Our ref: eA199968
Obj ID: A6019881
Receipt: 18272267

Government of South Australia

The Hon Clare Scriven MLC

The Hon Nicola Centofanti MLC
Member of the Legislative Council
Parliament House
ADELAIDE SA 5000

Dear Ms Centofanti

Internal Review Determination under the *Freedom of Information Act 1991*

I refer to your application for Internal Review made under the *Freedom of Information Act 1991* received on 16 November 2023.

Your original application sought access to the following:

> *"A copy of all minutes, reports, and meeting agendas in relation to the Agriculture Ministerial Meetings between 19/07/2022 and 05/09/2023."*

It is noted that you have proceeded to Internal Review as my office failed to determine your original application within the legislative timeframe, and therefore deemed a refusal of access.

Internal review of the documents

Following an independent internal review of your application, I advise the following:

Issues in this review

The Office of the Minister for Primary Industries and Regional Development did not provide a determination within the legislative timeframe, pursuant to Section 14(2) of the Freedom of Information Act.

Internal Review Determination

The following determination has been finalised.

I have located fourteen documents that are captured within the scope of your request.

Minister for Primary Industries and Regional Development
Minister for Forest Industries

GPO Box 1671 Adelaide SA 5001
Telephone 08 8226 2931 | Email minister.scriven@sa.gov.au

SOUTH AUSTRALIA

Determination

I have determined that access to the following documents is **granted in full**:

Doc No.	Description of document	No. of Pages
1	Calendar Meeting dated 20/07/2022 re Agriculture Ministers' Meeting	1
3	Calendar Meeting dated 09/09/2022 re Agriculture Ministers' Meeting Virtual	1
5a	Attachment to Document 5: Agriculture Ministers' Meeting Agenda	2
8	Minute from Chief Executive, Department of Primary Industries and Regions to Minister for Primary Industries and Regional Development dated 14/09/2022 re Agriculture Ministers' Meeting Out-of-Session Paper 01/2022	3
8a	Attachment to Document 8: Agriculture Ministers' Meeting Response Paper re Animalplan and Aquaplan	3
8b	Attachment to Document 8: Agriculture Ministers' Meeting Response Proforma Template re Animalplan and Aquaplan	1
8c	Attachment to Document 8: Animalplan 2022 to 2027	28
8d	Attachment to Document 8: Aquaplan 2022 to 2027	31

Determination 2

I have determined that access to the following documents is **granted in part**:

Doc No.	Description of document	No. of Pages
2	Minute from Chief Executive, Department of Primary Industries and Regions to Minister for Primary Industries and Regional Development dated 19/07/2022 and attachments re Agriculture Ministers' Meeting (AMM)	26
4	Minute from Chief Executive, Department of Primary Industries and Regions to Minister for Primary Industries and Regional Development dated 27/10/2022 re Agriculture Ministers' Meeting paper on fruity fly	3

The information removed from the above documents is pursuant to Clause 9(1) of Schedule 1 of the Freedom of Information Act which states:

"9—Internal working documents

(1) A document is an exempt document if it contains matter—

(a) that relates to -

(i) any opinion, advice or recommendation that has been obtained, prepared or recorded; or

(ii) any consultation or deliberation that has taken place,

in the course of, or for the purpose of, the decision-making functions of the Government, a Minister or an agency; and

(b) the disclosure of which would, on balance, be contrary to the public interest."

The information removed consists of detail relating to a matter for internal decision-making purposes.

In addressing the public interest test for the exemption, I have balanced the following factors:

In favour of the public interest:

- Meeting the objects of the Act favouring access to documents.
- Ensuring optimal use of public resources.
- High level of interest in the accountability of public office holders.
- The importance of transparency and openness and the interest that the public has in the decision-making processes of Government.

Contrary to the public interest:

- The recent age of the information was considered and the continuing relevance of the matters.
- The confidentiality of some information must be maintained for internal decision-making purposes of Government.
- It is expected that the release of this information would change the manner in which information is documented in briefings to the Minister resulting in an incomplete record of matters for consideration of a Minister.
- If documents of this nature were disclosed, Departmental officers may be more hesitant when recording information which, in turn, may result in less effective and accurate detail being captured.
- Disclosing this information may compromise the manner in which information is gathered in the future for the decision-making processes of Government to the detriment of the betterment for South Australia.

Having considered the various factors weighing for and against disclosure, I have determined that disclosure of this information would, on balance, be contrary to the public interest.

Determination 3

I have determined that access to the following documents is **granted in part**:

Doc No.	Description of document	No. of Pages
4a	Attachment to Document 4: Agenda Item X	5
6	Minute from Chief Executive, Department of Primary Industries and Regions to Minister for Primary Industries and Regional Development dated 05/05/2023 re Agriculture Ministers' Meeting Out of Session Papers	13

The information removed from the above documents is pursuant to Clause 5(1)(a)(i) of Schedule 1 of the Freedom of Information Act which states:

"5—Documents affecting inter-governmental or local government relations

(1) A document is an exempt document if it contains matter—

(a) the disclosure of which -

(i) could reasonably be expected to cause damage to intergovernmental relations; and

(b) the disclosure of which would, on balance, be contrary to the public interest."

The information removed relates to matters concerning other Australian jurisdictions.

In addressing the public interest test for the Clause 5(1)(a)(i) exemption, I have balanced the following factors:

In favour of the public interest:

- Meeting the objects of the Act favouring access to documents.
- Ensuring optimal use of public resources.
- High level of interest in the accountability of public office holders.
- The importance of transparency and openness and the interest that the public has in the decision-making processes of Government.

Contrary to the public interest:

- The need to preserve confidentiality of certain information being shared between government agencies.
- The recent age of the information was considered and the continuing relevance of the matters.
- To release this information would harm inter-governmental relationships with the Commonwealth and State Governments resulting in agencies reconsidering their position regarding their future interactions with the South Australian Government.

Having considered the various factors weighing for and against disclosure, I have determined that disclosure of this information would, on balance, be contrary to the public interest.

Determination 4

I have determined that access to the following documents is **granted in part**:

Doc No.	Description of document	No. of Pages
5	Calendar Meeting dated 07/12/2022 re Agriculture Ministers' Meeting	2
7	Calendar Meeting dated 15/05/2023 re Agriculture Ministers' Meeting	2

The information removed from the above documents is pursuant to Clause 6(1) of Schedule 1 of the Freedom of Information Act which states:

"6 - Documents affecting personal affairs

(1) A document is an exempt document if it contains matter the disclosure of which would involve the unreasonable disclosure of information concerning the personal affairs of any person (living or dead)."

The information removed consists of the names and email addresses of Departmental staff members, and there would be an expectation that their personal information would not be released in this way.

Accordingly, it is considered that disclosure of this information would be an unreasonable intrusion into the privacy rights of the individuals concerned.

If you are unhappy with this determination you are entitled to exercise your rights of external review with the Ombudsman SA. Alternatively, you can apply to the South Australian Civil and Administrative Tribunal (SACAT). If you wish to seek a review, you must do so within 30 calendar days of receiving this determination.

For more information about seeking a review or appeal, please contact the Ombudsman SA on telephone (08) 8226 8699 or SACAT on 1800 723 767.

In accordance with the requirements of Premier and Cabinet Circular PC045, details of your application, and the documents to which you are given access, will be published in PIRSA's disclosure log. A copy of PC045 can be found at http://dpc.sa.gov.au/__data/assets/pdf_file/0019/20818/PC045-Disclosure-Log-Policy.pdf

If you disagree with publication, please advise the undersigned in writing within fourteen calendar days from the date of this determination.

Should you require further information or clarification with respect to this matter, please contact Ms Rachael Colegate on 8226 2931 or email: Minister.Scriven@sa.gov.au.

Yours sincerely

C.M. Scriven

Hon Clare Scriven MLC
MINISTER FOR PRIMARY INDUSTRIES AND REGIONAL DEVELOPMENT
MINISTER FOR FOREST INDUSTRIES

27 / 11 / 2023

Gonos, Anthea (PIRSA)

Subject:	AGRICULTURE MINISTERS' MEETING [SEC=OFFICIAL]
Location:	Microsoft Teams Meeting
Start:	Wed 20/07/2022 2:30 PM
End:	Wed 20/07/2022 4:30 PM
Recurrence:	(none)
Meeting Status:	Accepted
Organizer:	AMM-AGSOC

Mehdi will join Meagan here in the boardroom and attend that way.

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting

Or join by entering a meeting ID
Meeting ID: 412 650 868 388
Passcode: 2CXq8C

Join with a video conferencing device
597361658@t.plcm.vc
Video Conference ID: 133 252 407 9
Alternate VTC instructions

Learn More | Meeting options

Government of South Australia
Department of Primary Industries and Regions

MINISTER'S OFFICE
20 JUL 2022
RECEIVED
EA197664

Minute to
Minister for Primary Industries and Regional Development
Minister for Forest Industries

Ref: A5543160

For	**Noting**
Critical Date	**20 July 2022**
Subject	**Agriculture Ministers' Meeting**

Synopsis

You will attend the Agriculture Ministers' Meeting (AMM) to be held via teleconference on Wednesday, 20 July 2022. Briefing to support your attendance at AMM is attached to this minute and has already been provided to your office electronically.

Recommendations

That you:

1. Note the information provided in this briefing and your briefing pack for AMM.

NOTED

Noted
17/8/22

.....

Hon Clare Scriven MLC
Minister for Primary Industries and Regional Development
Minister for Forest Industries
/ / 2022

Ministerial Comments

Background

- Agriculture Ministers' Meeting (AMM) is the intergovernmental forum for Agriculture Ministers, which promotes cross-jurisdictional coordinated approaches to matters of national interest.
- AMM membership comprises of Australian, State and Territory government ministers with responsibility for primary industries, and is chaired by Senator the Hon. Murray Watt, Commonwealth Government Minister for Agriculture, Fisheries and Forestry.
- Since 2020, due to COVID restrictions, AMM has only met via teleconference. Prior to that, however, AMM has had at least one face-to-face meeting per year and it is proposed that AMM will meet face-to-face in late 2022.

Discussion

- You will attend the AMM to be held via teleconference on Wednesday, 20 July 2022. Professor Mehdi Doroudi, Chief Executive, Department of Primary Industries and Regions (PIRSA) will also be in attendance.
- Most of the items on the AMM agenda have been discussed at previous Agriculture Senior Officials Committee meetings which is attended by the PIRSA Chief Executive.
- Items for discussion at AMM will be:
    - Jurisdictional priorities for AMM
    - National Biosecurity Strategy – paper for endorsement
    - Current priorities in Biosecurity, Agriculture Workforce, National Drought Agreeement update
    - Update on review of Ministerial Forums
- A full briefing pack has been prepared and provided to your office electronically for this meeting. Attachment C has been updated to provide additional detail to support your priority on Fruit Fly.
- An agenda paper on the National Biosecurity Strategy is expected to be circulated by the Commonwealth Government ahead of AMM. This paper will be provided to your office electronically once received by PIRSA.

Attachments

A. Attachment A - Agenda FINAL
B. Attachment B – Item 1 – Introduction to members
C. Attachment C – Item 2 – Priorities
D. Attachment D – Item 3 – National Biosecurity Strategy
E. Attachment E – Item 4A (I) - FMD
F. Attachment F – Item 4A (II) – Livestock Traceability
G. Attachment G – Item 4A (III) – Varroa Mite
H. Attachment H – Item 4B – Ag Workforce
I. Attachment I – Item 4C – National Drought Agreement update
J. Attachment J – Item 5 – Update on Review of Ministerial Forums
K. Attachment K – Item 6 – Next Meeting (face-to-face)

CHIEF EXECUTIVE
Department of Primary Industries and Regions

19/7/2022

CONTACT	Jo Collins
POSITION	Executive Director
DIVISION	Office of the Chief Executive
MOBILE and LANDLINE	0408 000 650
Cleared by	Stephen Poskett

AGRICULTURE MINISTERS' MEETING (AMM)

AGENDA

Wednesday, 20 July 2022

3:00 pm to 5:00 pm (AEST)

Microsoft Teams

Item No.	Description	Lead	Timing
1	Welcome and introductions	Chair/all	5 mins
2	Jurisdictional priorities for AMM	All	25 mins
3	National Biosecurity Strategy - endorsement and next steps	All	15 mins
4	<u>Current priorities</u> a) Biosecurity I. Foot and mouth disease, lumpy skin disease and other animal disease threats i. Including presentation from Dr Mark Schipp, Australian Chief Veterinary Officer II. Livestock traceability III. Varroa mite b) Agricultural workforce c) Climate and sustainability I. National Drought Agreement update d) Other	Chair/all	60 mins
5	Update on Review of Ministerial Forums	Chair	5 mins
6	Next meeting (face-to-face)	Chair/all	5 mins
7	Closing remarks and meeting close	Chair	5 mins

AMM - TELECONFERENCE

ITEM 1: **Introduction to members**

AUTHOR(S): **Penny Quinn**

MOBILE NO:

DATE: **20 July 2022**

Background

This is the first meeting of Agriculture Ministers since the new government was formed in May 2022.

Below details the current Agriculture Ministers Meeting (AMM) members by jurisdiction, with a detailed attendee list attached for your information.

Members details

Australian Government

Senator the Hon Murray Watt

Minister for Agriculture, Fisheries and Forestry

Minister Watt was elected as a Senator for Queensland in 2016. Minister Watt has played a key role in a range of Senate Committees, including the Rural and Regional Affairs Committee, and led a number of Senate inquiries into issues including regional development, energy and resources, emergency management and health care.

Western Australia

Hon Alannah MacTiernan BA LLB BJuris JP MLC

Minister for Regional Development; Agriculture and Food; Hydrogen Industry

After being elected in 2017, she was appointed Minister for Regional Development and Agriculture and Food and Minister Assisting the Minister for State Development, Jobs and Trade.

Minister MacTiernan is committed to creating economic opportunity in regional areas as well as innovation and a focus on investing in science.

Northern Territory

Hon Paul Kirby

Minister for Agribusiness and Fisheries; Minister for Business, Jobs and Training; Minister for Major Events; Minister for Public Employment; Minister for Veterans' Affairs

In January 2019 Minister Kirby was sworn in as Minister for Primary Industry and Resources and has a strong focus on workforce issues.

Queensland

Mark Furner MP

Minister for Agricultural Industry Development and Fisheries, Minister for Rural Communities

Minister Furner previously served as Minister for Local Government and Minister for Aboriginal and Torres Strait Islander Partnerships.

His responsibilities include biosecurity, agriculture, animal welfare, food and fibre industry development and rural economic development.

Australian Capital Territory

Rebecca Vassarotti MLA

Minister for Environment, Minister for Heritage, Minister for Homelessness and Housing Services, Minister for Sustainable Building and Construction

The ACT have a large focus on climate change action, biodiversity and a sustainable future.

New South Wales

The Hon. Dugald William SAUNDERS, MP

Minister for Agriculture, Minister for Western New South Wales

Minister Saunders is the local member for Dubbo. As a regional member Minister Saunders is committed to ensuring regional businesses have the opportunity to grow, unlocking the potential of regions and building regional tourism.

Victoria

Hon. Gayle Tierney

Minister for Training and Skills, Minister for Higher Education, Minister for Agriculture

Minister Tierney's key priorities are to work with agriculture leaders of all government levels to address workforce issues, climate change and drought and the increasing pressure on our biosecurity system.

Tasmania

Jo Palmer

Minister for Primary Industries and Water, Minister for Disability Services, Minister for Women

In April 2022, Minister Palmer joined the Tasmanian Government Ministry as Minister for Primary Industries and Water, Minister for Disability Services and Minister for Women, and also remains Deputy leader for the Government in the Legislative Council.

AMM - TELECONFERENCE

ITEM 2:	**AMM Priorities**
AUTHOR(S):	**Stephen Poskett / Penny Quinn**
MOBILE NO:	**0437 906 927**
DATE:	**20 July 2022**

ISSUES/ANALYSIS

- Senator the Hon Murray Watt MP, Minister for Agriculture, Fisheries and Forestry is seeking members views on key priorities for AMM over the next 12 months.
- The Department of Agriculture, Fisheries and Forestry (DAFF) has indicated that Minister Watt's priorities are Biosecurity, Climate and Sustainability and Agricultural Workforce. There will discussion on these priorities under Agenda Item 4.

RECOMMENDED SA POSITION

- You recently wrote to Minister Watt and indicated the following areas as priorities:
    - Biosecurity and Trade
    - Climate Change and Drought
    - Forestry
    - Workforce

<u>Biosecurity and Trade</u>

- Improving our biosecurity capabilities and defences is critical to protecting our industries from introduced pests, plants and diseases.
- Fruit Fly eradication continues to be a key priority and we look forward to working further progress on updating the National Fruit Fly Protocol to ensure it meets the requirements of contemporary practice. In particular reducing the Suspension Area of Qfly from 15km to 7.5km and the use of Sterile Insect Technology as an exclusionary measure in PFAs. Once developed and endorsed domestically DAFF's commitment to expediting international trade negotiations will be essential.
- Continued coordinated responses to Varroa Mite and Japanese Encephalitis, and the emerging threat of Foot and Mouth Disease and Lumpy Skin Disease, are key to protecting our industries from these diseases.
- In addition, the process and detail around the future of the live sheep export trade should be an item for discussion.

<u>Climate change and drought</u>

- Supporting farmers and regional communities to be more resilient to the impacts of drought and climate change could be a key priority over the next 12 months.

Forestry

- The proposed expansion of the National Institute for Forest Products and Innovation, and continuation of the rollout of Regional Forestry Hubs are areas for further discussion.
- The focus of the work of the research hubs and the national Forest Products Innovation Centres supports work currently underway in PIRSA.

