officers Group
DBCA	Department of Biodiversity, Conservation and Attractions
DPIRD	Department of Primary Industries and Regional Development
DPR	Declared pest rate
NRM	Natural resource management
R&D	Research and development
RBG	Recognised biosecurity group
WA	Western Australia
WHO	World Health Organisation

Chair's report

Funding is critical to maintaining an effective biosecurity system; however, biosecurity risk is changing and the framework for investing financial resources needs to keep pace. Understanding the operating environment is critical and continuing to do the same thing as we have always done is not an option. 2021/22 saw the Biosecurity Council finalise its advice on sustainable funding mechanisms to take Western Australia's biosecurity and pest management into the future.

The Council has discussed biosecurity funding mechanisms and cost-sharing principles with industry, community and government stakeholders through various forums over several years. Our 'funding mechanism' advice brought all of this together, concluding that WA's biosecurity system of the future needs a more equitable and sustainable funding mechanism.

Our favoured option is a whole-of-State levy like the Emergency Services Levy – a 'Biosecurity Services Levy'. It will augment the available funding to a level that is more appropriate for maintaining our biosecurity into the future, enabling critical work to be identified and delivered. It would not be used to replace consolidated funding to State government agencies but could be used to increase State government agency biosecurity and declared pest activity, and better support industry and community-driven action.

We acknowledge that comprehensive investigations are required to determine how such a funding mechanism might be implemented and the implications, including whether it is a realistic way to support the resourcing of WA's biosecurity system into the future; however, the timing for this is advantageous as our understanding of the importance of strong biosecurity is heightened because of the COVID-19 pandemic. I look forward to working with government to progress this. It is more important than ever to ensure all components of the biosecurity system are addressed, with appropriate biosecurity funding mechanisms in place to support it.

This will likely be my final Chair's report for the Biosecurity Council, with my term coming to an end in December. I would like to take this opportunity to thank my fellow Council members for their commitment and enthusiastic and professional contribution to the work of the Biosecurity Council, and the support provided by the Department of Primary Industries and Regional Development. The Biosecurity Council has and continues to deliver an important role in providing advice that assists the State in maintaining a strong biosecurity system at a time of many perturbations.

I have enjoyed my time with the Biosecurity Council and feel we have been able to provide strong recommendations that, when implemented, will deliver a robust and resilient biosecurity system that will support WA into the future.



Prof. Simon McKirdy
Chair, Biosecurity Council of Western Australia



The Biosecurity Council of Western Australia

Overview

The Biosecurity Council of Western Australia (the Council) was established in 2008 as a specialist advisory group to the Minister and Director General responsible for administering the *Biosecurity and Agriculture Management Act 2007* (BAM Act)¹. Establishing a Biosecurity Council is a requirement of the BAM Act.

The principal role of the Council is to provide advice to the Minister and the Department of Primary Industries and Regional Development (DPIRD) Director General on any biosecurity matter, whether referred to the Council by the Minister or Director General, or of its own volition. The Council operates at a strategic level, with a long-term vision for effective biosecurity in Western Australia (WA) that considers national and international treaties and obligations.

The advice provided by the Council is based on sound assessment and balances the needs of industry, community and government.

Some of the matters on which the Council may provide advice are:

- the requirements of a comprehensive and effective biosecurity system for WA;
- significant gaps in, or necessary improvements to, the biosecurity system;
- opportunities to improve industry and public awareness and support for biosecurity objectives;
- opportunities to improve government, community and industry cooperation and collaboration on biosecurity matters; and
- matters referred to the Council by the Minister for Agriculture and Food or the DPIRD Director General.

The Council's current instrument of appointment can be found at Appendix 1.

Membership

Council membership consists of the Chair and seven ordinary members. Members are appointed by the Minister and are drawn from people who are experienced or actively involved in biosecurity, primary industries, environmental protection/management or regional communities. Membership currently includes a local government representative.

Prof. Simon McKirdy (Chair) has a long history in the biosecurity/quarantine area. He is currently Professor of Biosecurity at Murdoch University and Pro Vice Chancellor of the Harry Butler Institute. Prior positions held include the Biosecurity Science and Risk Manager for Chevron Australia and Chief Executive Officer of the Plant Biosecurity Cooperative Research Centre. Simon has worked on various biosecurity-related committees including seven years with the Plant Biosecurity Quadrilateral Scientific Collaboration Working Group, which included representatives from Australia, Canada, New Zealand and the United States of America. He is currently a Plant Health Australia board director.

¹ Currently, the Minister for Agriculture and Food and the Director General of the Department of Primary Industries and Regional Development.

Dr Regina Flugge (Deputy Chair) has over 30 years of experience in environment and sustainable development roles and has worked in the education, government, not-for-profit and corporate sectors. Regina has a keen interest in environmental biosecurity following previous Ministerial appointments to the Conservation and Parks Commission, Conservation Commission of WA, Coastal Planning and Coordination Council and the Air Quality Coordinating Committee. Regina was Chair of Rangelands Natural Resource Management (NRM), the largest NRM region in WA, and Chair of the Ningaloo Coast World Heritage Advisory Committee.

Mr Bradley Adams is a third-generation fisherman who has been involved in the commercial abalone industry all his life. Brad was a commercial abalone diver for many years and pioneered sea-based abalone culture technology. He is the founder and Executive Director of Rare Foods Australia Ltd, based in Augusta. Brad has a keen interest in aquatic biosecurity as healthy marine ecosystems are essential to the future of sustainable fishing and aquaculture production of seafood. Brad was also a Director and past Chair of the Western Australian Fishing Industry Council. He currently serves as President of the Abalone Association of Australasia and is a director of the Aquaculture Council of Western Australia.

Ms Nicole Batten is a Director of Batten Farms – an 12 000-hectare broadacre grain and livestock property 500km north-east of Perth. She has worked in natural resource management, community development and the agricultural sector in the northern agricultural area of WA for many years. Nicole is a Councillor for the Shire of Chapman Valley, a grower Director on the Grower Group Alliance board and is the former National and State Chairperson for Partners in Grain (now known as Rural Edge). She is an Australian Institute of Company Directors graduate and is currently representing her grower group to formulate the Midwest Drought Resilience Plan.

Mr Justin Bellanger works across a range of roles related to the management of natural resources. He currently leads NRM WA, which represents the seven regional NRM groups across WA in developing, advocating and resourcing State-level and landscape scale initiatives. This complements his recent experience as Chief Executive Officer for South Coast NRM. Justin has over 27 years' experience in environmental, agricultural and aquatic biosecurity, and currently represents Australia's NRM organisations on the National Environmental Biosecurity Advisory Group, National Myrtle Rust Working Group and the National Biosecurity General Surveillance Community of Practice Governance Group. Justin is also the Independent Chair of the Aquaculture Council of WA.

Prof. John Mackenzie has had a long involvement in biosecurity and global health security, with a strong background in human and animal viruses. Over recent years, John's interests have broadened to encompass global outbreak alert and response activities, including the development of international surveillance within the International Health Regulations, chairing the Steering Committee of the World Health Organisation's (WHO) Global Outbreak Alert and Response Network and participating as a member of the WHO's International Health Regulations Emergency Committee for COVID-19 and the Emergency Committee for polio. John is an advocate of the 'one health' concept that recognises that the health of people, animals and the ecosystem are inextricably woven together. He initiated the international One Health Congress series and has been appointed to the FAO/UNEP/WHO/WOAH One Health High Level Expert Panel. He co-wrote the proposal and served as the interim Chief Executive Officer of the Australian Biosecurity Cooperative Research Centre, and was a member of the Commonwealth Biosecurity Advisory Council.

Dr Kelly Pearce has had an 18-year career in Agricultural Research, with a focus on farming systems. She continues to coordinate a number of regional science and innovation projects through her role as the Facey Group Executive Officer. Kelly holds a number of industry positions including Grower Group Alliance Director, Deputy Chair of the Western Australian Meat Industry Authority and Deputy Chair of the Sheep and Goat Industry Funding Scheme Management Committee. Kelly is a 2012 Nuffield Scholar, Graduate of the Australian Institute of Company Directors and a Research Fellow with the Australian Farm Institute. Kelly is also a grain and sheep producer from Yealering in Western Australia with her family.

Mr Brian Piesse (until 5 November 2021) was the Donnybrook-Balingup Shire President and, as such represented local government on the Council. He is Deputy Chair of the Bunbury Geopraphe Economic Alliance, a member of the Edith Cowan University Council, and has participated on other boards and committees including with the South West Development Commission, Western Dairy and the South West Catchments Council. Brian has a solid background in biosecurity and animal health having worked at the Commonwealth Serum Laboratories (CSL Limited) as the National Animal Health Manager, and Victorian State Manager. In the agriculture/agribusiness sphere, he has worked in management positions at Pivot Ltd and Wesfarmers CSBP Ltd. He has hands on experience as a producer of live cattle for the export market.

The membership of the Biosecurity Council is summarised in Table 1.

Table 1. Biosecurity Council membership terms (2021/22)

Name	Position	Expiry of term
Prof. Simon McKirdy	Chair	31 December 2022
Dr Regina Flugge	Deputy Chair	30 June 2023
Mr Bradley Adams	Member	31 December 2023
Ms Nicole Batten	Member	31 December 2022
Mr Justin Bellanger	Member	30 June 2023
Prof. John Mackenzie	Member	30 June 2023
Dr Kelly Pearce	Member	31 December 2022
Mr Brian Piesse	Member	5 November 2021



Image 2. Buccaneer Archipelago. Biosecurity is important to the health of WA's aquatic environments

Council activities in 2021/2022

Overview

Understanding the needs and challenges of industry, community and government is key to providing relevant and constructive advice to government. During 2021/22, the Council continued to monitor biosecurity-related developments at national and State levels and proactively engaged with industry, community and government on biosecurity matters. The key areas of advice that were progressed during the year were:

- The use of biological control agents to manage pests;
- Mechanisms for funding biosecurity and pest management; and
- Other matters as requested by the Minister.

Advice to the Minister and DPIRD

Biological control agents

The Council has a keen interest in exploring opportunities to build shared understanding and collaboration across government, industry, researchers and the community in relation to biosecurity. It is for this reason that it agreed to support a forum to discuss the potential of biological control (biocontrol) agents in managing pests in WA.