Workforce

- Developing solutions to attract more workers to jobs and careers in our primary industries and regional communities is key to their future growth and development.
- The Commonwealth Government's commitment to deliver a dedicated Agriculture Workers Visa and establishing Jobs and Skills Australia as a national partnership to drive VET education and to strengthen workforce planning are welcome steps in this area.
- The AGSOC Labour Working Group has previously been tasked to discuss workforce related issues and to investigate areas for collaboration.

BACKGROUND

- The following priorities were agreed by AMM members as priorities for 2021:

COVID-19 response and recovery

- At the last meeting of members in November 2021, Ministers discussed ongoing efforts to support COVID-19 response and recovery, particularly the implementation of the Australian Agriculture Worker Visa, which helped address labour shortages in the agriculture sector.
- Discussions also covered the National Agriculture Workforce Strategy, the Agriculture Workers' Code, and Pacific Australia Labour Mobility (PALM) Program and vaccine and quarantine arrangements. This work was being coordinated by the AGSOC Labour Working Group.

Climate Change

- In 2021, AMM agreed to the establishment of a Climate Change Task Group to provide advice to AGSOC on program objectives and draft an Implementation Plan and actions.
- The plan, being led by Victoria, was developed across jurisdictions with an aim to identify and plan key actions and arrangements, as part of a coordinated national approach to support the agriculture sector adapt to climate change and manage emissions.
- At the meeting of Ministers in November 2021, it was agreed that Ministers would finalise the implementation plan out-of-session. This has not yet occurred and may be raised by Victoria to progress.

Implementation of the National Drought Agreement

- PIRSA is the lead agency responsible for coordinating drought support. PIRSA works closely with the Commonwealth to deliver extensive drought support programs under the National Drought Agreement and Future Drought Fund.
- Previously, Ministers discussed progress on the framework for the review of the National Drought Agreement, which was agreed out-of-session by Ministers at the end of 2021.

Biosecurity

- In November 2021, Ministers received a progress report on the National Biosecurity Strategy and agreed that the final strategy be delivered for Ministers' consideration by the end of March 2022.
- The Strategy is being presented to Ministers at this meeting for endorsement. A more detailed briefing and agenda paper is attached for your information.

OTHER JURISDICTIONS/STAKEHOLDERS

- Issues of national significant that may be considered priorities by other jurisdictions, including but not limited to:
    - Poultry standards and guidelines
    - Emergency management, including Foot and Mouth Disease, Varroa mite, Japanese Encephalitis, Lumpy Skin disease
    - Trade issues
    - Climate Change

AMM - TELECONFERENCE

ITEM 3 :	**National Biosecurity Strategy**
AUTHOR(S):	**Nathan Rhodes**
MOBILE NO:	**0412 376 450**
DATE:	**15 July 2022**

RECOMMENDED SA POSITION

For discussion

ISSUES/ANALYSIS

- The Commonwealth Department of Agriculture, Water and the Environment (DAWE) is leading the development of a National Biosecurity Strategy. The intent of the Strategy is to help Australia's biosecurity system as a whole become better integrated, prepared and responsive to meet the challenges out to 2030.
- Some priority elements of the national biosecurity strategy are:
    - Provide a **strategic direction** for Australia's biosecurity system to 2030
    - Outline and agree our collective **national vision, objectives and outcomes**
    - Seek to **drive coordinated reform and investment**
    - Encourage broad input and incorporate **nation-wide engagement** activities
    - Build on – and bring together – key strategic biosecurity documents
    - Establish an **implementation framework**
- The national working group has finalised its work, including incorporation of feedback received from the recent public consultation process.
- A key feature of that feedback was to include a clear approach to the implementation of the strategy, to ensure it could result in tangible outcomes.
- The Strategy has broad support from all jurisdictions, and the National Biosecurity Committee will be responsible for oversight of the implementation over coming years.

BACKGROUND

- There is a broad consensus between governments, industry, environmental groups and communities about the importance of a strong biosecurity system for protecting our economy, environment and way of life, while facilitating trade and movement to, from and within Australia.
- The global environment is changing and the biosecurity challenges are growing. As biosecurity threats are directly impacting a wider net of stakeholders it's becoming clear that the existing system will not be able to cope with the increased threats of the next decade. Scaling our current

efforts will not be enough, and the biosecurity system needs new strategies and ways of working.

- The proposed national biosecurity strategy will develop national priorities to help align collective efforts towards common goals. The national biosecurity strategy will seek to identify a national, collaborative and future-focused approach to address this changing environment.

OTHER JURISDICTIONS/STAKEHOLDERS

- All jurisdictions are supportive of the National Biosecurity Strategy.
- Most jurisdictions have existing state/territory strategies in place, and industry plans/blue prints and other strategic documents.
- The National Biosecurity Strategy will support these existing plans, and provide strategic national guidance and vision, to lead the biosecurity system as a whole to prepare for and respond to changing global threats.

AMM - TELECONFERENCE

ITEM 4A (I):	**Foot and Mouth Disease (FMD) and Lumpy Skin Disease (LSD)**
AUTHOR(S):	**Nathan Rhodes and Mary Carr**
MOBILE NO:	**0412 376 450 / 0437 328 592**
DATE:	**20 July 2022**

RECOMMENDED SA POSITION

- Note the update provided by the Commonwealth on Foot and Mouth Disease.

ISSUES/ANALYSIS

- PIRSA works closely with the Australian government, our interstate colleagues and our local livestock industry, remaining alert to the developing situation in Indonesia.

- In response to the significance of the FMD and LSD outbreaks in Indonesia, PIRSA is prioritising staff resources to focus on preparedness activities on these diseases. PIRSA is working closely with state peak industry bodies and nationally through working groups to contribute to both national and state preparedness activities.

- PIRSA's key areas of activity for preparedness will be enhanced surveillance to ensure early detection of disease and planning to ensure a rapid and effective response should detection of this disease occur in Australia. This will include a communications strategy to compliment the national efforts being undertaken.

- The Hon Murray Watt MP, Australian Government Minister for Agriculture, Fisheries and Forestry, has written to you regarding the response to the detections of Lumpy Skin Disease in Indonesia.

- Of particular note, Minister Watt has raised the production of Lumpy Skin Disease vaccine, which would require the importation of live virus into Australia.

- Provided biosecurity risks can be mitigated to an acceptable level of protection the importation of live virus is supported by PIRSA, other state and territory governments and industry. PIRSA have been supportive of live LSD virus being held at the Australian Centre for Disease Preparedness (ACDP) when considered at Animal Health Committee (AHC), National Biosecurity Committee (NBC) and Agriculture Senior Officials Committee (AGSOC).

BACKGROUND

- In April 2022, an outbreak of foot-and-mouth disease (FMD) was detected in cattle in Indonesia. A report by Indonesia to the World Organisation for

Animal Health (WOAH) on the 23 June 2022 indicated there were cases of FMD in 19 provinces across the islands of Sumatra, Java, Kalimantan, Bangka and Lombok, and most recently on the 5 July an outbreak reported in Bali.

- DAFF confirmed on 5 July 2022 that the provincial authorities have notified the Counsel General in Bali of an FMD outbreak in Bali. There had been 63 cases and movement restrictions have been implemented.

- DAFF understands that Indonesia has increased surveillance and awareness activities due to the incursions of LSD and FMD and that as a consequence there are additional reports- it is a good indicator of the system working that reports are being made.

- In response to the FMD outbreak in Indonesia, Australia's frontline biosecurity officers are operating with increased vigilance across all flights arriving from Indonesia, including Bali.

- An FMD vaccination program has commenced in Indonesia supported by movement restrictions to try and limit the spread of the disease. However there are significant logistical issues in the roll-out and enforcement of the response efforts.

- The Australian Government is assisting Indonesia to combat and contain the FMD outbreak. This comes on top of the assistance already being provided to respond to an outbreak of lumpy skin disease.

- The Department of Agriculture, Fisheries and Forestry has heightened awareness at the international border and suspended imports of animal products from Indonesia that may carry FMD.

- It is likely that this outbreak of FMD in Indonesia will take many years to eradicate. The biosecurity threat will remain a high risk to Australia for the near future.

- Industry and government have been communicating the need for the livestock industry to practice a heighten level of vigilance for workers and visitors who may be returning from overseas. Enforcing simple biosecurity steps such as clean footwear and clothing (that was not worn overseas), ensuring that visitors/workers have spent time(a week) in a low-risk area prior to coming on the property or interacting with livestock.

OTHER JURISDICTIONS/STAKEHOLDERS

- The Commonwealth Government is leading the Emergency Animal Disease Taskforce, which has developed a national action plan which is primarily focused on measures to address Lumpy Skin Disease. Many of the actions are directly transferable to Foot and Mouth Disease. Increased screening requirements of flight arrivals from Denpasar have been implemented at Adelaide airport.

- All jurisdictions are strengthening preparedness activities.

AMM - TELECONFERENCE

ITEM 4A (II) : **Livestock Traceability**

AUTHOR(S): **Nathan Rhodes**

MOBILE NO: **0412 376 450**

DATE: **15 July 2022**

RECOMMENDED SA POSITION

For discussion

ISSUES/ANALYSIS

Electronic NLIS (Sheep & Goats) Implementation

- National Biosecurity Committee has agreed in principle to support the introduction of individual electronic identification (eID) for sheep and goats in all jurisdictions.
- The NLTEWG developed a draft methodology, based on the Victorian experience, to enable all other states and territories to implement a working eID system for sheep and goats. It has been proposed that all jurisdictions commence transitioning to eID for sheep and goats in 2022, with full supply chain capability, including supporting legislation, in place by 1 January 2025.
- Each jurisdiction will need to prepare, in consultation with stakeholders, a jurisdiction-appropriate implementation plan, incorporating nationally-agreed milestone dates

Grant to Livestock SA

- Livestock SA has been provided $140,000 in funding through the Red Meat and Wool Growth Program to analyse the need for and benefits of the South Australian sheep industry moving to an eID system and develop an implementation strategy to transition the industry to this traceability system.
- Livestock SA will create a South Australian Sheep Traceability Strategy Committee to be led by Livestock SA and including at least two representatives from the Department of Primary Industries and Regions, to:
    - Conduct state-wide consultation and develop a South Australian specific Business Case outlining the justifications for undertaking sheep eID in SA, which will evaluate the benefit, costs, and risks of this strategy
    - Develop an implementation strategy for a sheep eID program in SA
    - Develop a communication, extension, and engagement strategy for the implementation of sheep eID in SA.

Traceability Governance Model

- Marsden Jacob Associates made a presentation of the Options Paper to the SAFEMEAT Advisory Group on 3 June 2022. The Options Paper includes:
    - Options for implementing nationally consistent governance frameworks for national livestock traceability.
    - Potential governance frameworks, including decision-making frameworks that could be applied to livestock traceability.
    - Governance frameworks for setting standards on system performance (including database management and standards on tags), which does not include reviewing the standards or the content of the standards.
    - Enabling frameworks to implement/enact these options.
- The primary motivation for the establishment of Australia's livestock traceability framework is biosecurity and being able to trace animals in a disease outbreak, with a particular focus on foot-and-mouth disease (FMD) susceptible livestock species. A key tool of the livestock traceability framework is the National Livestock Identification System (NLIS) which encompasses all cloven-hoofed animals such as cattle, sheep, goats, and pigs.

BACKGROUND

- Livestock identification and traceability requirements varies amongst the different livestock species. The four major FMD susceptible species – cattle, sheep, goats and pigs all have identification and movement recording requirements.
- Since March 2020, the National Biosecurity Committee (NBC) has been working on SAFEMEAT's recommendations from the report *Reform Recommendations for Australia's Livestock Traceability System*.
- The NBC established a working group, the National Livestock Traceability Enhancement Working Group (NLTEWG), in January 2021, consisting of representatives from Commonwealth, state and territory governments and Animal Health Australia to undertake scoping work on the available options to implement SAFEMEAT's traceability reform recommendations.
- The NLTEWG focused on two deliverables:
    - The development of options for nationally consistent governance frameworks, including decision making and data management considerations, for national livestock traceability arrangements.
    - Securing NBC support for individual electronic identification (eID) for sheep and goats and work to develop a national implementation plan and associated costings.
- The NLTEWG contracted Marsden Jacob Associates to deliver an Options Paper to NBC that sets out a range of potential governance models that could be implemented to enhance decision-making and accountability frameworks that would underpin the performance of a

future national livestock traceability governance framework with respect to Emergency Animal Diseases (EAD).

- National Biosecurity Committee has agreed in principle to support the introduction of individual electronic identification (eID) for sheep and goats in all jurisdictions.

OTHER JURISDICTIONS/STAKEHOLDERS

- All jurisdictions are supportive in-principle of implementing electronic ID in sheep. Only Victoria currently has a mandatory system in place.
- The costs of such a system have been estimated by ABARES as per the below:

- Any decision to mandate introduction of eID will need to consider the most appropriate funding mechanism, including options of cost-sharing between the Commonwealth, states and industry.

AMM - TELECONFERENCE

ITEM 4A (III): **Varroa Mite response**

AUTHOR(S): **Nathan Rhodes**

MOBILE NO: **0412 376 450**

DATE: **20 July 2022**

RECOMMENDED SA POSITION

- Note the update on the NSW Varroa mite response program.
- Note that PIRSA has maintained the existing border restrictions, preventing hives entering South Australia, that have been in NSW at any time in the past 6 months

ISSUES/ANALYSIS

- The National Management Group met on 8 and 14 July 2022 to discuss the Response Plan prepared by the New South Wales response team. The Response Plan covers the first 100 days of the response with a total cost of $45 million, shared 50:50 between governments and industry. The SA allocation is $1.157 million.
    - There was some discussion around the inclusion of compensation for hobbyist beekeepers and of compliance activities in the proposed cost shared amount. This is still to be resolved, but will not delay the response.
- The latest situation report from 14 July 2022 lists 39 Infected Premises (one new IP in the last 4 days). The NSW response team is confident all the detections to date remain within known linkages to other IPs from tracing and surveillance.
- South Australia has prohibited movement of bees, bee products and bee equipment into this state from NSW (or any state where Varroa mite is detected) without permission from the Chief Inspector of Stock to manage the risks of Varroa entering South Australia. Queensland and Victoria implemented similar restrictions preventing the movement of bees into their states.
- The Almond Board of Australia has advised PIRSA that:
    - Almost 300,000 commercial beehives will be required by the Australian almond industry over a 4–5-week period from late July 2022. The almond industry is predominantly situated across the southern Murray Darling Basin.
    - SA has two almond regions, the Riverland that covers 11,163ha and Adelaide Plains that covers 669ha, making SA 20% of Australia's production.
- PIRSA does not believe the risk of movement of NSW hives into South Australia is acceptable at this point in time, based on the information provided by NSW to date. PIRSA will advise industry of the continuation of the existing border restrictions for the time being.

- PIRSA believes the risk of varroa mite arising from hive movements from Victoria and QLD into south Australia is acceptable, subject to conditions. PIRSA proposes to allow movements from those states subject to the following requirements:
    - A permit is required to enter SA with details on the location hives are moving from and to, and a prohibition of moving those hives further without permission.
    - A permit will not be granted if the hives have been in NSW in the last 12 months or are linked to any IPs from NSW.
    - Testing is required pre-entry into South Australia in the form of a statutory declaration with the permit application that 10% of hives with alcohol wash (or sugar shake?) has been completed and reported to PIRSA.
    - Testing will be required on location in SA in the form of acaracide and sticky mat by PIRSA at a rate to be determined.
    - If moving from Queensland, a detailed transit/route plan is required detailing transit of NSW.

- The Apiary industry is concerned about the financial loss to NSW beekeepers arising from their inability to meet contractual arrangements to provide pollination services in SA. The Almond industry is concerned that the number of hives available in SA, Victoria and QLD will be insufficient to meet to full pollination requirements.
    - PIRSA understands that there are sufficient hives in SA to achieve close to full pollination, but some SA apiarists may choose not to move hives for pollination to manage their own risk of infestation should Varroa mite be detected in SA.

BACKGROUND

- The Almond Board have indicated SA needs 71,000 hives for almond pollination from 24 July with an expected supply of 65,000 SA hives (ie a shortfall of 6,000 hives).
- Historically hive supply occurs largely from SA beekeepers supported by some Victorian beekeepers and it is estimated NSW may have historically supplied between 1,000-2,000 hives. PIRSA understands there is a shortfall as a result of 5,000 hives being needed at Paringa (that were coming this season from NSW) and another 1,000 being needed elsewhere in the Riverland after a Victorian supplier withdrew.
- The impact of the shortfalls can be partially addressed by managing the density and location of hives used during pollination. The Almond Board is trying to minimise the impacts of anticipated national shortfalls and has sent out information to its growers nationally about managing hive shortfall (Fact Sheet and Paper from 2014) to assist industry on density and location advice.
- The exact numbers of hive supply in SA for almonds is not known and is hard to accurately predict as beekepers make decisions annually based on considerations of price for the pollination service (currently high), honey price (currently low) and biosecurity risk (typically this relates to concern about American Foul Brood spread but this year will

include concern about risk of Varroa mites so is a higher risk consideration this season).

OTHER JURISDICTIONS/STAKEHOLDERS

- NSW advises that it has confidence that the varroa infestation is limited to those hives that are direct traces to earlier infested premises, and has assessed the risk of infestation in the rest of NSW to be low. NSW is seeking agreement from QLD, Victoria and South Australia to lift existing border controls, to allow movement of NSW hives into other states for pollination services.
- Victoria has advised that it is not confident that the risk of allowing NSW hives into Victoria is acceptable, and will continue to apply restrictions at the Victoria border. PIRSA understands that Victoria will allow SA beekeepers entry for almond pollination subject to strict permits requirements, including testing and surveillance.
- QLD has not advised of its position in relation to ongoing movement controls, but movement of SA hives to QLD is very limited.

AMM - TELECONFERENCE

ITEM 4B:	**Agricultural Workforce**
AUTHOR(S):	**Stephen Poskett**
MOBILE NO:	**0437 906 927**
DATE:	**20 July 2022**

RECOMMENDED SA POSITION

- For discussion to determine whether it is a priority for AMM over the next 12 months.

ISSUES/ANALYSIS

- South Australian regional employers including primary producers continue to raise concerns on the increasing difficulty in attracting workers to undertake seasonal agricultural work and jobs across associated supply chains, and in other sectors.
- Attraction, retention and development of the regional workforce is an ongoing challenge and is influenced by a range of socio-economic factors. It has been exacerbated by restrictions imposed due to the COVID-19 pandemic.
- Challenges to obtaining a regional workforce include the nature and location of work, the need to relocate to undertake work, the inexperience of some businesses in recruitment, the skills required to carry out the work, housing availability, and the regional support and infrastructure that may or may not be available to job seekers and their families.
- The challenges to obtaining a regional workforce also varies by industry and regional area, and the response needs to be tailored to consider both of these factors.
- Traditionally regional workforce recruitment comes from a range of sources including secondary and tertiary graduates, unemployed people, local workers who have relocated, and regional workers who have upskilled or are seeking new career pathways.
- Seasonal workers have been sourced from interstate and international holiday makers and workers under the Pacific Australia Labour Mobility Scheme.

BACKGROUND

- The Department of Primary Industries and Regions (PIRSA) continues to partner with the eight South Australian Regional Development Australia (RDA) Associations in the delivery of the $1.2 million Regional Work SA project.
- Through the project, RDAs have been working with organisations such as Study Adelaide, hosting visits for tertiary students to the regions, and promoting work and lifestyle opportunities.
- The RDAs also continue to work with other state government agencies to consider place-based opportunities for skills development, and education and career pathways for youth.
- In 2021, the Government of South Australia established a cross-government Regional Workforce Advisory Group, led by the Department of Premier and Cabinet, to discuss and agree collaborative solutions to medium to long term issues relating to regional workforce attraction and retention.
- The Department of Primary Industries and Regions (PIRSA) is a member of the Advisory Group and is also working with other key stakeholders to identify and deliver programs to help address some of these challenges.
- The Government of South Australia will invest an addition $5m in facilities and equipment for Mt Gambier TAFE to enable it to provide courses to support the forestry industry in the region.
- The Commonwealth Government has committed to establish Jobs and Skills Australia as a national partnership to drive VET education and strengthen workforce planning.
- The Commonwealth Government will create 465,000 new fee-free TAFE places in areas of demonstrated labour shortage. These fee-free TAFE placements will help rebuild industries hit hardest by the pandemic, like hospitality and tourism, and meet current and future needs in the care economy, including jobs like childcare, aged care, disability care, nursing and community services.
- The Commonwealth Government has committed to delivering a dedicated Agriculture Workers Visa drawing on the stability of the Pacific Labour Mobility Scheme.

OTHER JURISDICTIONS/STAKEHOLDERS

- Agricultural workforce is a shared priority for all jurisdictions.
- PIRSA engages with the Commonwealth and States and Territories on agricultural workforce issues through the AGSOC Labour Working Group which provides advice on these matters to AMM and AGSOC.
- PIRSA is also a member of the Commonwealth, State and Territory Working Group on Pacific Labour Mobility.

AMM - TELECONFERENCE

ITEM 4C:	**National Drought Agreement update**
AUTHOR(S):	**Brett Bartel**
MOBILE NO:	**0428 282 091**
DATE:	**20 July 2022**

RECOMMENDED SA POSITION

- For discussion to determine whether it is a priority for AMM over the next 12 months.

BACKGROUND

- On 12 December 2018, the Council of Australian Governments agreed and signed a new National Drought Agreement (NDA). The NDA sets out a joint approach to drought preparedness, responses and recovery, with a focus on accountability and transparency.

- The NDA states that it will be reviewed approximately 2 years before it expires, with expiry set to be on 30 June 2024.

- At the AMM meeting in November 2021, Ministers discussed progress on the framework for the review of the National Drought Agreement, which was agreed out-of-session by Ministers at the end of 2021.

- Review of the NDA commenced in February 2022, with a project Board established with representatives from all Jurisdictions to oversee the process.

- Public consultation on the NDA review has been undertaken through the Department Agriculture Fisheries and Forestry (DAFF) Have Your Say website. Consultation closed on 30 June 2022. The Commonwealth has also undertaken consultation with our key industries groups (LSA, GPSA) and PPSA.

- It is anticipated a new draft version of the NDA will be completed for public comment in mid-2023, with the agreement finalised for Justifications endorsement by 30 June 2024.

OTHER JURISDICTIONS/STAKEHOLDERS

- PIRSA works closely with the Commonwealth to deliver extensive drought support programs under the National Drought Agreement and Future Drought Fund and reports on progress against the NDA annually.

AMM - TELECONFERENCE

ITEM 5:	**Update on Review of Ministerial Forums**
AUTHOR(S):	**Stephen Poskett**
MOBILE NO:	**0437 906 927**
DATE:	**20 July 2022**

Issues/Analysis

- The Commonwealth Government will provide an update on the Review of Ministerial Forums that is being undertaken by the Department of Prime Minister and Cabinet.

- All jurisdictions have supported the continuation of AMM for a further 12 months recognising its importance to progress priority matters, with the support of AGSOC (Option 2 – see background below).

BACKGROUND

- In late 2021, AGSOC members were provided a paper of options to guide discussion on the next steps for AMM.
- Two options were proposed for discussion:
    - Option 1 was the disbandment of AMM. It was proposed that this would not prevent the continuation of work or ministerial oversight of the AMM work program or other priority matters. Meetings would be convened on an ad-hoc basis and engagement bilaterally (or multilaterally), and via ministerial correspondence.
    - A second option was for the AMM Chair to seek an extension to the operation of AMM from the Prime Minister for a proposed period of time, for example, for six months.

AMM - TELECONFERENCE

ITEM 6:	**Next meeting (face-to-face)**
AUTHOR(S):	**Stephen Poskett**
MOBILE NO:	**0437 906 927**
DATE:	**20 July 2022**

RECOMMENDED SA POSITION

- Support the next AMM taking place as a face-to-face meeting.
- Support Western Australia being the host of the next AMM meeting.

ISSUES/ANALYSIS

- The Commonwealth Government is likely to propose the next AMM be a face-to-face meeting.
- Western Australia may indicate interest in hosting the meeting, which would likely take place over two days and potentially include a field/regional visit.
- A face-to-face meeting is likely to be supported by other jurisdictions, with Queensland supportive of Western Australia hosting AMM.

BACKGROUND

- COVID border closures and restrictions have prevented AMM from meeting in person since 2019.
- Hosting of AMM has traditionally rotated between jurisdictions and been held face-to-face. Western Australia was due to host the next face-to-face meeting of AMM before COVID restrictions meant meetings moved to a teleconference format.

Gonos, Anthea (PIRSA)

Subject:	AMM Virtual Meeting | Meagan to accompany Minister
Location:	Level 10, 1 King William street
Start:	Fri 9/09/2022 12:30 PM
End:	Fri 9/09/2022 2:30 PM
Recurrence:	(none)
Meeting Status:	Meeting organizer
Organizer:	Minister Scriven Calendar
Required Attendees:	PIRDANDFI, Minister (PIRSA); Doroudi, Mehdi (PIRSA)

Government of South Australia
Department of Primary Industries and Regions

MINISTER'S OFFICE
27 OCT 2022
RECEIVED

Minute to
Minister for Primary Industries and Regional Development
Minister for Forest Industries

Ref: A5655266

For	**Action**
Critical Date	**3 November 2022** (when associated papers for Agricultural Senior Officers Committee are due)
Subject	**Draft Agricultural Minister's Meeting paper on fruit fly**

Synopsis

To provide you with a draft paper on fruit fly to consider tabling at the next Agricultural Minister's Meeting in December 2022.

Recommendations

That you:

1. Consider tabling the draft paper on fruit fly at the next Agricultural Minister's Meeting
APPROVED / NOT APPROVED

C.M. Scriven

Hon Clare Scriven MLC
Minister for Primary Industries and Regional Development
Minister for Forest Industries
10 / 11 / 2022

Ministerial Comments -

Background

- At the last Agricultural Minister's Meeting (AMM - 09 September 2022), the Commonwealth Government submitted a situation report on fruit fly which gave a summary on recent activity in managing fruit fly in Australia and some of the key risks that were of concern.
- At that time, given that South Australia's comments on the paper had not been included, you indicated that you would like to submit a South Australian paper for consideration at the next AMM in December 2022.

Discussion

- Clause 9(1)
-
-

Stakeholder / regional impacts, consultation and engagement

- Peak industry groups have consistently raised the need to resolve fruit fly related issues of national concern with you (most recently via Citrus SA on 06 October 2022) with a particular focus on all three of the issues identified above.

Management of key risks

- Clause 9(1)

Legislative and/or financial implications

- Clause 9(1)

Attachments

A. Draft Agricultural Minister's Meeting paper on fruit fly

CHIEF EXECUTIVE
Department of Primary Industries and Regions

27/10/2022

CONTACT	Nathan Rhodes
POSITION	Executive Director
DIVISION	Biosecurity
MOBILE and LANDLINE	0412 376 450 / 8429 3135
Cleared by	Nick Secomb - General Manager, Fruit Fly Emergency Response

AGRICULTURE MINISTERS' MEETING

AGENDA PAPER—ITEM X

Resolving three issues of urgent priority for the management of fruit fly in Australia

RECOMMENDATION

1. Clause 5(1)(a)(i)
2.
3.
4.
5.
6.

KEY ISSUES

1. Queensland fruit fly (Qfly) is present in Queensland, New South Wales and Victoria and Mediterranean fruit fly (Medfly) is present Western Australia. There are Pest Free Areas (PFAs) for fruit flies in Tasmania and South Australia's Riverland. Western Australia remains free of Qfly (as well as Medfly in some places such as the Ord River area) and Eastern states remain free of Medfly.

2. In the middle, South Australia is the only mainland fruit fly free state. This 'east-west distribution profile' underpins many international trade agreements and supports horticulture production.

3. These trade protocols, collectively worth around $840 million annually (as reported to National Biosecurity Committee #33 in September 2020 by the Plant Health Committee and National Fruit Fly Council), are contingent on maintaining the east-west distribution profile but are at risk due to increasing pest pressure.

4. South Australia plays a critical role in the maintenance of the east-west distribution profile by preventing Medfly from extending its range eastwards and by preventing Qfly from extending its range westwards.

5. South Australia's ability to maintain its Area Freedom status for fruit fly is under significant pressure. Over the past three years, thirty-one fruit fly outbreaks have been declared in South Australia. Sixteen of those outbreaks have been eradicated, with fifteen still under active management in the SA Riverland. This work has come at a combined cost to the South Australian Government of over $80 million.

6. Sterile Insect Technique (SIT) plays a vital role in eradicating fruit fly when outbreaks are declared in South Australia.

7. SIT programs are acknowledged world-wide as a highly effective tool for managing low-density outbreaks of fruit fly, such as exist from time to time in certain parts of South Australia. SIT is most useful in ensuring complete eradication in the latter stages of outbreaks when wild fly densities are very low. It is also particularly advantageous in eradication responses in urban environments as SIT flies can disperse to areas that operational teams may have trouble accessing, such as back yards of houses with owners that cannot be contacted.

8. Over the past three years, around 720 million sterile Medflies and 620 million sterile Qflies have been deployed as part of eradication responses in South Australia, and this has been critical to the maintenance of South Australia's fruit fly free status and the east-west distribution profile.

<u>National capacity for the Sterile Insect Technique</u>

9. South Australia has shown significant leadership in the development of SIT as an operational tool in Australia and currently manages the only Australian facility that is capable of rearing large numbers of sterile Qfly.

10. Clause 5(1)(a)(i)

11. Clause 5(1)(a)(i)

12. Clause 5(1)(a)(i)

13. Clause 5(1)(a)(i)

14. Clause 5(1)(a)(i)

15. Clause 5(1)(a)(i)

16. Clause 5(1)(a)(i)

Trade issues of concern

17. Fruit fly management principles agreed in Australia's National Fruit Fly Management Protocol (ANFFMP) support domestic and international trade of fruit fly host produce by providing accepted management and biosecurity arrangements that protect importing jurisdictions.

18. The updated ANFFMP, essentially a transcription of the former Fruit Fly Code of Practice (CoP) into a more contemporary format, was endorsed by the Australian Government and all states and territories in December 2021.

19. Two significant trade issues remain unresolved within the ANFFMP

    a) Reviewing the size of the Controlled Movement (Suspension) Zone for Qfly to reduce it from 15 km to 7.5 km in line with international practice.

    b) Developing protocols for use of the Sterile Insect Technique (SIT), including its use in Pest Free Areas as an exclusionary tool.

20. The matter relating to the need to review the size of the Controlled Movement Zone is not new and is something that has had technical support for several years.

21. Halving the size of the Controlled Movement Zone surrounding each declared outbreak more accurately reflects the natural dispersal pattern of wild flies and will bring Australia into line with international norms for the management of fruit fly outbreaks. It

will also significantly reduce the longevity and subsequent impact of each outbreak, given that reinstatement dates are driven by detections of wild fruit flies within each Controlled Movement Zone.

22. Continuing to apply an antiquated buffer distance for each Controlled Movement Zone is resulting in many growers being unnecessarily impacted by outbreaks, outbreak management costs being unnecessarily inflated, outbreaks taking significantly longer to resolve and subsequent impacts on trading partner confidence in the PFA and Australia's fruit fly management systems, including the east-west distribution profile. These impacts are unnecessary given the technical case for a reduced Controlled Movement Zone.

23. As well as its application in eradication, SIT can be used as an exclusionary tool to prevent fruit flies from establishing in PFAs. The use of SIT within PFAs in Australia is currently limited to use as part of an eradication response. This use is described within ANFFMP. This means that fruit fly SIT cannot currently be used as an exclusionary tool within a PFA in Australia without trade implications, despite international recognition and adoption of the practice.

24. International Standards for Phytosanitary Measures (ISPMs) are standards adopted by the Commission on Phytosanitary Measures (CPM), which is the governing body of the International Plant Protection Convention (IPPC). ISPMs are recognised as the standards upon which international trade is based. ISPM 26 was endorsed by the CPM in April 2006 and provides the guidelines for the establishment and maintenance of Pest Free Areas for fruit flies of economic importance.

25. ISPM 26 explicitly allows for the use of SIT as an exclusionary tool in PFAs, and it is used in this manner in countries such as the USA, Chile and Argentina.

26. ANFFMP is based on trade arrangements which were last tested and agreed in 1996 (pre-dating ISPM 26 by 10-years). By not considering and accepting all uses of SIT as outlined in ISPM 26, ANFFMP is not aligned with the most current international standard which has been adopted by the CPM for the establishment and management of PFAs for fruit fly.

27. South Australia proposes a two-step process to use exclusionary SIT in PFAs.

- Exclusionary SIT should be immediately included as an acceptable tool within Australia's National SIT Policy, in alignment with ISPM 26, with operational requirements to be developed and agreed nationally.
- Plant Health Committee, as the body responsible for overseeing ANFFMP, should then agree on the operational measures that must accompany its adoption.

28. Both trade issues are currently under consideration by Australia's technical experts via Australia's Fruit Fly Technical Advisory Committee. These are critical matters that require resolution so that South Australia can more appropriately play its important role in maintaining Australia's fruit fly management system and the east-west distribution profile.

29. Both of these issues should be given high priority on the AFFTAC work plan, with a view to resolving both early in 2023.

30. Clause 5(1)(a)(i) [redacted]

FOR DECISION

South Australia
December 2022

Gonos, Anthea (PIRSA)

Subject: Agriculture Ministers' Meeting [SEC=OFFICIAL]
Location: Microsoft Teams Meeting

Start: Wed 7/12/2022 10:30 AM
End: Wed 7/12/2022 12:30 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: AMM-AGSOC

-----Original Appointment-----
From: AMM-AGSOC <AMM-AGSOC@agriculture.gov.au>
Sent: Tuesday, 11 October 2022 5:00 PM
To: AMM-AGSOC; Minister Watt; 'The Hon. Alannah MacTiernan'; PIRSA:Minister Scriven; 'The Hon. Dugald Saunders'; 'The Hon. Gayle Tierney'; 'The Hon. Jo Palmer'; 'The Hon. Mark Furner'; 'The Hon. Paul Kirby'; 'The Hon. Rebecca Vassarotti'; TAS - Palmer Invitations

Clause 6(1)

[redacted]

Subject: Agriculture Ministers' Meeting [SEC=OFFICIAL]
When: Wednesday, 7 December 2022 11:00 AM-1:00 PM (UTC+10:00) Canberra, Melbourne, Sydney.
Where: Microsoft Teams Meeting

Please note updated agenda (as at 9.30am 7 Dec) attached (changes – Item 6, Lead Chair (Minister Tierney is not attending) and Items 9 and 10, Format column corrected with 9 showing a & b as paper, and 10 showing a & b as paper and c as verbal)

Good afternoon

On behalf of the Agriculture Ministers' Meeting Chair, Senator the Hon Murray Watt, we would like to invite you to the next Agriculture Ministers' Meeting. Please keep supporting officials to a minimum number.