The Biocontrol Forum was undertaken in response to investigations funded through Peel Harvey Biosecurity Group that identified a need for a strategic, collaborative approach to make biocontrol agents more readily accessible to WA landholders. The forum brought together stakeholders from industry, community, government and research institutions to explore ways to improve accessibility to biocontrol agents, better understand the current situation and identify opportunities.

The forum made several recommendations, which were considered by the Council. In May 2022, the Council formally recommended to the Minister that a Biocontrol Agent Working Group is established to:

- Explore the potential for biocontrol agents in WA;
- Identify how a collaborative biocontrol agent industry could operate in WA; and
- Consider and implement, if appropriate, the recommendations and actions made through the Biocontrol Forum.

Mechanisms for funding biosecurity

The Council has kept a watching brief on the legislated mechanisms for funding WA's biosecurity for many years. With the State's primary biosecurity legislation being reviewed, the timing was opportune to further examine biosecurity cost-sharing and other avenues for sustainably funding WA's biosecurity and pest management activities.

To inform its advice, the Council commissioned a literature review and desktop analysis, and consulted key stakeholders.

Of the five legislated funding mechanisms that may be used for biosecurity or pest management purposes in WA, three were identified by the Council as sustainable sources of funding – declared pest rates (DPRs), industry funding schemes and fees for service under the *Agricultural Produce Commission Act 1988*.

Whilst the funding mechanisms were assessed by the Council as being sound, there were significant gaps and challenges. These generally arose from the lack of a strategic framework rather than from the mechanisms themselves – for example:

- Inequities in the provision and division of funds
- Bias toward agricultural biosecurity and pest management; and
- Lack of coordination across boundaries, industries and mechanisms.

There is an opportunity to review and revise WA's biosecurity cost-sharing options to ensure a fair and equitable system is in place to carry WA into the future.

The option favoured by the Council is a whole-of-State rate or levy, similar to the Emergency Services Levy. This will augment the available funding to a level more appropriate for maintaining WA's biosecurity, enabling increased government-led biosecurity action and better support for industry and community-driven action.

The Council finalised its work in June 2022, making eight recommendations:

1. Implement an equitable, fair, independent and transparent funding model for biosecurity similar to the Emergency Services Levy.
2. Clarify and communicate the roles and responsibilities of government (Federal, State and local), industry and community groups and individuals in supporting WA's biosecurity.
3. Develop a biosecurity cost-sharing policy for WA.
4. Ensure an unbiased process, based on appropriate science-based criteria, is used to assess whether an organism should be a declared pest.
5. Develop policy to guide when and how the biosecurity funding mechanisms are used.
6. Establish a body to coordinate across WA's biosecurity funding mechanisms.
7. Develop an annual state-wide biosecurity investment plan.
8. Enable flexibility in the way the DPR delivery model is applied.

Other matters

As requested by the Minister, the Council provided advice on the accreditation and use of private laboratories to perform diagnostic testing relating to export trade or regulated animal diseases.

The Council highlighted the need for a rigorous accreditation process for private laboratories given the potentially serious ramifications for Australia's export trade if diseases are incorrectly diagnosed. A national policy is currently being developed to ensure Australia aligns with international requirements and provide the rigour required to be confident that any private laboratories that undertake testing for regulated animal diseases have appropriate quality controls and reporting in place.

Engagement

Interactions with government

Biosecurity Senior Officers Group (BSOG)

From August 2021 the Biosecurity Council has been participating as an observer on the BSOG, with a Council representative attending BSOG meetings in October 2021 and March 2022.

The BSOG is comprised of senior staff from agencies that have biosecurity responsibilities including DPIRD (Chair), the Department of Biodiversity, Conservation and Attractions (DBCA), the Forest Products Commission, the Department of Health and the Department of Water and Environmental Regulation. The WA Local Government Association also sits on the BSOG, and the Department of Defence (Commonwealth) participates as an *ex officio* member.

In addition to observing the meetings, the Council kept the BSOG informed of its work. Similarly, the BSOG, via its Chair, actively participated at each ordinary Council meeting to provide Council with updates on the key issues and biosecurity activities at State and national levels.

The two-way engagement allows the Council to keep informed on State and National biosecurity issues and opportunities, whilst providing a forum to discuss areas in which independent advice from the Council might be sought.

Other

Over the course of the year, the Council Chair and Deputy met with the Minister and senior staff from DPIRD and DBCA. The purpose of these meetings was to provide updates on the activities being undertaken by the Council, including preliminary findings, and to discuss challenges and opportunities relevant to WA's biosecurity system.

The Council also met with the Panel undertaking the review of the BAM Act. This meeting provided the Council with an opportunity to understand the review process, clarify the Council's role in the review and provide its view on recurring themes from its work that the Panel might want to consider through the review.

Engagement with industry and community

On occasion, the Biosecurity Council is invited to present at or participate in various industry and community events. The Council uses these opportunities to highlight the role of the Council, the work being undertaken and, where appropriate, its recommendations on key issues. During 2021/22, this included participation in the following:

- National Biosecurity Committee's WA biosecurity roundtable;
- National Biosecurity Forum; and
- WA Feral Cat Working Group.