The meeting will be held via Microsoft Teams, please use the details below:

Microsoft Teams meeting

Join on your computer, mobile app or room device
Click here to join the meeting

Meeting ID: 475 264 153 749
Passcode: osHyLw
Download Teams | Join on the web

Join with a video conferencing device
597361658@t.plcm.vc
Video Conference ID: 136 398 384 3
Alternate VTC instructions

Or call in (audio only)
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OFFICIAL

AGRICULTURE MINISTERS' MEETING

AGENDA

7 December 2022

11am – 1pm (AEDT)

Microsoft Teams

Item No.	Description	Format	Lead	Timing
1	Welcome and introductions	Verbal	Chair	5 mins
2	Flood impacts	Verbal	Chair	10 mins
3	Actions arising from previous meeting	Paper	Chair	5 mins
Items for decision				
4	Draft AMM work plan and outcomes of the Ministerial Forums Review	Paper	Chair	10 mins
5	National Drought Agreement Review and Report	Paper	Chair	15 mins
6	Climate change priority projects	Verbal	Chair	10 mins
7	Fruit fly	Paper	Minister Scriven	10 mins
Items for discussion				
8	Animal Welfare a. Current national standards and guidelines for animal welfare b. Other animal welfare matters i. Establishment of Inspector-General for Animal Welfare and Live Animal Exports ii. Information sharing on animal welfare incident reports	a. Verbal b. Verbal	Chair	15 mins
9	Biosecurity a. Update on National Biosecurity Strategy implementation b. Preparedness and response update	a. Paper b. Paper	Chair	10 mins

Item No.	Description	Format	Lead	Timing
10	Traceability a. Electronic identification for sheep and goats b. National Horse Traceability Working Group report c. Using traceability to further export value	a. Paper b. Paper c. Verbal	Chair	10 mins
11	Farm Debt Mediation discussion	Verbal	Chair	5 mins
12	Face-to-face meeting in Western Australia	Verbal	Chair / Minister MacTiernan	5 mins
13	Other business	Verbal	Chair	10 mins

Government of South Australia
Department of Primary Industries and Regions

Minute to
Minister for Primary Industries and Regional Development
Minister for Forest Industries

Ref: A5848779

For	**Signature**
Critical Date	**11 May 2023** (due date for AMM responses)
Subject	**Agriculture Minister's Meeting (AMM) Out of Session Papers**

Synopsis

The Department of Agriculture, Fisheries and Forestry (DAFF) has circulated five out of session Agriculture Minister's Meeting (AMM) papers for AMM members' consideration and response (Attachments A-E). DAFF is seeking AMM members' responses by Thursday 11 May 2023, ahead of the next AMM on Monday 15 May 2023. It is requested that you sign the attached proformas (Attachments F-J) and return them directly, via email, to DAFF.

Recommendations

That you:

1. Sign and return the attached proformas (Attachments F-J).

SIGNED / NOT SIGNED

Hon Clare Scriven MLC
Minister for Primary Industries and Regional Development
Minister for Forest Industries

11 / 5 / 2023

Ministerial Comments -

Background

- The next Agriculture Ministers' Meeting (AMM) will take place on Monday 15 May 2023, via teleconference.
- To ensure focus on key priorities during AMM, the Department of Agriculture, Fisheries and Forestry (DAFF) Secretariat has circulated the following Out-of-Session (OOS) papers for AMM members' consideration and response:
    - AMM OOS 02/2023 – Agriculture Ministers' Meeting 2023 Workplan - paper prepared by DAFF
    - AMM OOS 03/2023 – National Biosecurity Strategy Implementation - paper prepared by DAFF
    - AMM OOS 04/2023 – National Funding for the Australian Mediterranean and Queensland Fruit Fly Sterile Insect Technique Facilities - paper prepared by the Department of Primary Industries and Regions (PIRSA)
    - AMM OOS 05/2023 – Cyber Security Within the Agriculture, Fisheries and Forestry Sectors - paper prepared by DAFF
    - AMM OOS 06/2023 – Publication of the National Red Imported Fire Ant Eradication Program Strategic Review August 2021 - paper prepared by Queensland Department of Agriculture and Fisheries on behalf of the National Red Imported Fire Ant Eradication Program Steering Committee.
- The OOS papers were emailed directly to your office by the AMM Secretariat on Thursday 27 April 2023.
- The AMM Secretariat is seeking signed proforma responses from all AMM members by Thursday 11 May 2023.
- The OOS papers have all previously been considered by the Agriculture Senior Officials' Committee (AGSOC) and endorsed for consideration by AMM. Mehdi Doroudi is South Australia's AGSOC representative.

Discussion

<u>AMM OOS 02/2023 – Agriculture Ministers' Meeting 2023 Workplan</u>

- The Agriculture Ministers' Meeting's (AMM's) priorities for 2023, as agreed the last AMM on 7 December 2023, are biosecurity, climate change and workforce matters.
- AMM will also consider matters such as farm animal welfare matters of national significance, oversight of the National Drought Agreement and reform of agricultural and veterinary chemicals regulation. These are outlined in the AMM Annual Report to National Cabinet.
- The AMM 2023 Workplan translates the priorities and forward workplan in the annual report into a high-level overview of AMM's actions, roles and responsibilities, and timelines for the coming year. This is the first AMM workplan under National Cabinet's new architecture for ministerial forums.
- The AMM Workplan was developed in consultation with Commonwealth department areas with responsibility for the issues and was endorsed by the Agriculture Senior Officials' Committee on 28 February 2023.
- AMM will be required to report on progress against this workplan in early 2024.

- It is recommended that you agree to the Agriculture Ministers' Meeting 2023 Workplan.

AMM OOS 03/2023 – National Biosecurity Strategy Implementation

- The National Biosecurity Strategy (NBS) which was released on 9 August 2022, commits to establishing a National Biosecurity Strategy Implementation Committee (NIC), which will work together with the National Biosecurity Committee (NBC) to develop, oversee, implement, monitor, and review the National Implementation Plan and National Action Plan during a 6-to-12-month planning stage.
- Clause 5(1)(a)(i)

AMM OOS 04/2023 – National Funding for the Australian Mediterranean and Queensland Fruit Fly Sterile Insect Technique Facilities

- Clause 5(1)(a)(i)

- It is recommended that you note that the:
    - Agriculture Ministers' Meeting (AMM - 07 December 2022) directed the National Biosecurity Committee (NBC) to provide advice on a national funding model to maintain Medfly and Qfly SIT capacity in Australia.
    - That the NBC has considered a number of funding models proposed by South Australia but have not yet been able to agree on a preferred funding model.
    - That there are diverse views amongst NBC members on the best design for a national funding model to maintain national SIT capacity and that the NBC has asked that more work be done before a national funding model can be considered again, with a stronger consideration of industry contributions.
- Clause 5(1)(a)(i)
- [redacted]

AMM OOS 05/2023 – Cyber Security Within the Agriculture, Fisheries and Forestry Sectors

- The increasing uptake of technology in the agriculture, fisheries, and forestry industries comes with increasing cyber risks.
- DAFF is working with the Department of Home Affairs' Cyber and Infrastructure Security Centre (CISC) to conduct a risk profile of the food and grocery sector, including agriculture. The aim is to identify the risks and possible protective methods that the sector can use to enhance cyber security.
- DAFF and CISC will consult with jurisdictions throughout the project and further official level meetings are scheduled for May 2023.
- CISC is likely to call upon jurisdictions to contribute input regarding their respective cyber security challenges.
- Further updates about progress will be provided at future AMMs and the project report and findings will be circulated in due course.
- It is recommended that you note the:
    - Increasing digitalisation of the agriculture, fisheries and forestry sectors and subsequent cybersecurity threats.
    - Sector is to undergo a cybersecurity risk profiling exercise by the Cyber and Infrastructure Security Centre and the Australian Cyber Security Centre.
- It is recommended that you agree to discuss future reporting paper(s) when available including any recommendations.

AMM OOS 06/2023 – Publication of the National Red Imported Fire Ant Eradication Program Strategic Review August 2021

- In July 2017, the then Agricultural Ministers' Forum agreed to implement the National Red Imported Fire Ant Eradication Program Ten-Year Eradication Plan with funding of $411.4 million over ten years, overseen by the Program's Steering Committee.
- On 19 January 2021, the Steering Committee concluded that the Program could not achieve eradication within the ten-year timetable and agreed funding envelope and as such the Steering Committee commissioned an independent review of the

National Red Imported Fire Ant Eradication Program. AGSOC approved continuation of the Program while an independent review was completed.

- On 3 September 2021, the Independent Review Panel, delivered its 'National Red Imported Fire Ant Eradication Program Strategic Review August 2021' (the Review), which identified that the Program is significantly slowing the spread of Red Imported Fire Ants, but it will not be able to eradicate or contain the species within the scope and budget of the Ten-Year Plan. The Panel found that with a fixed budget, and delayed implementation, the Steering Committee and the Program's management have been continually forced to make budget driven decisions, which have prioritised efficiency over effectiveness.
- On 30 September 2021, the Steering Committee finalised their response to the Review and supported vision to eradicate by 2032 as recommended by the panel. The Steering Committee have since advised that the Review is to be published.
- The Steering Committee is currently overseeing the preparation of a four-year eradication response plan for Agriculture Ministers' consideration that takes into consideration the findings of the strategic review. The eradication response plan will be progressed for AMM's consideration.
- The Queensland Government approved funding of $37.1 million over five years from 2021–22 for a Fire Ant Suppression Taskforce (FAST). The FAST will partner with impacted agencies (whether they be Local, State or Commonwealth Government), as well as industry and the community to build self-management capabilities.
- Publication of the Review is desirable to demonstrate transparency and commitment to the national eradication effort and allow the publication of the Steering Committee minutes.
- It is recommended that you note the intention of the National Red Imported Fire Ant Eradication Program's Steering Committee, to publish the 'National Red Imported Fire Ant Eradication Program Strategic Review August 2021'.
- It is also recommended that you highlight that given the significant increase in cost of the proposed response plan, some assessment of confidence of success of the response is necessary to accompany advice that the RIFA infestation is still technically feasible to eradicate.
- PIRSA has previously provided this feedback through AGSOC and the NBC.

Stakeholder / regional impacts, consultation and engagement

- Nil

Management of key risks

- Nil

Legislative and/or financial implications

- None

Attachments

A. AMM OOS paper 02/2023 – AMM Workplan 2023
B. AMM OOS paper 03/2023 – National Biosecurity Strategy Implementation
C. AMM OOS paper 04/2023 – National funding for the Australian Mediterranean and Queensland Fruit Fly Sterile Insect Technique Facilities
D. AMM OOS paper 05/2023 – Cyber security within the Agriculture, Fisheries and Forestry sector
E. AMM OOS paper 06/2023 – Publication of the National Red Imported Fire Ant Eradication Program Strategic Review August 2021
F. Response proforma – AMM OOS 02/2023
G. Response proforma – AMM OOS 03/2023
H. Response proforma – AMM OOS 04/2023
I. Response proforma – AMM OOS 05/2023
J. Response proforma – AMM OOS 06/2023

for

CHIEF EXECUTIVE
Department of Primary Industries and Regions

5/5/2023

CONTACT	Jo Collins
POSITION	Executive Director
DIVISION	Industry, Strategy and Partnerships
MOBILE and LANDLINE	0408 000 650
Cleared by	Stephen Poskett, Assistant General Manager, Strategy and Policy

AGRICULTURE MINISTERS' MEETING

RESPONSE TO OUT-OF-SESSION AGENDA PAPER

To: AMM SECRETARIAT **[FOR DECISION]**

AMM OOS 02/2023

AMM WORKPLAN

Attached is an out-of-session paper for consideration by Agriculture Ministers' Meeting members.

Please indicate below your response to the recommendations, provide your comments if required, sign and return to the Secretariat at AMM-AGSOC@agriculture.gov.au by **COB 11 MAY 2023**.

RECOMMENDATIONS	**ADVICE**
That ministers: 1. **AGREE** to the Agriculture Ministers' Meeting 2023 Workplan (**Attachment A**).	**AGREED** [✓] **NOT AGREED** [ ] Refer comments [ ]

Comments

Minister's Name: Clare Scriven

Signature: C.M. Scriven

Date: 11 May 2023

Jurisdiction: South Australia

Contact Officer: .....

AGRICULTURE MINISTERS' MEETING

RESPONSE TO OUT-OF-SESSION AGENDA PAPER

To: AMM SECRETARIAT **[FOR DECISION]**

AMM OOS 03/2023

NATIONAL BIOSECURITY STRATEGY IMPLEMENTATION

Attached is an out-of-session paper for consideration by Agriculture Ministers' Meeting members.

Please indicate below your response to the recommendations, provide your comments if required, sign and return to the Secretariat at AMM-AGSOC@agriculture.gov.au **by COB 11 MAY 2023.**

RECOMMENDATIONS	**ADVICE**
That ministers:	
1. **NOTE** the progress in relation to the National Biosecurity Strategy (NBS) implementation.	**NOTED** [✓] **NOT NOTED** [ ] Refer comments [ ]
2. **AGREE** to adjustments to the timeframe for the provision of the final National Action Plan, to provide the National Biosecurity Strategy Implementation Committee (NIC) with flexibility to progress a phased approach to the implementation of the NBS.	**AGREED** [✓] **NOT AGREED** [ ] Refer comments [ ]

Comments

Minister's Name: Clare Scriven

Signature: C.M. Scriven

Date: 11 May 2023

Jurisdiction: South Australia

Contact Officer: .....

AGRICULTURE MINISTERS' MEETING

RESPONSE TO OUT-OF-SESSION AGENDA PAPER

To: AMM SECRETARIAT **[FOR DECISION]**

AMM OOS 04/2023

NATIONAL FUNDING FOR THE AUSTRALIAN MEDITERRANEAN AND QUEENSLAND FRUIT FLY STERILE INSECT TECHNIQUE FACILITIES

Attached is an out-of-session paper for consideration by Agriculture Ministers' Meeting members.

Please indicate below your response to the recommendations, provide your comments if required, sign and return to the Secretariat at AMM-AGSOC@agriculture.gov.au by **COB 11 MAY 2023**.

RECOMMENDATIONS	ADVICE	
That ministers:		
1. **NOTE** that Agriculture Ministers' Meeting (AMM - 07 December 2022) directed the National Biosecurity Committee (NBC) to provide advice on a national funding model to maintain Mediterranean and Queensland fruit fly (Medfly and Qfly) Sterile Insect Technique (SIT) capacity in Australia.	**NOTED** **NOT NOTED** Refer comments	[✓] [ ] [ ]
2. **NOTE** that the NBC has considered a number of funding models proposed by South Australia but have not yet been able to agree on a preferred funding model.	**NOTED** **NOT NOTED** Refer comments	[✓] [ ] [ ]
3. **NOTE** that there are diverse views amongst NBC members on the best design for a national funding model to maintain national SIT capacity and that the NBC has asked that more work be done before a national funding model can be considered again, with a stronger consideration of industry contributions.	**NOTED** **NOT NOTED** Refer comments	[✓] [ ] [ ]
4. **AGREE** that further update should be provided to Agriculture Ministers' Meeting once a resolution has been reached and a recommendation is ready for consideration.	**AGREED** **NOT AGREED** Refer comments	[✓] [ ] [ ]

Comments

Minister's Name: Clare Scriven

Signature: C.M. Scriven

Date: 11 May 2023

Jurisdiction: South Australia

Contact Officer: .....

AGRICULTURE MINISTERS' MEETING

RESPONSE TO OUT-OF-SESSION AGENDA PAPER

To: AMM SECRETARIAT **[FOR DECISION]**

AMM OOS 05/2023

CYBER SECURITY WITHIN THE AGRICULTURE, FISHERIES AND FORESTRY SECTORS

Attached is an out-of-session paper for consideration by Agriculture Ministers' Meeting members.

Please indicate below your response to the recommendations, provide your comments if required, sign and return to the Secretariat at AMM-AGSOC@agriculture.gov.au by **COB 11 May 2023**.

RECOMMENDATIONS	**ADVICE**
That ministers:	
1. **NOTE** the increasing digitalisation of the agriculture, fisheries and forestry sectors and subsequent cybersecurity threats.	**NOTED** [✓] **NOT NOTED** [ ] Refer comments [ ]
2. **NOTE** that the sector is to undergo a cybersecurity risk profiling exercise by the Cyber and Infrastructure Security Centre and the Australian Cyber Security Centre.	**NOTED** [✓] **NOT NOTED** [ ] Refer comments [ ]
3. **AGREE** to discuss future reporting paper(s) when available including any recommendations.	**AGREED** [✓] **NOT AGREED** [ ] Refer comments [ ]

Comments

Minister's Name: Clare Scriven

Signature: C.M. Scriven

Date: 11 May 2023

Jurisdiction: .....

Contact Officer: .....

AGRICULTURE MINISTERS' MEETING

RESPONSE TO OUT-OF-SESSION AGENDA PAPER

To: AMM SECRETARIAT **[FOR NOTING]**

AMM OOS 06/2023

PUBLICATION OF THE NATIONAL RED IMPORTED FIRE ANT ERADICATION PROGRAM STRATEGIC REVIEW AUGUST 2021

Attached is an out-of-session paper for consideration by Agriculture Ministers' Meeting members.

Please indicate below your response to the recommendations, provide your comments if required, sign and return to the Secretariat at AMM-AGSOC@agriculture.gov.au **by COB 11 MAY 2023.**

RECOMMENDATIONS	**ADVICE**
That ministers: 1. **NOTE** the intention of the National Red Imported Fire Ant Eradication Program's Steering Committee, to publish the 'National Red Imported Fire Ant Eradication Program Strategic Review August 2021'.	**NOTED** [✓] **NOT NOTED** [ ] Refer comments [ ]

Comments

Minister's Name: Clare Scriven

Signature: C.M. Scriven

Date: 11 May 2023

Jurisdiction: South Australia

Contact Officer: .....

Gonos, Anthea (PIRSA)

Subject: AMM 01/2023 Agriculture Ministers' Meeting [SEC=OFFICIAL]
Location: Microsoft Teams Meeting

Start: Mon 15/05/2023 1:00 PM
End: Mon 15/05/2023 2:30 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: AMM-AGSOC

-----Original Appointment-----
From: AMM-AGSOC <AMM-AGSOC@agriculture.gov.au>
Sent: Wednesday, 26 April 2023 9:19 AM
To: AMM-AGSOC; Kalashnikoff, Deborah (PIRSA); Senator The Hon Murray Watt; PIRSA:Minister Scriven; The Hon Jackie Jarvis; The Hon Jo Palmer; The Hon Jo Palmer ; The Hon Tara Moriarty; The Hon. Gayle Tierney; The Hon. Mark Furner; The Hon. Paul Kirby; The Hon. Rebecca Vassarotti
Clause 6(1)

Subject: AMM 01/2023 Agriculture Ministers' Meeting [SEC=OFFICIAL]
When: Monday, 15 May 2023 1:30 PM-3:00 PM (UTC+10:00) Canberra, Melbourne, Sydney.
Where: Microsoft Teams Meeting

-----Original Appointment-----
From: AMM-AGSOC <AMM-AGSOC@agriculture.gov.au>
Sent: Wednesday, 26 April 2023 8:38 AM
To: AMM-AGSOC; Senator The Hon Murray Watt; PIRSA:Minister Scriven; The Hon Jackie Jarvis; The Hon Jo Palmer; The Hon Jo Palmer ; The Hon Tara Moriarty; The Hon. Gayle Tierney; The Hon. Mark Furner; The Hon. Paul Kirby; The Hon. Rebecca Vassarotti
Clause 6(1)

Subject: AMM 01/2023 Agriculture Ministers' Meeting [SEC=OFFICIAL]
When: Monday, 15 May 2023 1:30 PM-3:00 PM (UTC+10:00) Canberra, Melbourne, Sydney.
Where: Microsoft Teams Meeting

Good morning,

On behalf of the Agriculture Ministers' Meeting Chair, Senator the Hon Murray Watt, we would like to invite you to the first Agriculture Ministers' Meeting. Please keep supporting officials to a minimum number.

The meeting will be held via Microsoft Teams, please use the details below:

Microsoft Teams meeting

Join on your computer, mobile app or room device
Click here to join the meeting

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Passcode: r3WBpj
Download Teams | Join on the web

Join with a video conferencing device
597361658@t.plcm.vc
Video Conference ID: 137 556 577 4
Alternate VTC instructions

Or call in (audio only)
+61 2 7208 4605,,33836397# Australia, Sydney
Phone Conference ID: 338 363 97#
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Learn More | Meeting options

Government of South Australia
Department of Primary Industries and Regions

MINISTER'S OFFICE
15 SEP 2022
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EA198101

Minute to
Minister for Primary Industries and Regional Development
Minister for Forest Industries

Ref: A5620552

For	**Signature**
Critical Date	**19 September 2022** (response date requested by AMM-AGSOC secretariat)
Subject	**AMM Out-of-Session Paper 01/2022 – Endorsement of Animalplan 2022-27 and Aquaplan 2022-27**

Synopsis

An Out of Session Agriculture Ministers' Meeting (AMM) paper (AMM OOS 01-2022) has been sent for your consideration (Attachment A). The paper seeks AMM endorsement of both the Animalplan 2022-27 and Aquaplan 2022-27. Both plans are provided at Attachments C and D.

Recommendations

That you:

1. Complete and sign the attached Response Proforma Form (Attachment B) indicating that you endorse both the Animalplan 2022-27 and Aquaplan 2022-27.

SIGNED / NOT SIGNED

C.M. Scriven

Hon Clare Scriven MLC
Minister for Primary Industries and Regional Development
Minister for Forest Industries
29/9/2022

Ministerial Comments

Background

- The Australian Government Department of Agriculture, Forestry and Fisheries (DAFF) along with state and territory governments and industry have been working to identify priorities for strengthening Australia's animal and aquatic animal health management systems.

- The outcomes of this work are now finalised and the priorities detailed in two plans: Animalplan 2022 to 2027, Australia's national action plan for terrestrial agricultural animal health, and Aquaplan 2022–2027, Australia's national strategic plan for aquatic animal health.

- Whilst Animalplan 2022–2027 and Aquaplan 2022–2027 share the same aims, purpose and principles for their development and implementation, separate plans were necessary to account for the different priorities.

- These plans have been endorsed by Agriculture Senior Officials Committee (AGSOC), Animal Health Committee (AHC) and National Biosecurity Committee (NBC).

Discussion

- Both Animalplan 2022–2027 and Aquaplan 2022-2027 have been designed to attract financial investment and in-kind contributions to their priority objectives and activities.

Animalplan 2022 to 2027

- The South Australian Chief Veterinary Officer (CVO) sits on the Steering Committee for Animalplan as a representative of a smaller jurisdiction.

- There is no funding agreement that underpins achieving the objectives of Animalplan and no direct financial implication to South Australia or the Department of Primary Industries and Regions (PIRSA) written in the plan.

- This plan will assist DAFF, states and territories and industry to focus on areas of improvement that may be co-funded through a range of mechanisms that are already in place. This includes funding from Rural Research and Development Corporations (RDC) and DAFF funding, including new announcements, or in-kind support.

- Opportunities may arise through projects that PIRSA contributes in-kind to through the core business of government. There may also be funding to support PIRSA activities where there is a national benefit, such as the current DAFF funding for OneBiosecurity improvements which will be listed as a AnimalPLAN project, or funding for SA towards AUSPestCheck implementation, a national data management system that is being trialled by DAFF for Animal data reporting.

- The availability of discretionary funding available for projects of national benefit may assist with attracting DAFF/national industry co-funding for projects that are based in South Australia.

- PIRSA Animal Health does not have any discretionary funding and can only leverage with in-kind contributions currently.

Aquaplan 2022 to 2027

- The objectives outlined in Aquaplan 2022-27 are relevant to South Australia and may provide opportunities for external funding to progress a number of the detailed actions.
- One of these is Objective 6: Veterinary Medicines. PIRSA has been externally funded to lead a national project: Fisheries Research and Development Corporation (FRDC) project 2020-094 which is a three-year project (ending in 2024) aimed to help progress activity 6.2 – Aquatic Animal minor use permit applications.
    - As part of FRDC 2020-094, the Sub-Committee on Aquatic Animal Health (SCAAH) Aquatic Veterinary Medicines Working Group was reformed. The role of this Working Group is to:
        - Facilitate progress of Aquaplan 2022-2027 activity 6.2: Aquatic animal minor use applications, by gathering and providing information on aquatic veterinary medicine use, priorities and issues in their jurisdiction as required.
        - Provide guidance and input on Aquaplan 2022-2027 activities 6.1: Understand existing veterinary medicine use, and 6.3: Establish antimicrobial resistance baselines for aquaculture sectors as required. For example, reviewing and approving the activity project plans.
- Once endorsed by AMM a media release will be prepared to launch the plans and to raise their profile among stakeholders.

Attachments

A. Attachment A - AMM OOS Paper 01-2022 Animalplan and Aquaplan
B. Attachment B - AMM OOS 01 - 2022 - Response Proforma template - Animalplan and Aquaplan
C. Attachment C - Animalplan 2022 to 2027 - AMM Attachment A
D. Attachment D - Aquaplan 2022-2027 (Designed Version 220801) - AMM Attachment B

CHIEF EXECUTIVE
Department of Primary Industries and Regions

14/09/2022

CONTACT	Jo Collins
POSITION	Executive Director
DIVISION	Industry, Strategy and Partnerships
MOBILE and LANDLINE	0408 000 650
Cleared by	Stephen Poskett, A/General Manager Strategy and Policy

AGRICULTURE MINISTERS' MEETING

RESPONSE TO OUT-OF-SESSION AGENDA PAPER

To: AMM SECRETARIAT **FOR DECISION**

AMM OOS 01/2022

ENDORSEMENT OF ANIMALPLAN 2022–2027 AND AQUAPLAN 2022–2027

Attached is an out-of-session paper for consideration by Agriculture Ministers' Meeting members.

Please indicate **your response** to the recommendations in the space on this form, provide additional comments if required and sign and return to the secretariat (AMM Secretariat) **by COB on Monday, 19 September 2022.**

RECOMMENDATIONS	ADVICE
That ministers:	
1. **ENDORSE** Animalplan 2022–2027, Australia's first national action plan for terrestrial agricultural animal health (**Attachment A**).	**ENDORSED** [✓] **NOT ENDORSED** [ ] Refer comments [ ]
2. **ENDORSE** AQUAPLAN 2022–2027, Australia's fourth national strategic plan for aquatic animal health (**Attachment B**).	**ENDORSED** [✓] **NOT ENDORSED** [ ] Refer comments [ ]

Comments

Minister's Name: Clare Scriven

Signature: C M Scriven

Date: 29.9. 2022

Jurisdiction: South Australia

Contact Officer: Stephen Poskett (08) 8429 0654

AGRICULTURE MINISTERS' MEETING

OUT-OF-SESSION PAPER—AMM OOS 01/2022

DUE BY COB 19 SEPTEMBER 2022

ENDORSEMENT OF ANIMALPLAN 2022–2027 AND AQUAPLAN 2022–2027

RECOMMENDATION/S

That ministers:

1. **ENDORSE** Animalplan 2022–2027, Australia's first national action plan for terrestrial agricultural animal health (**Attachment A**)
2. **ENDORSE** AQUAPLAN 2022–2027, Australia's fourth national strategic plan for aquatic animal health (**Attachment B**).

KEY ISSUES

1. Two national 5-year plans for terrestrial and aquatic animal health are provided for Ministers' consideration and endorsement.
2. The Australian Government Department of Agriculture, Forestry and Fisheries (DAFF) has worked closely with state and territory governments and animal industry partners to identify priorities for strengthening Australia's animal and aquatic animal health management systems. These priorities are outlined in two plans: Animalplan 2022 to 2027, Australia's National Action Plan for Terrestrial Agricultural Animal Health (**Attachment A**); and AQUAPLAN 2022–2027, Australia's National Strategic Plan for Aquatic Animal Health (**Attachment B).**
3. Each plan provides a shared vision for industry and governments to prioritise investment and have been endorsed by terrestrial and aquatic animal industry national peak bodies and by governments, through Animal Health Committee, the National Biosecurity Committee and the Agriculture Senior Officials Committee. Ministerial endorsement of the plans has been identified by industry and governments as important to demonstrate governments' commitment to the plans and to give confidence to industry and potential investors.
4. The plans align with, and will contribute to, other relevant national strategies and action plans such as the National Farmers' Federation 2030 Roadmap for a $100 billion industry, the Commonwealth Biosecurity 2030 Roadmap and the forthcoming National Biosecurity Strategy. For example, both plans will contribute to strategic action areas of the Commonwealth Biosecurity 2030 roadmap by generating greater shared responsibility through improved awareness and understanding; lifting preparedness, response, and resilience to exotic aquatic and terrestrial animal disease incursions; and advancing detection and diagnostic technologies.
5. By improving components of Australia's terrestrial and aquatic animal health management systems, these plans will contribute to industry productivity and profitability, and the ongoing management of animal health and welfare. Each plan has

identified objectives based on the different components of the biosecurity system (e.g., surveillance, diagnostic capability, emergency preparedness) and specific activities that will contribute to achieving each objective.

6. Separate plans were necessary to account for the different priorities among aquatic and terrestrial animal health systems and stakeholders. However, Animalplan 2022–2027 and AQUAPLAN 2022–2027 share the same aims, purpose and principles for their development and implementation including: a) a focus on common national priorities, b) a focus on strategic issues that will provide lasting benefit, c) identifying activities that have defined, achievable and measurable outcomes, and d) providing a framework of agreed national priorities to attract and prioritise investment.

7. Animalplan 2022–2027 is the first national action plan for terrestrial agricultural animal health and has drawn on the principles of AQUAPLAN whilst also being tailored to the specific needs of animal industries, government partners and stakeholders.

8. AQUAPLAN 2022–2027 is the fourth national strategic plan for aquatic animal health. There is a successful history of delivering strategic plans to improve the aquatic animal health system, commencing from 1998 and supported by stakeholders through the development and review of the previous plans.

9. The development of Animalplan 2022–2027 and AQUAPLAN 2022–2027 has involved extensive consultation among industry and government stakeholders, aimed at identifying the highest common priorities for collective action.

10. Animalplan 2022–2027 and AQUAPLAN 2022-2027 are designed to attract financial investment and in-kind contributions to their priority objectives and activities.

11. Following endorsement by ministers, a media release will be prepared to launch the plans and to raise their profile among stakeholders.

12. Seafood Directions is the principal conference of the Australian seafood industry and provides an ideal opportunity to launch AQUAPLAN 2022-2027. Pending endorsement, the launch of AQUAPLAN 2022-2027 may be targeted for this conference (13-15 September 2022).

FOR DECISION

Attachment A: Animalplan 2022–2027
Attachment B: AQUAPLAN 2022–2027

Agriculture Senior Officials' Committee / Department of Agriculture, Fisheries and Forestry

September 2022

AGRICULTURE MINISTERS' MEETING

RESPONSE TO OUT-OF-SESSION AGENDA PAPER

To: AMM SECRETARIAT **FOR DECISION**

AMM OOS 01/2022

ENDORSEMENT OF ANIMALPLAN 2022–2027 AND AQUAPLAN 2022–2027

Attached is an out-of-session paper for consideration by Agriculture Ministers' Meeting members.

Please indicate **your response** to the recommendations in the space on this form, provide additional comments if required and sign and return to the secretariat (AMM Secretariat) **by COB on Monday, 19 September 2022.**

RECOMMENDATIONS	ADVICE
That ministers: 1. **ENDORSE** Animalplan 2022–2027, Australia's first national action plan for terrestrial agricultural animal health (**Attachment A**).	**ENDORSED** [ ] **NOT ENDORSED** [ ] Refer comments [ ]
2. **ENDORSE** AQUAPLAN 2022–2027, Australia's fourth national strategic plan for aquatic animal health (**Attachment B**).	**ENDORSED** [ ] **NOT ENDORSED** [ ] Refer comments [ ]

Comments

Minister's Name: .....

Signature: .....

Date: 2022

Jurisdiction: .....

Contact Officer: .....

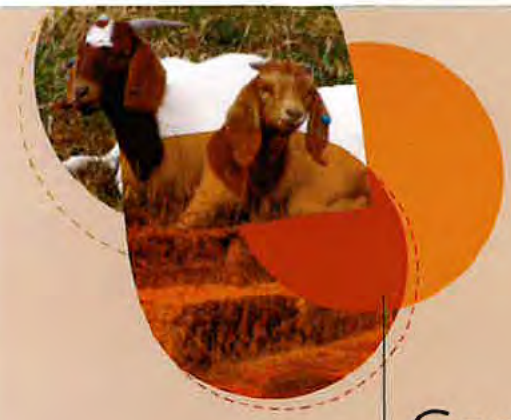
Australian Government

ANIMALPLAN 2022 to 2027

Australia's National Action Plan for Terrestrial Agricultural Animal Health

Foreword

By Australian Government Minister for Agriculture, Fisheries and Forestry.



Contents

Cataloguing data

This publication (and any material sourced from it) should be attributed as: DAFF 2022, Animalplan 2022 to 2027: Australia's National Action Plan for Terrestrial Agricultural Animal Health, Department of Agriculture, Fisheries and Forestry, Canberra, July. CC BY 4.0.

ISBN 978-1-76003-444-3

This publication is available at **www.agriculture.gov.au/animal/health/animal-plan**

Department of Agriculture, Fisheries and Forestry
GPO Box 858 Canberra ACT 2601
Telephone 1800 900 090
Web agriculture.gov.au

Introduction

Animalplan 2022 to 2027 is Australia's first national action plan to strengthen our national agricultural animal health system. Animalplan consolidates agreed animal health activities across Australia's terrestrial animal agricultural industries and has been developed through collaboration between governments, industry organisations, animal health experts and other stakeholders. A list of organisations consulted during the development of Animalplan is in Appendix A.

Australia has a favourable animal health status free from the burden of many significant animal diseases. This has been underpinned by an established and well-developed national animal health system supported by robust public–private partnerships. However, continuous improvement jointly between production industries and government agencies is required to ensure this system remains fit for purpose through 2030 and beyond and supports trade and market access outcomes.

Animalplan will strengthen Australia's arrangements for managing animal health in agriculture by increasing productivity and reducing production losses incurred as a result of agricultural pests and diseases. This will contribute to biosecurity system transformation outlined in CSIRO's Australia's Biosecurity Future report and also assist in achieving the National Farmers' Federation's (NFF) vision for Australian agriculture to exceed $100 billion in farm-gate output by 2030 (NFF 2019).

Animalplan was endorsed by the Animal Health Australia (AHA) Industry Forum, the National Biosecurity Committee, the Agriculture Senior Officials' Committee and the Agriculture Ministers' Forum, and will contribute to:

1. improving Australia's preparedness and ability to respond to emergency animal diseases (EADs)
2. improving Australia's surveillance and diagnostic capacity and capability for animal pests and diseases
3. improving the adoption and implementation of biosecurity practices throughout the terrestrial animal industry supply chain
4. promoting a collaborative approach to antimicrobial resistance
5. improving animal welfare outcomes relevant to emergency scenarios
6. supporting the implementation of industry sustainability frameworks and plans
7. improving the integrity of animal health systems.

Implementation of Animalplan activities will be a shared responsibility between government and non-government organisations. Progress on activities will be reported on the Animalplan web page.