Regional meeting

Each year the Biosecurity Council holds one of its meetings in a regional location. The intent is to:

- engage with local/regional stakeholders on biosecurity;
- build networks/relationships with key biosecurity stakeholders; and
- provide a conduit to government/agencies for local/regional stakeholders.

In November 2021, the Council visited Carnarvon for its third regional meeting. Biosecurity is paramount to the ongoing prosperity of the Gascoyne region in which Carnarvon is located. The region is home to a large and diverse horticultural sector, pastoral enterprises and aquaculture. Tourism is also an important economic driver.

Whilst the geography of Carnarvon provides a natural biosecurity barrier, with the ocean to the west and arid landscape to the east, biosecurity is critical to the ongoing sustainability of the region.

The Council met with stakeholders from 10 different groups/organisations, and toured DPIRD's Carnarvon research facility, Harvest Road's aquaculture facilities and a local horticulture farm that practised stringent biosecurity standards.

The issues raised with the Council during its time in Carnarvon were discussed with DPIRD and the Minister. Importantly, the visit helped Council better understand the needs and challenges of the industries and community of the region.



Image 3. Biosecurity Council members met with growers in Carnarvon

Website and invasion curve animation

Up-to-date information about the Biosecurity Council continues to be freely available on the [Biosecurity Council's webpages](#) on the DPIRD Agriculture and Food website. This includes a link to the invasion curve animation – a short video commissioned by the Council in 2015 to explain the invasion curve and its relevance to WA's biosecurity system.

The animation has proved to be a valued resource – it is being used by organisations across Australia and the world and has almost 10 000 views since its release on the (then) Department of Agriculture and Food [YouTube](#) channel.

During 2021/22, the Council reviewed the video and sought feedback from a small number of external stakeholders. In general, it was thought that the video is clear, useful and appropriate, although there is room for improvement. The Council requested DPIRD take ownership of the video and consider reviewing and updating it, – as undertaking this work is beyond the role of the Council.

The Council considers public awareness of biosecurity as critical to improving support for and engagement in WA's biosecurity system, from prevention and early detection through to managing established pests, weeds and diseases. Re-imagining the video for use as a tool to engage the general public on biosecurity would be beneficial.

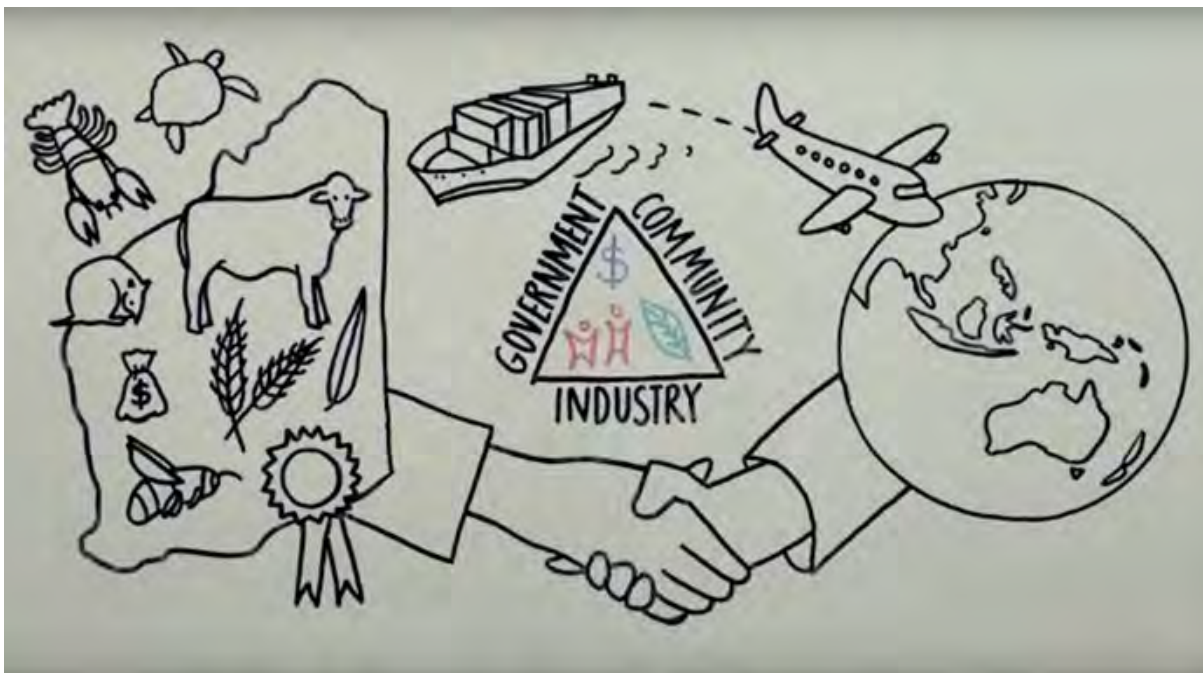


Image 4. Image from the Biosecurity Council's invasion curve animation

Meetings

The Biosecurity Council formally convened four times during 2021/22. The Deputy Director General Sustainability and Biosecurity, DPIRD and the DPIRD Biosecurity Executive Director, were invited to attend each meeting; and the DPIRD Director General attended one meeting.