Scope

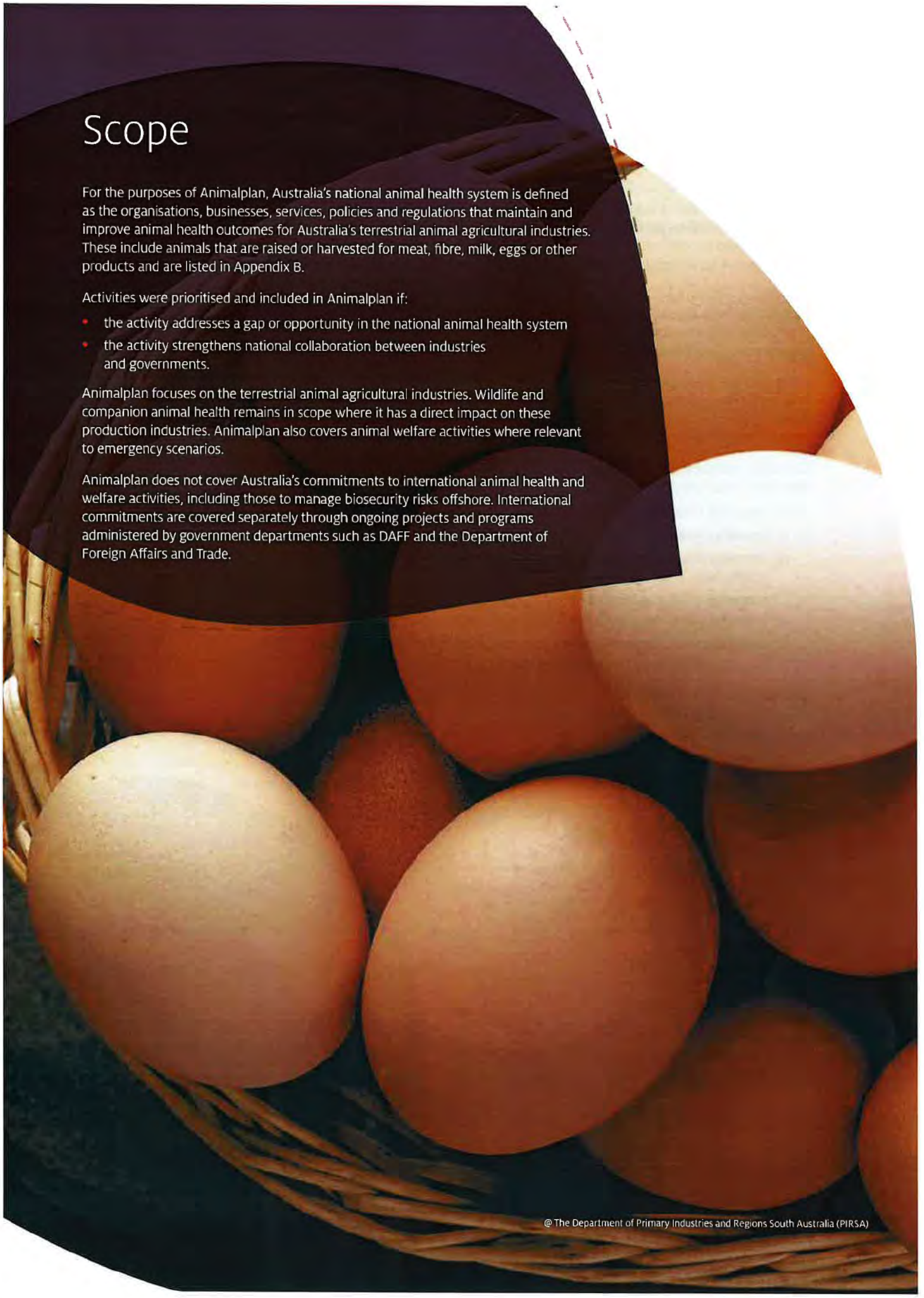
For the purposes of Animalplan, Australia's national animal health system is defined as the organisations, businesses, services, policies and regulations that maintain and improve animal health outcomes for Australia's terrestrial animal agricultural industries. These include animals that are raised or harvested for meat, fibre, milk, eggs or other products and are listed in Appendix B.

Activities were prioritised and included in Animalplan if:

- the activity addresses a gap or opportunity in the national animal health system
- the activity strengthens national collaboration between industries and governments.

Animalplan focuses on the terrestrial animal agricultural industries. Wildlife and companion animal health remains in scope where it has a direct impact on these production industries. Animalplan also covers animal welfare activities where relevant to emergency scenarios.

Animalplan does not cover Australia's commitments to international animal health and welfare activities, including those to manage biosecurity risks offshore. International commitments are covered separately through ongoing projects and programs administered by government departments such as DAFF and the Department of Foreign Affairs and Trade.



1. Related strategies and plans

Many government and industry organisations have already developed animal health strategic plans for a single industry, region or jurisdiction. Similarly, national strategies and plans also exist or are under development covering a range of areas, including the National Biosecurity Strategy and issue-specific strategies for surveillance, diagnostics, and antimicrobial resistance. Animalplan does not duplicate or supersede these plans. Rather, it references and links these in a single strategic action plan for terrestrial agricultural animal health.

Appendix C outlines the specific areas of alignment between Animalplan and these existing strategies, plans and frameworks.

2. Implementation, governance and funding for Animalplan activities

The Animalplan Steering Committee, with representation from government and industry, will further prioritise, champion and oversee the implementation of Animalplan activities, and provide updates to AHA Members' Forum and National Biosecurity Committee.

Animalplan is a framework of agreed national priorities and is expected to attract funding and in-kind contributions. A diverse representation of industry and government members on the steering committee will facilitate open discussions about funding opportunities for priority activities.

Activity leads have agreed to champion and drive their individual activities, in collaboration with other industry and government organisations. In collaboration with the steering committee, activity leads may also explore options to secure funding for Animalplan activities.

3. Objectives

Animalplan 2022 to 2027 has 7 objectives:

- Improve Australia's preparedness and ability to respond to emergency animal diseases (EADs).
- Improve Australia's surveillance and diagnostic capacity and capability for animal pests and diseases.
- Improve the adoption and implementation of biosecurity practices throughout the terrestrial animal industry supply chain.
- Promote a collaborative approach to antimicrobial resistance.
- Improve animal welfare outcomes relevant to emergency scenarios.
- Support the implementation of industry sustainability frameworks and plans.
- Improve the integrity of animal health systems.

Objective 1 — Improve Australia's preparedness and ability to respond to emergency animal diseases

Australia's existing EAD preparedness and response arrangements are effective and include robust governance frameworks for EAD decision-making processes, a comprehensive national contingency planning framework through Australia's AUSVETPLAN manuals and the Emergency Animal Disease Response Agreement (EADRA), and biosecurity communication networks. These arrangements are delivered through strategic partnerships between government agencies, industry organisations and AHA to help protect Australia's coveted animal health status.

Biosecurity risk pathways are changing, with changing movements of people, animals and animal products. This affects the distribution of pathogens. Examples of disease detection and spread between 2018 and 2020 in the Asia–Pacific region include African swine fever, African horse sickness and lumpy skin disease. With increasing cross-border and international trade, Australia's national animal health system will likely be subject to increased EAD risks. The ongoing collaboration of government agencies, terrestrial animal industries and organisations such as AHA is important to minimise these risks.Table 1 outlines the agreed list of activities that will strengthen Australia's capacity to prepare and respond to EADs.

Table 1 Activities to improve Australia's preparedness and ability to respond to emergency animal diseases

Activity	Desired outcome by 2027	Lead
1.1. Continue to implement recommendations from emergency responses including EAD incursions, COVID-19, previous EAD simulation exercises and recent natural disasters	Recommendations from emergency responses are actioned to reduce emergency scenario risks to terrestrial agricultural animal industries	AHA (to facilitate engagement across governments and industries); government agencies and peak industry organisations (to lead implementation of recommendations)
1.2. Continue to undertake simulation exercises for a variety of EAD scenarios, including identifying and addressing trade ramifications	Simulation exercises are completed to reduce industry risks in a variety of emergency scenarios	AHA, in collaboration with jurisdictions and peak industry organisations
1.3. Operationalise AUSVETPLAN manuals and documents across industry supply chains and structures	Agreed AUSVETPLAN manuals and documents are applied to reduce vulnerabilities in industry supply chains and structure	AHA, in collaboration with jurisdictions and peak industry organisations
1.4. Undertake projects, including research where required, to further develop economic analyses and epidemiological modelling tools supporting rapid decision making in EAD responses for priority diseases	Existing and/or new decision support tools provide timely and appropriate information to effectively support EAD responses	DAFF
1.5. Implement innovative technologies and training to meet national EAD education and training needs	Innovative technologies and training methods are adopted and implemented to improve EAD education and training needs for animal health professionals and supply chain participants	AHA to lead, with contributions from jurisdictions, Australian Veterinary Association (AVA), Australian Centre for Disease Preparedness (ACDP) and Veterinary Schools Australia and New Zealand (VSANZ)
1.6. Investigate existing systems or trial new systems for national EAD data management in multi-jurisdictional responses	EAD data, including surveillance and traceability data, is captured, analysed, managed and shared across jurisdictions and utilised for decision making purposes	DAFF

Activity 1.1 will build on existing work conducted by organisations such as AHA and its membership, to implement recommendations from previous emergency response scenarios and exercises and assist all terrestrial animal agricultural industries in their emergency preparedness activities.

During the Animalplan consultation process, stakeholders acknowledged the importance of fostering stronger partnerships between industry and government to help reduce risks to animal health and industry supply chains and structures during different EAD response scenarios, and maintain business continuity as much as possible. Activities 1.2 and 1.3 respectively involve undertaking further simulation exercises for a variety of emergency scenarios, and operationalising agreed AUSVETPLAN manuals to reduce vulnerabilities across industry supply chains and structures.

Improving access to epidemiological and economic decision support tools will improve our ability to manage EADs. Activity 1.4 will involve undertaking projects, including research where needed, to assist in improving existing or developing new epidemiological modelling and economic analysis tools for EAD response options for agreed priority diseases. This will help minimise industry and animal losses during these events by providing informed disease control or management strategies in different EAD scenarios.

The COVID-19 pandemic has accelerated the adoption and implementation of innovative technologies to fill existing business needs. From 2022 to 2027, similar innovative technologies can be used to deliver EAD training in a more efficient and effective manner remotely. Activity 1.5 focuses on reviewing, implementing and scaling up these technologies to educate and train government and industry participants in a more cost-effective manner.

In 2020 COVID-19 also demonstrated the importance of extracting, collating, sharing and managing data at a national level. Activity 1.6 will investigate existing systems or trial new systems for national EAD data management to facilitate multi-jurisdictional EAD responses and improve the flow of animal health data during emergency responses.

Objective 2 — Improve Australia's surveillance and diagnostic capacity and capability for animal pests and diseases

Australia has a favourable animal health status, which underpins the 'clean and green' image of our animal industries and supports our competitive advantage in international markets. However, demands are likely to increase from trading partners and the World Organisation for Animal Health (OIE) to support disease freedom claims. Improvements to Australia's surveillance and diagnostic capacity and capability are required to ensure that Australia's national animal health system can detect and report animal diseases efficiently and effectively. When required, these improvements must also provide evidence of disease absence to maintain and improve market access, support import requirements and enhance consumer confidence in Australia's terrestrial animal industry products.

The delivery of activities in future National Animal Health Surveillance Business Plans (NAHSBP) and National Animal Health Diagnostic Business Plans (NAHDBP) are captured under this objective (Activity 2.1). Additional agreed activities that build on these plans have been outlined in Table 2.

Novel technologies, such as point-of-care (POC) testing, and genomics, will likely become a core element of Australia's animal health diagnostic capability. Activity 2.2 will identify and analyse novel diagnostic technologies and their role in surveillance and diagnostics.

Export certification supports consumer and trading partners' confidence in our national animal health system. Activity 2.3 will involve reviewing market access requirements on an ongoing basis to ensure Australia's animal health surveillance programs meet trading partners' expectations. Activity 2.4 will involve evaluating agreed surveillance and diagnostic programs and implementing recommendations to improve their performance.

As mentioned under Objective 1, harnessing animal health data is critical to support market access. Activity 2.5 will focus on capturing, analysing, sharing and reporting on animal health surveillance data from stakeholders to improve data transparency, flow and collaboration at a national and international level.

Table 2 Activities to improve Australia's surveillance and diagnostic capacity and capability for animal pests and diseases

Activity	Desired outcome by 2027	Lead
2.1. Implement actions under National Animal Health Surveillance Business Plans (NAHSBP) and National Animal Health Diagnostic Business Plans (NAHDBP)	National surveillance and diagnostic capability and capacity for animal diseases adequately manage biosecurity risks and support early detection	As identified in the NAHSBP and NAHDBP
2.2. Develop and implement novel technologies, such as POC animal testing and genomics, to address gaps in diagnostic capacity	A number of novel technologies are adopted and implemented that improve Australia's surveillance and diagnostic capacity Australia has a well-developed policy and legislation on the use of POC diagnostic tests in notifiable diseases	SCAHLS/Peak industry organisations/Rural RDCs
2.3. Conduct an audit of current and future export and import market access requirements for animals and animal products to guide national surveillance planning	Surveillance requirements are identified, understood, and implemented to improve market access and support Australia's disease status claims	DAFF
2.4. Implement agreed recommendations to improve national surveillance and diagnostic programs	Recommendations are implemented to improve surveillance and diagnostic programs	DAFF/AHA
2.5. Through national agreement, capture, analyse, share, and report on animal health surveillance data from states and territories, industry and the Commonwealth	Transparency, flow and collaboration on animal health surveillance data are improved between industries and jurisdictions at both a national and international level	DAFF/AHA

Objective 3 — Improve the adoption and implementation of biosecurity practices throughout the terrestrial animal industry supply chain

Global agriculture supply chains are becoming increasingly complex (KPMG International 2013). It is common for an agricultural commodity to be produced and processed across multiple establishments in different jurisdictions before it reaches its end user. For this reason, biosecurity risks must be managed across entire supply chains to minimise the risks of animal diseases spreading across borders and between countries.

Effective management of animal health and biosecurity by producers will lead to improved farm productivity, product quality, domestic and international trade opportunities and ultimately profitability. Improved biosecurity practices can:

- result in better animal health, welfare and performance
- reduce disease transmission and amplification within and between farms
- increase the likelihood of early disease detection and control
- be integrated into existing farm quality systems, such as FeedSafe, Australian Pork Industry Quality Assurance Program, National Feedlot Accreditation Scheme and Livestock Production Assurance Program
- facilitate movement of animals and animal products within and between jurisdictions
- reduce the development and spread of antimicrobial resistant (AMR) bacteria
- help supply chain establishments to meet international trade requirements (for example, through health accreditation).

Table 3 outlines agreed activities that focus on improving the adoption and implementation of on-farm and supply chain biosecurity practices, to reduce disease risks across the value chain and assist in improving the productivity and profitability of agribusinesses.

Many industries and state and territory governments have developed systems to improve biosecurity practice uptake. If use of these systems can be leveraged to help demonstrate an increase in producer profit margins, then producer adoption and implementation rates may improve, supporting biosecurity practices nationwide. Many producers are already accredited with quality assurance systems. Activity 3.1 will involve investigating the benefits and implementing a national dashboard platform for biosecurity information systems using pre-existing government and industry systems such as South Australia's One Biosecurity program. Similarly, Activity 3.2 will focus on sharing knowledge between terrestrial animal industries and jurisdictions to update quality assurance programs, on-farm biosecurity, biosecurity extension programs and regulatory activities.

Education and awareness campaigns are critical to improving adoption and uptake of better biosecurity practices by supply chain participants. Activity 3.3 will focus on conducting more joint and collaborative industry-government communication activities to improve biosecurity 'culture' and 'community of practice' at a national level.

Encouraging novel small scale terrestrial animal agricultural industries to undertake biosecurity 'best practice' will help improve their productivity. Activity 3.4 will involve continuing the development of guidelines to reduce biosecurity risks associated with novel animal industry production systems.

Table 3 Activities to improve the adoption and implementation of biosecurity practices throughout the terrestrial animal industry supply chain

Activity	Desired outcome by 2027	Lead
3.1. Investigate the benefits and consider developing a national dashboard platform for government and industry biosecurity information systems, such as South Australia's One Biosecurity program	A national 'one-stop-shop' dashboard platform is investigated and scoped, which will collate biosecurity data across existing biosecurity information systems and help deliver targeted biosecurity interventions across producer supply chains	Peak Industry Organisations in collaboration with jurisdictions and AHA
3.2. Share knowledge across terrestrial animal industries and jurisdictions to strengthen quality assurance programs, on-farm biosecurity systems, biosecurity extension programs and regulatory activities	Strengths and weaknesses from existing systems across terrestrial animal industries are assessed and actioned, to improve validation of biosecurity, quality assurance and traceability processes, and support maintenance of market access through compartmentalisation/zoning	AHA/Peak Industry Organisations
3.3. Conduct more industry-government education and awareness communication activities to promote a biosecurity 'culture' and 'community of practice' across animal industries, including smallholders	Producers and enterprises in the supply chain increase their understanding of the value of biosecurity, and increase adoption of farm and supply chain biosecurity practices	Peak Industry Organisations/AHA/DAFF
3.4. Continue developing biosecurity guidelines for the supply chains of novel small-scale industries	Biosecurity guidelines are updated or developed for novel small-scale production animal industries	AHA, in collaboration with AgriFutures and novel industries

Objective 4 — Promote a collaborative approach on antimicrobial resistance

Antimicrobial resistance is a significant global health priority driven largely by the inappropriate use of antimicrobials (including antibiotics) for human and animal health, and in agriculture. Australia's National AMR Strategy – 2020 and Beyond has a strong focus on the use of antimicrobials (including antibacterials and antifungals) in agriculture and the consequent transfer of resistance between animals, humans and the environment (Department of Health 2020).