In addition to its quarterly meetings, the Council held four half-day workshops during the year. These workshops were used to progress the Council's advice to the Minister and undertake planning. Notably, a planning workshop was held to collaboratively develop a high-level plan to help position the Council with confidence and focus for the upcoming three years.

Table 2 documents Council member meeting attendance.

Consistent with its instrument of appointment (Appendix 1), the Council should be aware of changing industry, community and environment needs and give appropriate consideration to national and international treaties and obligations. To support this, Council meeting agendas included presentations that address key biosecurity activities and issues. Table 3 lists the presentations made to the Council during 2021/22.

In addition to these, the Chair of the cross-agency BSOG provided an update on biosecurity activities, advances and issues from both national and State perspectives at each meeting.

Table 2. Biosecurity Council member meeting attendance (2021/22)

Name	Meetings attended	Workshops attended
Prof. Simon McKirdy (Chair)	4	4
Mr Brad Adams	3	4
Ms Nicole Batten	4	4
Mr Justin Bellanger	4	4
Dr Regina Flugge	4	4
Prof. John Mackenzie	3	3
Dr Kelly Pearce	4	4
Mr Brian Piesse ¹	1	1

¹ Appointment term ended 5 November 2021

Table 3. Presentations to the Biosecurity Council during 2021/22

Date	Title	Name	Organisation
20 Sept 2021	Strengthening community action to manage declared pests	R Rees	DPIRD
25 Feb 2022	Landholder perceptions of invasive species management: survey results	J Fletcher and J Strickland	Painted Dog

Governance

The governance framework that shaped the operations of the Council during 2021/22 includes various critical documents, processes and procedures:

- the BAM Act;
- instrument of appointment;
- code of conduct;
- duty statements;
- disclosure of interest procedures;
- decision-making processes;
- annual reporting; and
- monitoring and evaluation.

During the 2021/22 financial year, the Council reviewed its Code of Conduct to make sure it remained relevant and appropriate. The Council also evaluated its performance. This enabled members to be constructively critical of the Council's operations and, thereby, identify areas for improvement to enhance its effectiveness.

Good governance is an important aspect of any government board.



Image 5. European wasp at nest entrance. European wasps are considered one of the worst wasps in the world

Progress on past Council recommendations

This section reports on government activities to address the recommendations made by the Biosecurity Council over the past three years.

Declared pest rates and recognised biosecurity groups (RBGs) (2020)

The Council prepared and delivered an issues paper on the approach being used to deliver on-ground activities funded from the Declared Pest Account (known as the declared pest rate/recognised biosecurity group (DPR/RBG) approach). Nine strategic issues were identified by the Council relating to three areas:

- the strategic intent of the DPR/RBG approach;
- implementation of the approach; and
- issues relating to on-ground delivery.

The paper recommended that an independent review of the DPR/RBG approach be undertaken and the return on investment to the State be identified.

Implementing the recommendations

These recommendations are being implemented through three key activities.

1. Through its work on biosecurity funding mechanisms, the Council considered the DPR/RBG approach and its return on investment for the State.
2. In 2021, DPIRD launched a project to improve the public value of the DPR/RBG model and ensure it contributes to the State's strategic intent for biosecurity ('Strengthening Community Action to Manage Declared Pests'). The project, which is due to be completed by 30 June 2024, has four focus areas:
 - engagement with all stakeholders;
 - RBG practices;
 - the legislative framework for community action; and
 - community pest management activities.
3. The review of the BAM Act also provides a key opportunity for all stakeholders to comment on the DPR/RBG model. The Review includes a formal evaluation to:
 - Assess the extent to which the DPR is an appropriate mechanism for collecting funds for declared pest control;
 - Assess the extent to which RBGs provide the most appropriate method for delivering funds for declared pest control; and
 - Identify and model options to improve DPR collection and delivery.

Declaration of non-agricultural species (2020)

Concerns were raised with the Council about the process of declaring non-agricultural pests under the BAM Act – specifically, the length of time it takes to make a declaration, and perceived biases against declaring organisms that do not have a primary impact on agricultural industries. The Council engaged key stakeholders and, following these discussions, put forward four recommendations to DPIRD and DBCA.

The recommendations focused on improving understanding of the declaration process and opportunities for cross-agency collaboration.

Implementing the recommendations

DPIRD considers the policy and process for species declaration to be a priority matter. It will be addressed through DPIRD's Biosecurity Futures Initiative, which includes the review of the BAM Act and the development of a Roadmap to guide WA's biosecurity into the future.

The existing process for assessing organism declaration and categorisation status can be initiated internally or externally by stakeholders. There are limits to the number of assessments that can be undertaken, and applications are prioritised according to the potential risk posed. Unlisted organisms found within the state are generally the highest priority for assessment.

DPIRD consults with other government agencies that have been identified as having a direct interest, and with stakeholders through relevant committees or industry bodies, prior to making a recommendation to the Minister on the declaration status of an organism. The Minister must also consult with any other Minister who has a relevant interest.

The BSOG continues to meet regularly to provide opportunities for cross-agency collaboration on this issue.



Image 6. Rainbow lorikeets – an invasive pest

Biosecurity research and development (2019)

Research and development (R&D) is crucial to managing WA's biosecurity risks and threats. There is a perception that these risks and threats could be better recognised nationally to provide opportunities to access funding for R&D activities relevant to WA's biosecurity. The Minister requested Council advice on opportunities to enhance biosecurity R&D funding for WA.

The Council delivered its report on 'biosecurity R&D' to the Minister and Director General of DPIRD in November 2019.

The report made two recommendations:

1. WA, through DPIRD, establish, coordinate and drive a biosecurity R&D network across WA.
2. DPIRD establishes a baseline for its science capability that extends beyond 'response readiness' to engaging in biosecurity research and innovation.

The Council also identified seven opportunities to build WA's biosecurity science capability and enhance its R&D opportunities (Appendix 2).

Implementing the recommendations

The BSOG generally agreed that establishing, coordinating and driving a biosecurity R&D network across WA is an important endeavour that could provide long-term benefits. Resourcing such a system continues to be an issue. Nevertheless:

- DPIRD has developed a draft Biosecurity R&D strategy that is currently being reviewed within the Biosecurity Directorate prior to broader consultation. Baseline scientific capacity needs for biosecurity R&D will be addressed through DPIRD's Biosecurity Futures Initiative Roadmap.
- DPIRD collaborates with key stakeholders including DBCA and CSIRO on R&D to support ongoing biosecurity surveillance and response capabilities.
- The government has funded the installation of temporary laboratories at DPIRD's South Perth office. These state-of-the-art facilities will enable DPIRD to continue its vital R&D and diagnostic work while a permanent option is developed.

Sustaining a biosecurity response (2019)

The Minister requested the Council investigate the ability of the then Department of Agriculture and Food to sustain a high-level biosecurity response while retaining the integrity of its budget and other functions. With the amalgamation of the Department of Agriculture and Food into DPIRD, this work was expanded to help shape change in an agency with a larger biosecurity function and with broader skills, resources and regional presence.

In June 2019, the Council delivered its report to the Minister and Director General of DPIRD. The report included seven recommendations:



Image 7. DPIRD staff member, Mengqi Chen examining samples in the new laboratories

1. DPIRD develops a strategy that clarifies the expectations for biosecurity response in DPIRD.
2. Implement a multi-layered approach to stakeholder engagement as part of DPIRD's preparedness planning.
3. Formalise cost-sharing arrangements with stakeholders.
4. Establish a State Government biosecurity contingency fund.
5. Develop and maintain resources, including external resources, to ensure DPIRD is operationally ready for pest/disease incursions.
6. Develop and implement an active intelligence gathering and analysis network.
7. Provide staff with opportunities and incentives for innovation, research and development.

Implementing the recommendations

DPIRD has made significant progress towards the findings in the report including developing and implementing a DPIRD-wide Emergency Management Strategy, Learning and Development framework and Departmental governance framework for emergency management.

In 2021, the State Government committed an additional \$15.1 million over four years to support 22 full time employees and fill critical gaps in WA's biosecurity capacity, including:

- Increasing DPIRD's emergency preparedness for future responses to biosecurity incidents and emergencies and the surge in activity these require, with response plans in place for known critical threats that are on the horizon;
- Boosting WA's early detection capability so that threats can be dealt with quickly and cost effectively as they arise; and
- Increasing biosecurity incident and emergency response capacity and capability.

DPIRD continues to put in place actions and processes to support its ability to sustain a biosecurity response, including:

- Discussions with Treasury regarding establishing a State Government biosecurity contingency fund;
- Establishing an Industry and Government Preparedness Task Group to share information and enhance WA's emergency animal disease prevention, preparedness and response capacity; and
- Partnering with the Federal Government in the Northern Australia Quarantine Strategy.

DPIRD's Biosecurity Futures Initiative Roadmap will provide a clear plan for the delivery of biosecurity to ensure that WA is well positioned to meet current and future biosecurity needs, including biosecurity response.

Cost of Council operations in 2021/22

The direct costs of the Council's operation during the 2021/22 reporting year amounted to \$146 820 (Table 4).

Secretariat support was provided by DPIRD.

Table 4. Biosecurity Council of Western Australia expenditure for 2021/22

Description	Cost (\$)
Board member fees	111 276
Travel expenses	18 359
Professional services – consultancies	12 000
Meeting/workshop expenses	3 743
Stakeholder engagements	867
Advertising	335
Printing/consumables	233
Credit card surcharge	7
Total	146 820

Notes:

1. Data sourced from the accounting records of DPIRD.
2. Costs of executive, accounting, administrative and other general support are not included.