The One Health Master Action Plan (OHMAP) has been developed to address the strategy's 7 key objectives, which focus on governance; infection prevention and control; communication and engagement; antimicrobial stewardship; AMR surveillance; research; and global partnerships (Department of Health 2021).

An Animal Sector AMR action plan will be developed under the OHMAP. Implementation of the plan will require commitment and action from all jurisdictions and close collaboration with industry and external animal health organisations, including AHA and the AVA. The animal industries antimicrobial stewardship RD&E strategy has also been developed to facilitate collaboration between terrestrial production animal industries to reduce the prevalence of AMR (AIAS 2020).

Table 4 outlines an agreed activity that will promote a collaborative approach on antimicrobial resistance.

The progress of both the OHMAP and the Animal Sector AMR Action Plan have been acknowledged in Activity 4.1 and will help ensure that Australia remains a world leader on mitigating AMR risks.

Table 4 Activity to promote a collaborative approach on antimicrobial resistance

Activity	Desired outcome by 2027	Lead
4.1. Implement AMR activities as identified in the One Health AMR Master Action Plan and the Animal Sector National AMR Action Plan (under development)	Governments, industries and other relevant stakeholders undertake coordinated and effective actions to mitigate the risks of AMR	As identified in the One Health AMR Master Action Plan and the Animal Sector National AMR Action Plan

Objective 5 — Improve animal welfare outcomes relevant to emergency scenarios

States and territories set and enforce animal welfare standards through administration of their legislation for animal welfare and the prevention of animal cruelty. Voluntary model codes of practice for the welfare of animals (CSIRO 2021) establish an agreed set of principles and practices for the terrestrial animal agricultural industries. Work is now underway to update and convert specific codes into Australian Animal Welfare Standards and Guidelines (DAWE 2021a) for species or enterprises. Once endorsed by the relevant state and territory ministers, the standards are to be implemented in state and territory law as minimum legal standards. The guidelines are intended to represent better practice that should be adopted by industry. Standards and guidelines have been completed for cattle, sheep, the land transport of livestock, saleyards and depots, and exhibited animals. Standards and guidelines are under development for poultry, pigs and livestock at processing establishments.

Further, the National Animal Welfare RD&E Strategy (NAWRDES 2019) has been pivotal in identifying knowledge deficits, encouraging collaboration and promoting the implementation of innovative animal welfare solutions since its establishment in 2009.

To ensure Animalplan does not duplicate existing national animal welfare projects, Animalplan activities will only focus on improving animal welfare outcomes related to emergency scenarios, such as an emergency animal disease incursion or a climate disaster.

Activity 5.1 will involve addressing terrestrial production animal industry animal welfare risks in emergency situations to improve relevant policy and crisis response documents.

Table 5 Activity to improve animal welfare outcomes relevant to emergency scenarios

Activity	Desired outcome by 2027	Lead
5.1. Address terrestrial production animal welfare risks in emergency scenarios and incorporate findings in relevant policy and crisis response documents	Emergency response plans for terrestrial production animal supply chains manage animal welfare risks	AHA, in collaboration with jurisdictions and peak industry organisations

Objective 6 — Support the implementation of industry sustainability frameworks and plans

Sustainability focuses on safeguarding the long-term viability of terrestrial animal agricultural industries and is core to an industry's social license to operate. Consumer attitudes and values are evolving and play a key role in shaping the value of sustainability across animal production industries. Globally, consumers want confidence that animal production is conducted in a manner that is both ethically responsible and transparent.

In response to rapidly evolving consumer attitudes, many industries have already commenced the development of their own sustainability frameworks and plans to help demonstrate socially responsible farming practices and maintain consumer confidence in Australian terrestrial animal agricultural industries. For example, the Beef Sustainability Framework (TABSF 2020) comprises animal health and welfare sustainability indicators, such as biosecurity plan adoption and implementation rates and pain relief usage rates, to demonstrate continuous improvement and their commitment to being a socially responsible agricultural industry (see Appendix C).

Activity 6.1 will improve animal health and welfare by sharing and implementing ideas across animal production industries, such as animal health and welfare indicators, to assist in developing and updating industry-specific sustainability frameworks and plans.

Table 6 Activity to support the implementation of industry sustainability frameworks and plans

Activity	Desired outcome by 2027	Lead
6.1. Share knowledge (such as the development of benchmarks) between industries to update industry sustainability frameworks and plans and reduce animal health and welfare risks	Industry organisations and producers share ideas, adopt and implement sustainability frameworks and plans that improve animal health and welfare outcomes	NFF to facilitate, peak industry organisations to implement learnings

Objective 7 — Improve the integrity of animal health systems

Importing countries are seeking greater transparency and traceability of animals and animal products across the supply chain. Locally and overseas, consumer interest in the paddock-to-plate concept is increasing, with buyers wanting to know their food has been ethically and sustainably produced – for example, without inappropriate use of antibiotics, added hormones and other unnecessary chemicals. The ability to demonstrate traceability and high-quality production for all animal and animal product exports will help strengthen access to domestic and export markets for Australia's live terrestrial animals and animal products and improve the competitiveness of the sector.

Modern, accurate and timely traceability systems provide assurances to consumers of Australian agricultural products and our trading partners. In November 2018 the Agriculture Ministers' Forum discussed findings from a review of Australia's traceability systems and agreed to progress recommendations from a review of the Intergovernmental Agreement on Biosecurity (DAWE 2019), which included several traceability-related projects. One of these projects was the development of the National Traceability Framework (DAWE 2021b), a tool to guide Australian agricultural industries and food producers, governments and related businesses in enhancing our traceability systems and promoting 'Brand Australia' in our international markets. The framework sets out:

- a common vision
- principles for traceability systems
- roles and responsibilities of industries, governments and other stakeholders
- suggestions for developing an industry action plan to implement the framework
- traceability objectives
- measures of success.

The framework is the result of extensive collaboration between Australian agricultural industries and the Australian Government.

Table 7 outlines activities that build on existing national traceability initiatives, such as the National Traceability Framework and Traceability Grants Program (DAWE 2021c), to improve the integrity of animal health systems.

Activity 7.1 will involve developing a cost-effective national traceability register and/or system for agreed industries that do not have one. Activity 7.2 will implement existing or new mechanisms to streamline or automate traceability data across agreed industries for animals and animal products. Activity 7.3 will harness traceability systems to provide feedback to farmers on animal health.

Table 7 Activities to improve the integrity of animal health systems

Activity	Desired outcome by 2027	Lead
7.1. Develop cost-effective national traceability registers or systems for agreed terrestrial animal industries that do not have one	Cost-effective national traceability registers or systems are developed for agreed terrestrial animal industries	Peak industry bodies/AHA/ SAFEMEAT
7.2. Implement mechanisms to streamline or automate terrestrial animal and animal product traceability data across agreed industries and make this accessible to all supply chain participants	Existing or new mechanisms are implemented with high adoption rates from supply chain participants to improve collation of traceability data across information systems	Integrity Systems Company (ISC), in collaboration with peak industry organisations
7.3. Use traceability systems to provide feedback to supply chain participants on animal health outcomes	Existing or strengthened traceability systems provide improved feedback to supply chain participants on animal health outcomes occurring at relevant points of supply chains	AHA/ISC

Appendix A: Organisations consulted for Animalplan 2022 to 2027

- AgriFutures Australia
- Animal Health Australia
- Animal Medicines Australia
- Australian Alpaca Association
- ACT Environment, Planning and Sustainable Development Directorate
- Australian Centre for Disease Preparedness
- Australian Centre for International Agricultural Research
- Australian Chicken Meat Federation
- Australian Duck Meat Association
- Australian Eggs
- Australian Government Department of Agriculture, Fisheries and Forestry
- Australian Horse Industry Council
- Australian Lot Feeders' Association
- Australian Meat Industry Council
- Australian Pork Limited
- Australian Veterinary Association
- Australian Wool Innovation
- Cattle Council of Australia
- CSIRO
- Dairy Australia
- Feed Ingredients and Additives Association of Australia
- Goat Industry Council of Australia
- Integrity Systems Company
- LiveCorp
- Meat and Livestock Australia
- National Farmers' Federation
- NSW Department of Primary Industries
- NT Department of Primary Industry and Resources
- Queensland Department of Agriculture and Fisheries
- RSPCA Australia
- SAFEMEAT
- Sheep Producers Australia
- SA Department of Primary Industries and Regions
- Stock Feed Manufacturers' Council of Australia
- Tasmanian Department of Primary Industries, Parks, Water and Environment
- The Animal Welfare Collaborative
- Veterinary Schools of Australia and New Zealand
- Victorian Department of Jobs, Precincts and Regions
- WA Department of Primary Industries and Regional Development
- Wildlife Health Australia
- WoolProducers Australia

Appendix B: List of terrestrial agricultural animals

For the purpose of *Animalplan 2022 to 2027*, terrestrial agricultural animals are:

- alpacas and llamas
- bees
- buffalo
- camels
- cattle – dairy and beef
- deer
- emus, ostriches
- game birds (pheasants, partridges, guinea fowl, quails, geese and pigeons)
- goats
- horses
- kangaroos
- pigs
- poultry (chickens, ducks and turkeys)
- rabbits
- sheep.

Appendix C: Alignment of Animalplan with existing industry strategic plans

Table C1 Alignment of Animalplan objectives with existing strategic plans

Existing industry strategic plan	Animalplan objective alignment	Summary
2030 Roadmap—Australian Agriculture's Plan for a $100 Billion Industry	1, 2, 3, 4, 5, 6, 7	The National Farmers' Federation (NFF) has set a target for the agricultural industry to exceed $100 billion in farm gate output by 2030. One of the 5 pillars in the roadmap to achieving this goal is growing sustainably.
Animal Health Australia Strategic Plan 2020–25	1, 2, 3, 5, 6, 7	This plan outlines AHA's role, vision, mission, delivery method, and operating environment. It also describes AHA's strategic priorities of enhancing EAD preparedness, supporting market access, on-farm and supply chain biosecurity, animal health and product integrity, reducing risks of disease across the value chain and improving producer outcomes.
Australian Alpaca Association Strategic Plan 2019–2024	1, 3, 5, 6, 7	This plan sets out 3 strategic priorities namely to develop customer driven markets, to develop a strong peak body and to ensure that the Australian alpaca association is engaging and consulting with its members, communicating opportunities and encouraging participation.
Australian Eggs Strategic Plan 2017–2021	1, 3, 5, 6, 7	The Australian Eggs Limited Strategic Plan 2017–2021 provides a 'guiding path' for the Australian egg industry on goals, key focus areas and programs expected to be delivered through the period 2017 to 2021.
Australian Pork Limited Strategic Plan 2020–2025	1, 2, 3, 5, 6, 7	This plan sets out key priorities to guide Australian Pork Limited's investment over the period 2020–2025, with a strong focus on market and product differentiation, better management of market volatility, driving consumer demand, social licence and enabling viable productive farms.
Dairy Australia Strategic Plan 2020–2025	3, 5, 6, 7	This plan outlines 7 strategic priorities to guide investment over 2020–2025 and contribute to delivering a more profitable and sustainable Australian dairy industry by 2025.

Existing industry strategic plan	Animalplan objective alignment	Summary
Meat Industry Strategic Plan (MISP) 2020–2030	1, 2, 3, 4, 5, 6, 7	The MISP frames the overarching strategic priorities for Australia's red meat and livestock industry, comprising the production, processing and live export components of Australia's beef, sheep meat and goatmeat supply chains. It incorporates the strategic outlooks of Cattle Council of Australia, Australian Lot Feeders' Association, Sheepmeat Council of Australia, Goat Industry Council of Australia, Australian Meat Industry Council, Australian Livestock Exporters' Council, with input from Meat & Livestock Australia, Australian Meat Processors Corporation and LiveCorp.
Meat & Livestock Australia (MLA) Strategic Plan 2025	1, 2, 3, 4, 5, 6, 7	This plan outlines MLA's plan to foster the long-term prosperity of the Australian red meat and livestock industry by collaborating with stakeholders to invest in research, development and marketing initiatives that contribute to producer profitability, sustainability and global competitiveness. This strategic plan has a strong focus on improving adoption and extension of R&D solutions and improving integrity systems.
Sheepmeat Industry Strategic Plan 2015–2020	1, 2, 3, 5, 6, 7	This plan outlines the priority areas for sheepmeat industry investment from 2015–2020, which are aligned with the corresponding 'priorities of the MISP 2020.
Wool 2030 Strategy	1, 3, 5, 6, 7	This strategy has 5 pillars with a strong focus on animal health and wellbeing, including protection from disease and predation (Pillar 1).

Other related strategies, plans and frameworks

- AgriFutures Australia Strategic R&D plan 2017–2022
  - One of the goals of this 5-year plan is to enhance the profitability and sustainability of the levied rural industries through investment in research, innovation and learning initiatives.
- AQUAPLAN 2014–2019
  - AQUAPLAN is Australia's National Strategic Plan for Aquatic Animal Health and a sister plan to Animalplan.
- Australia's National Antimicrobial Resistance Strategy – 2020 and Beyond
  - This strategy sets a 20-year vision to protect the health of humans, animals and the environment through minimising the development and spread of AMR while continuing to have effective antimicrobials available.
- Animal Industries AMS RD&E Strategy (AIAS)
  - This strategy is a collaborative mechanism for animal industries to identify common research, development and extension (RD&E) priorities for the effective monitoring of antimicrobial use (AMU) and surveillance of AMR to inform stewardship actions that meet Australia's animal health and market access needs, without impacting food safety or human health The AIAS will also benefit the implementation of Australia's National AMR Strategy and The Australian Animal Sector National Antimicrobial Resistance Plan
- Australian Animal Welfare Standards and Guidelines
  - These include details of current standards and guidelines and those undergoing development. The welfare standards and guidelines for livestock aim to harmonise and streamline livestock welfare legislation in Australia.
- Australian Beef Sustainability Framework
  - This framework has been developed to meet the changing expectations of customers and stakeholders by defining what sustainable beef production means in Australian production systems. The framework supports the strategy outlined in the Meat Industry Strategic Plan 2020.
- Australian Dairy Sustainability Framework
  - This framework's 4 commitments are: enhancing economic viability and livelihoods, improving wellbeing of people, providing best care for the animals, and reducing environmental impact.
- Australian Egg Industry Sustainability Framework
  - This sustainability framework is a process for defining what is socially, environmentally and economically responsible in the context of egg farming and providing a basis for continuous improvement.
- Australian Sheep Sustainability Framework
  - The Australian Sheep Sustainability Framework will report on the key priorities of responsible sheep meat and wool production to build trust and confidence in the industry. Sheep Producers Australia and WoolProducers Australia jointly own the framework.
- Australian Veterinary Association Strategic Plan 2017–2021
  - This plan outlines the AVA's vision, purpose, core values, stakeholders and strategic priorities towards 2021. It explores AVA's 4 strategic pillars of leadership, membership, knowledge, and being a strong organisation.
- Biosecurity Innovation Program
  - The Biosecurity innovation Program invests in innovative technologies and approaches to enhance Australia's national biosecurity system to manage emerging biosecurity challenges and risks.
- World Health Organization Global Action Plan on AMR
  - The goal of the draft global action plan is to ensure, for as long as possible, continuity of successful treatment and prevention of infectious diseases with effective and safe medicines that are quality-assured, used in a responsible way, and accessible to all who need them.
- Integrity System 2025 and beyond strategy
  - This strategy outlines the investment commitment by the red meat industry into its integrity system to ensure that it remains recognised and trusted globally as delivering a quality red meat product that is produced to rigorous standards.
- Joint External Evaluation of International Health Regulations Core Capacities of Australia
  - The Joint External Evaluation is a voluntary process in which a team of internal and external experts jointly assess a country's ability to prevent, detect and respond to public health threats across 19 core capacities of the International Health Regulations (2005).

- National Animal Health Diagnostics Business Plan 2016–2020
  - This plan represents the commitment of Australian governments and industry to maintain and further improve our diagnostic systems. The plan summarises existing diagnostic programs and outlines additional priority activities.
- National Animal Health Surveillance Business Plan 2016–2020
  - This plan represents the commitment of Australian governments and industry to maintain and further improve our surveillance systems. The plan summarises existing surveillance programs and outlines additional priority activities.
- National Agricultural Innovation Agenda
  - The Australian Government is driving improvements to Australia's agricultural innovation system through National Agricultural Innovation Agenda. This includes a focus on uptake of agricultural innovation, balanced research and development investment and world-class innovation practices.
- National Animal Biosecurity RD&E Strategy 2017–2022
  - The vision for this strategy is to contribute to world-leading, cross-sectoral biosecurity RD&E through collaboration and efficient use of resources, further improving Australia's high animal health status, productivity and ongoing market access.
- National Environmental Sustainability Strategy for the Pork Industry 2010–2015
  - This strategy's purpose is to drive the integration of sound environmental practices throughout the Australian pork supply chain in order to be environmentally sustainable.
- National Primary Industries Animal Welfare Research, Development and Extension Strategy
  - The strategy encourages greater co-investment and collaboration on a national basis to improve the efficient use of RD&E resources in the field of livestock animal welfare.
- One Health Master Action Plan for Australia's National Antimicrobial Resistance Strategy – 2020 and beyond
  - This action plan provides national focus areas for each of the One Health sectors to implement the strategy over the next 5 years. It also provides guidance for stakeholders to develop their own action plans to combat AMR and ensure that effective antimicrobials continue to be available in the future.
- Priorities for Australia's biosecurity system: an independent review of the capacity of the national biosecurity system and its underpinning intergovernmental agreement
  - A review of the implementation and effectiveness of the Intergovernmental Agreement on Biosecurity (IGAB) and recommendations for amendment. IGAB has created a framework for governments to coordinate and identify priority areas of reform and action to build a stronger and more effective national biosecurity system.
- Responding to Antimicrobial Resistance: Australian Animal Sector National Antimicrobial Resistance Plan 2018
  - The aim of the plan is to align with, and support, the National AMR Strategy and provide a strategic and coordinated animal sector approach to national One Health efforts to address AMR.
- Wildlife Health Australia (WHA): the National Coordinating Body for Wildlife Health – Strategic Plan 2019 – 2021
  - This plan includes a summary of the role of WHA, its priorities, objectives and KPIs. One of WHA's key goals is to facilitate improved, effective and efficient wildlife disease preparedness and response in Australia.
- Wool Industry: National RD&E Strategy 2011–2030
  - This strategy covers several main areas, including wool industry resilience and growth.