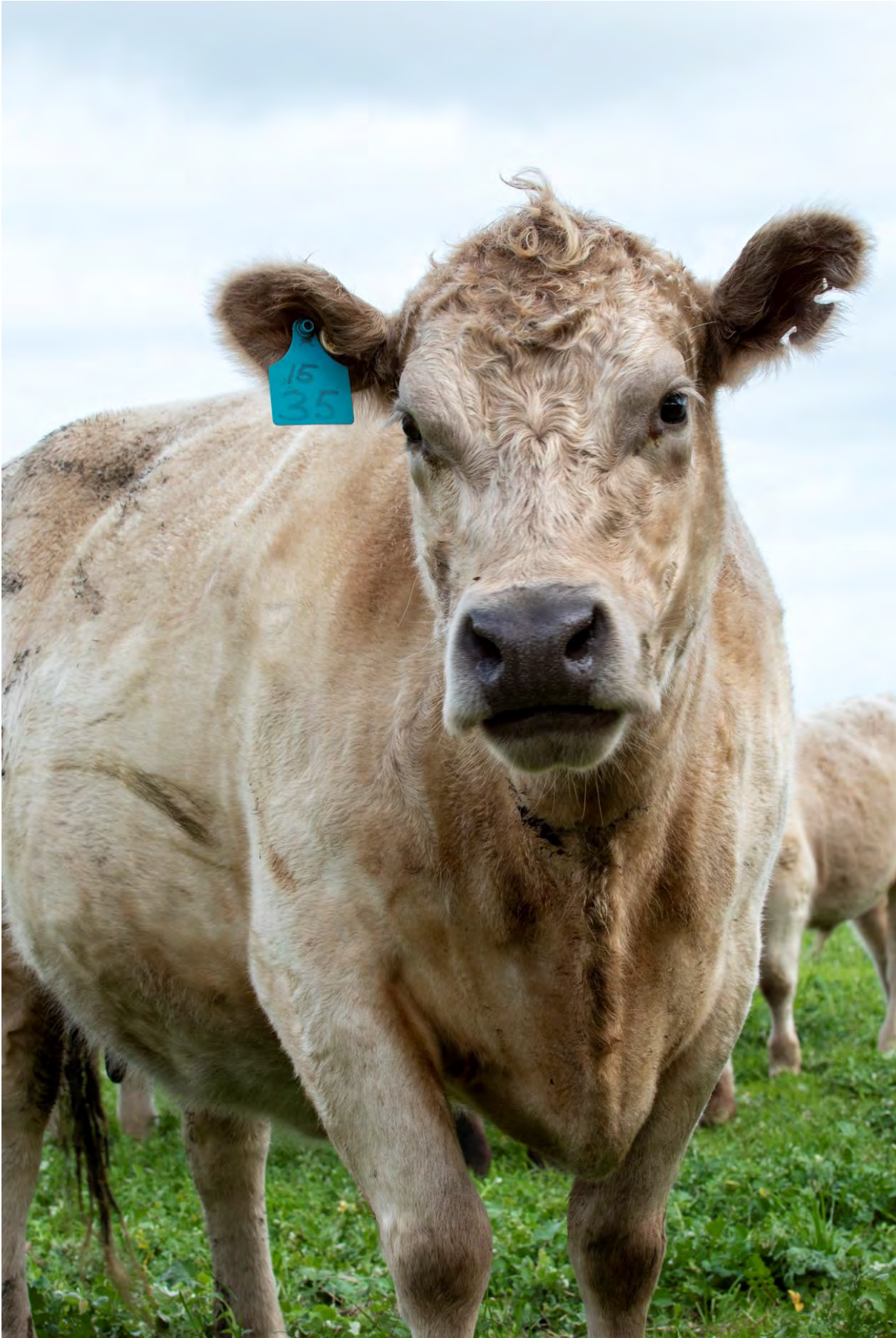


Image 8. Murray Grey cattle. Biosecurity is critical to WA's agricultural industries

Direction for 2022/23

A comprehensive planning session undertaken in May 2022 enabled the Council to develop a high-level plan to help position it with confidence and focus for the upcoming three years. The planning session enabled Council members to review and replan its areas of work and key strategies following a period where Council activities have been constrained due to COVID restrictions, turnover of Council members and capacity limitations.

With its advice on mechanisms for funding biosecurity now complete, the Council is looking forward to reviving and/or starting work in various strategic areas

- *Improving WA's border biosecurity.* Maintaining WA's biosecurity is becoming increasingly complex and it is important that our border biosecurity strategies, practices and principles can adapt to the changing environment, including the increasing traffic on unmanned border crossings. With significant biosecurity threats on our doorstep, the Council will build on its work undertaken in this space in 2020 to better understand the current and future pressures on WA's border biosecurity system, what WA needs from its border biosecurity system and how this can be achieved.
- *Building a biosecurity workforce.* Government cannot be expected to deliver WA's biosecurity on its own – everyone has a role to play. The Council will explore what skillsets are needed to keep WA bio-secure into the future, where these skillsets are and, if there are gaps, how these gaps can be filled.
- *Understanding the 'value' of biosecurity.* Biosecurity awareness is critical to community and industry support for and compliance with WA's biosecurity system. Understanding how Western Australians perceive 'biosecurity' is needed to inform policy and underpin biosecurity communications, extension, engagement and education. This information can also be used as indicators to better understand the value proposition of a bio-secure WA, including for hard-to-measure aspects such as environmental, social and cultural biosecurity. The importance of these, such as the risks associated with incursions of myrtle rust, cannot be overstated.
- *Funding WA's biosecurity.* Building on its advice regarding sustainable mechanisms for funding WA's biosecurity, the Council will investigate the potential implications, both positive and negative, of a 'biosecurity services levy' and how it might be applied in WA.

2022/23 will also see the Council travelling to Esperance for its annual regional meeting. It will also continue to monitor the review of WA's primary biosecurity legislation, the BAM Act, and looks forward to assisting the independent Review Panel in its deliberations as required.

Appendix 1. Instrument of Appointment

BIOSECURITY AND AGRICULTURE MANAGEMENT ACT 2007 **INSTRUMENT ESTABLISHING AND APPOINTING MEMBERS** **OF THE BIOSECURITY COUNCIL**

1. This instrument replaces the instrument signed on 5 November 2021, and comes into effect on 1 July 2022.
2. As required by section 48(1) of the *Biosecurity and Agriculture Management Act 2007*, the Biosecurity Council is established and the following persons are appointed as members of the Council for the term specified.

Members	Term
Professor Simon McKIRDY (Chairperson)	for a term expiring on 31 December 2022
Mr Bradley ADAMS	for a term expiring on 31 December 2023
Mrs Nicole BATTEN	for a term expiring on 31 December 2022
Mr Justin BELLANGER	for a term expiring on 30 June 2023
Mr Anthony DEAN	for a term expiring on 30 June 2025
Dr Regina FLUGGE	for a term expiring on 30 June 2023
Professor John MACKENZIE	for a term expiring on 30 June 2023
Dr Kelly PEARCE	for a term expiring on 31 December 2022

3. Set out below are the matters on which the Council is to give advice and other matters relating to the operation and procedures of the Council.

MATTERS ON WHICH COUNCIL IS TO GIVE ADVICE

The Council is to give advice to the *Biosecurity and Agriculture Management Act 2007* (the Act) Minister and Director General on any matter related to biosecurity and in particular:

1. The requirements of a comprehensive and effective biosecurity system for the State of Western Australia and necessary linkages to other biosecurity systems (national and international).
2. Significant gaps in, or necessary improvements to, the biosecurity system.
3. Opportunities to improve industry and public awareness and support for biosecurity objectives.
4. Opportunities to improve Government, community and industry cooperation and collaboration on biosecurity matters.
5. Matters referred to the Council by the Minister or the Director General.

MATTERS RELATING TO THE OPERATION OF THE COUNCIL

The Council should:

1. Be strategic by adopting a long-term perspective for biosecurity in Western Australia and by giving appropriate consideration to national and international obligations.
2. Be aware of changing industry, community and environment needs and of options for balancing the demands of different interests.
3. Provide advice to others, including to other Ministers and Directors General, only when specifically permitted.
4. Act and be seen to act with integrity, as set out in the Western Australian Public Sector Code of Ethics.

On or before 30 November of each year, the Council must prepare and submit to the Minister an annual report on its activities throughout the preceding financial year in accordance with section 50 of the Act.

MEETINGS AND CONDUCT OF THE COUNCIL

The Council is to hold four ordinary meetings each year. For consideration of issues out-of-session, agenda papers will be directed to all members by the Secretariat and the outcome of any decision will be communicated to all members.

The Chairperson may convene special meetings of the Council if it is necessary to deal with any urgent matters requested by the Minister or Director General.

The Council must maintain a formal record of its proceedings and make that record available to the Minister and the Director General or their nominees.

Signed by the Minister on 14 July 2022

Appendix 2. Opportunities for WA to engage in national biosecurity research and innovation

Opportunity	Notes
Tailor application of next generation sequencing to DPIRD policy and regulatory responsibilities, including validating emerging environmental DNA (eDNA) use by third parties. Engage with, and determine how the Australian National Phenome Centre can be effectively utilised for biosecurity	With DNA sequencing and 'omics' methodologies now widespread and affordable as a research tool, there is an ongoing challenge of how it is applied in a regulatory and trade sensitive environment. The new frontier of eDNA detection of invasive species is a particular challenge. WA has now opened the Australian National Phenome Centre, which is unmatched for capability in the southern hemisphere and arguably the world
Explore the possibility of a new collaborative entity in biosecurity risk assessment that commits to an ongoing risk assessment and prioritisation program suited to WA	While priority pest lists might usefully serve a national purpose, there is a widespread view that such lists have limited utility in WA. A better but not fully developed approach is to investigate and model categories of threats for a region/industry or the State
Explore how DPIRD can engage with: the National Biosecurity Committee working group's national list of biosecurity research and innovation priority projects; relevant 'innovation centres'; and with innovators in technology development	Biosecurity is on the cusp of a digital revolution. DPIRD has the opportunity to join this technology unfolding. This could be through direct partnerships, or it could be a role taken on by a State-based university
Accelerate the roll-out of MyPestGuide and consolidate this with a vision for strategic and targeted application to priority pest pathways	Among the various tools and apps in the name of citizen science, DPIRD's MyPestGuide Reporter stands out. There is a larger, unfulfilled potential of the app
Commit science and resources for ongoing applied research in the areas of prevention, disinfestation and eradication techniques, for high priority biosecurity risks	This will help attract and retain quality scientists whilst also delivering positive biosecurity outcomes
Consider a small grants program that partners industry with innovators to transform biosecurity hygiene and control options	Research and innovation in the areas of prevention, disinfestation and eradication is very much in the industry's best interest and largely a private good. This could be administered through the Industry Funding Schemes or as an 'innovation challenge program'
Explore a collaborative program with national reach for research and innovation in safekeeping threatened native species	<p>WA's success at protecting native species from invasive plants and animals provides a strong foundation</p> <p>WA has a comparative advantage to lead nationally and engage globally, given the unique ecosystems and species that exist here</p>