Biosecurity Strategies

- Australian Capital Territory Biosecurity Strategy 2016–2026
  - This strategy identifies the pre-border, border, and post-border elements of the biosecurity continuum at both the national and jurisdictional level and outlines actions for addressing biosecurity risks.
- New South Wales Biosecurity Strategy 2013–2021
  - This strategy is based on the principle of shared responsibility and its broad objectives are to prevent pest, disease, and weed incursions into New South Wales, quickly containing and eradicating any incursions and minimising their impact.
- Northern Territory Biosecurity Strategy 2016–2026
  - This strategy commits governments, industry, and the community to share the responsibility to protect agricultural resources and other assets from pest and disease threats, and chemical contamination.
- Queensland Biosecurity Strategy 2018–2023
  - The key goals of this strategy include preventing exotic pests and diseases from entering Queensland, and to prepare for, and deal effectively with, incursions.
- South Australian Biosecurity Policy – 2020–2023
  - This policy outlines how to collaborate to protect and improve the state's economy, environment, amenity and public health by preventing and reducing pest and disease impacts, maintaining food safety and ensuring responsible agricultural chemical use.
- Tasmanian Biosecurity Strategy 2013–2017
  - This strategy sets the overall direction for Tasmania's biosecurity system. It outlines pre-border, border, and post-border activities designed to work together to mitigate risk.
- Western Australian Biosecurity Strategy 2016–2025
  - Western Australia's Biosecurity Strategy aims to take a collaborative approach to minimise risks to the state from terrestrial and aquatic pests and diseases.
- Commonwealth Biosecurity Strategy 2030
  - This is a strategic roadmap for protecting Australia's environment, economy and way of life.

Abbreviations

Term	Definition
ACDP	Australian Centre for Disease Preparedness
AHA	Animal Health Australia
AIAS	Animal Industries Antimicrobial Stewardship Research Development and Extension Strategy
AMR	antimicrobial resistance
APL	Australian Pork Limited
AVA	Australian Veterinary Association
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAFF	Australian Government Department of Agriculture, Fisheries and Forestry
DAWE	Australian Government Department of Agriculture, Water and the Environment
DCCEEW	Australian Government Department of Climate Change, Energy, the Environment and Water
EAD	emergency animal disease
EADRA	Emergency Animal Disease Response Agreement
IGAB	Intergovernmental Agreement on Biosecurity
ISC	Integrity Systems Company
MISP	Meat Industry Strategic Plan
MLA	Meat & Livestock Australia
NAHDBP	National Animal Health Diagnostics Business Plan
NAHSBP	National Animal Health Surveillance Business Plan
NFF	National Farmers' Federation
OHMAP	One Health Master Action Plan
OIE	World Organisation for Animal Health
PIRSA	South Australian Department of Primary Industries and Regions
POC	point of care
POCTA	Prevention of Cruelty to Animals legislation
RDC	Research and Development Corporation
RD&E	research, development and extension
SCAHLS	Subcommittee for Animal Health Laboratory Standards
VSANZ	Veterinary Schools Australia and New Zealand
WHA	Wildlife Health Australia
WHO	World Health Organization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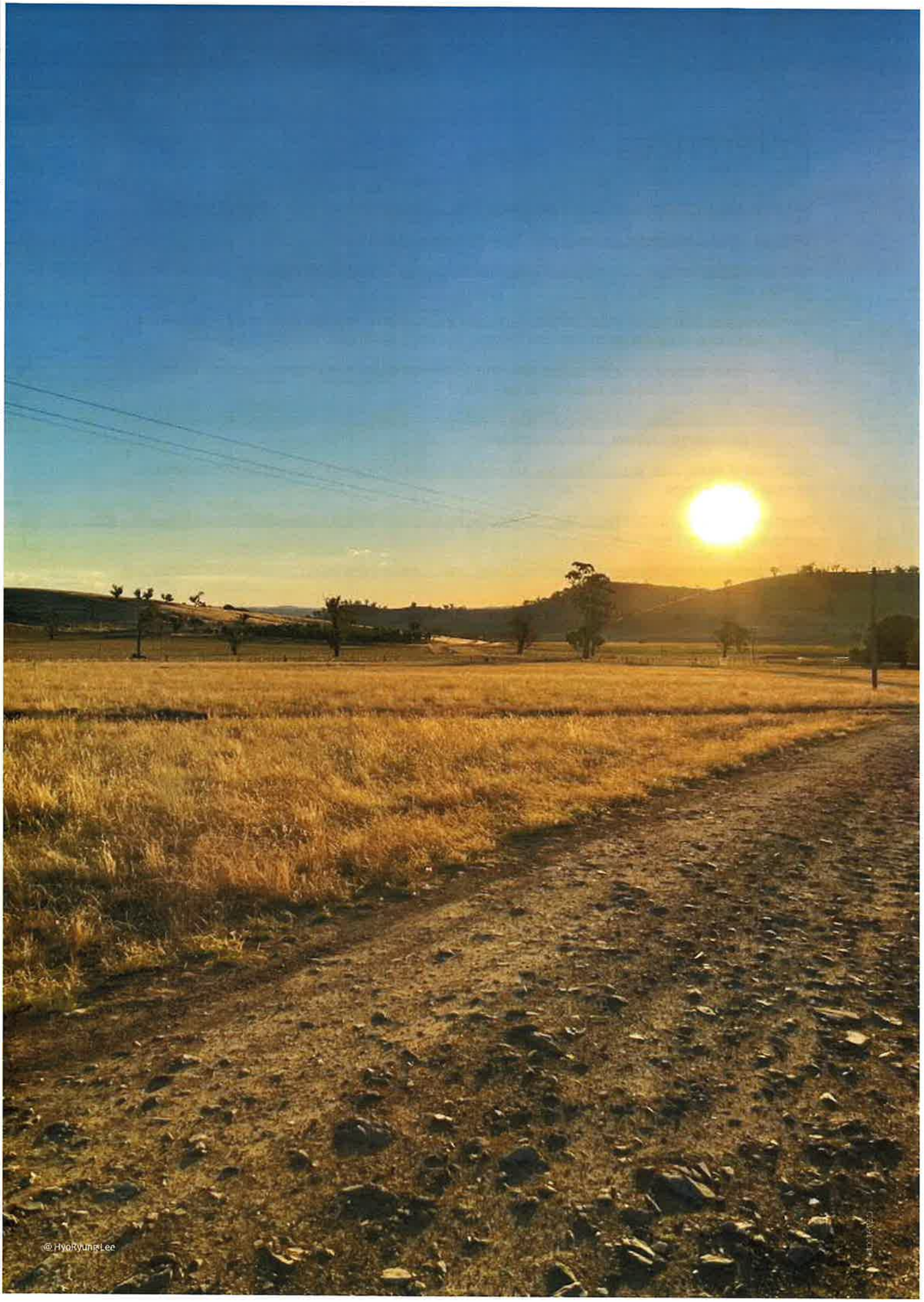
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Document 8d

COLLABORATING TO PROTECT AND IMPROVE AQUATIC ANIMAL HEALTH

2022-2027 AQUAPLAN

FOREWORD

Ministers Pic here

By the Australian Government Minister for Ag/ Fisheries.

CONTENTS

INTRODUCTION

AQUAPLAN is Australia's national strategic plan for aquatic animal health. It sets out national priorities for collaborative actions to strengthen Australia's aquatic animal health management systems. These systems are critically important to improve the productivity and profitability of aquatic animal industries (including aquaculture, fisheries, and ornamental fish sectors) and to protect our unique aquatic environments from the threat of disease.

Three previous AQUAPLANs[1] have built and improved almost all aspects of Australia's highly regarded systems for managing aquatic animal health and represent a world leading approach to industry-government collaboration on aquatic animal health.

Global and domestic trends in trade and aquatic animal production indicate that Australia will require increasingly strong and resilient systems to effectively manage aquatic animal disease risks. AQUAPLAN 2022-2027 has looked ahead to consider what systems need to be strengthened or put in place to support the continued growth of Australia's aquatic animal industries and the effective management of aquatic animal health and disease risks. It sets out seven clear objectives – Border biosecurity and trade, Enterprise and regional biosecurity, Surveillance, Diagnostic capability, Emergency preparedness, Veterinary medicines, and Research and innovation.

With the launch of AQUAPLAN 2022-2027, the strong legacy of AQUAPLAN continues. A review of AQUAPLAN 2014-2019, identified a strong, ongoing need for a nationally coordinated approach to aquatic animal health. The approach taken is consistent with previous plans; however, the experience of past plans has been applied to improve its development and implementation. The industry and government partnerships that are fundamental to achieving the common goals of the plan have been given particular emphasis in AQUAPLAN 2022-2027.

AQUAPLAN 2022-2027 was developed through extensive collaboration among industry and government parties extending over more than a year (see Appendix A and B). This period coincided with the COVID-19 pandemic that was characterised by an unprecedented human health crisis and economic and trade disruption with considerable impact on many seafood industry sectors. Despite these challenges, AQUAPLAN 2022-2027 has been developed with more extensive collaboration than any of its predecessors with the assistance of the proliferation of online collaboration tools.

In addition to the industry-government collaboration that underpins AQUAPLAN's success, its development has followed some key guiding principles:

- The plan addresses common national priorities
- It focuses on national strategic issues that will provide enduring benefit to the management of aquatic animal health
- Its objectives and activities have defined, achievable outcomes
- It is a framework of agreed national priorities to which investment will be attracted.

[1] AQUAPLAN 1998-2003, AQUAPLAN 2004-2010 and AQUAPLAN 2014-2019 are available on the Department of Agriculture, Water and the Environment website.

The Australian abalone farming industry aims to provide premium quality abalone to niche markets worldwide through efficient, competitive and technologically advanced methods. AQUAPLAN provides opportunities to achieve this through collaborative action to improve and acknowledge leading biosecurity practices and surveillance methods for farm and environment protection, and for trade and market access.

Nicholas Savva, Executive Officer,
AAGA

For the barramundi industry to reach its full growth potential, it is essential that disease risks are minimised, and health of stock is optimised. This requires performance at all levels of industry, science, and government. AQUAPLAN builds a much-needed framework for co-investment in RD&E across the complex systems that underpin aquatic animal health.

Jo-Anne Ruscoe, Chief Executive Officer,
ABFA

This plan has been developed collaboratively with governments and industry stakeholders and I commend my fellow Steering Group members, the Department, state government representatives and all those who contributed for their ongoing commitment and strategic approach to aquatic animal health to support Australia's aquatic environment, and improve the productivity and profitability of Australian businesses and livelihoods – particularly in regional and remote areas.

Kim Hooper, Executive Officer,
APFA

AQUAPLAN is an important guide to cooperative investment by industry and government in maintaining aquatic animal health.

Dr. Lee Stephens, President,
Oysters Australia

Healthy fish is something that we in Australia have the luxury of taking for granted. The regular updating of AQUAPLAN is a reminder that many other production systems around the world require significant and on-going investment to maintain their stocks basic health and productivity. Also, that it is a shared responsibility to remain vigilant and strive to up-hold our clean health status as it has mutual benefit.

Kirsten Rough, Research Manager,
ASOTIA

The Southern rock lobster sector is no different to any other seafood industry in its requirement to have carefully planned arrangements for managing aquatic animal health, and to support sustainability, productivity, and market access. AQUAPLAN provides our industry with a professional interface with Government which allows us to access resources for our own industry issues like responding to food safety issues, algal blooms and lobster health in holding tanks.

Tom Cosentino, Executive Officer,
SRLL

Aquatic animal health and biosecurity are critical to the future success of aquaculture. The salmon industry has always treated these issues as a high priority and understands a national strategy such as AQUAPLAN needs to complement industry initiatives through effective communication and outcome focused projects, only possible in a coordinated and collaborative approach with government.

Sue Grau, Chief Executive Officer,
TSGA

The growth in Australia's aquatic animal production industry, in response to rising demand for sustainably produced, high quality seafood, brings additional challenges in disease emergence and control. AQUAPLAN provides a valuable strategic roadmap, specifically designed to ensure focus among diverse stakeholders in responding to this challenge and ACDP is delighted to be playing its part.

Prof. Trevor Drew, Director,
CSIRO Australian Centre for Disease Preparedness

AQUAPLAN is critical to inform the future research, development and extension needs for fishing and aquaculture. As such it is pivotal in how FRDC invests to ensure Australia remains disease free and can respond to any disease outbreaks.

Dr. Patrick Hone, Managing Director,
FRDC

Australia has unique and diverse aquatic animals. Healthy aquatic animals underpin production, sustainability and reduce disease risk. By prioritising ongoing investment in our aquatic animal health system through AQUAPLAN, we can keep pace with changing risks and emerging threats and our aquatic industries and environments will continue to thrive and be healthy.

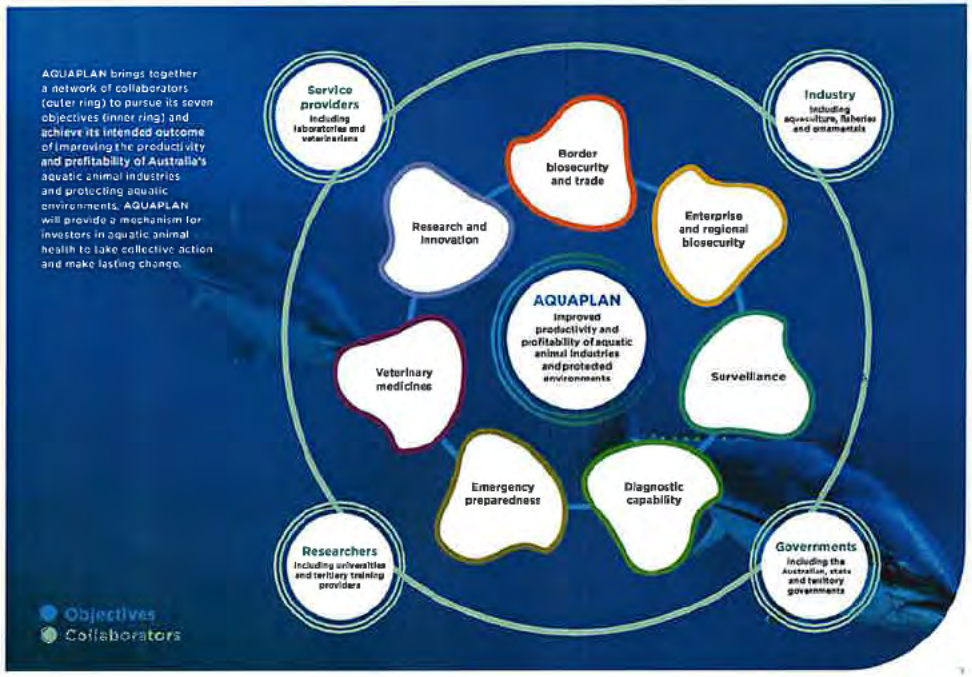
Dr. Mark Schipp, Australian Chief Veterinary Officer,
DAFF

An ongoing investment in aquatic biosecurity policy and practice is essential for the health and prosperity of Tasmania's aquatic primary industries. AQUAPLAN identifies priority issues that need to be addressed by industry and government.

Kevin de Witte, Tasmanian CVO,
SCAAH Chair

VISION

AQUAPLAN brings together a network of collaborators (outer ring) to pursue its seven objectives (inner ring) and achieve its intended outcome of improving the productivity and profitability of Australia's aquatic animal industries and protecting aquatic environments. **AQUAPLAN** will provide a mechanism for investors in aquatic animal health to take collective action and make lasting change.



DRIVERS FOR A NATIONAL STRATEGIC PLAN

The threat of aquatic animal diseases is present and severe. There are numerous examples internationally and within Australia of significant disease outbreaks from new, emerging or known diseases. Some of these diseases have spread across the globe and affected all major production areas of the susceptible species. Others have depleted wild populations of aquatic animals and impacted the commercial fisheries and ecosystems that rely on them. These experiences demonstrate the critical importance of prevention and preparedness activities.

There are many factors that contribute to the emergence and spread of aquatic animal diseases—the rapid global growth of aquaculture, increasing domestication of species, the high diversity of species, production in new environments and large trade volumes. These factors **are expected to become more significant and continue to drive disease** emergence and spread. Further, once established, aquatic animal diseases may be difficult to eradicate due to the contiguous nature of aquatic resources and environments.

Australia's **seafood industry focuses on premium** products that generate significant economic value. It is a primary industry within the broader Australian food and agribusiness industry that **is identified as a sector of competitive strength** and strategic priority[1]. It is comprised of a diverse range of species, ecosystems and production and fishing methods, including many native, **new and emerging sectors. Forecasts and recent** investments indicate that Australia's aquatic animal production sectors will continue to grow strongly.

Disease is a common and significant threat to **Australia's aquatic animal industries and aquatic** environments. There are few threats that can destroy businesses and impact aquatic animal **resources as rapidly as disease, especially** emerging diseases*.

Example - Infectious salmon anaemia

Infectious salmon anaemia (ISA) is a viral disease that has caused severe impacts on salmon farming internationally including production declines, mass unemployment and economic disruption. Australia is fortunate to be free from the virus that causes ISA but the disease **is a significant threat to Australia's largest** aquaculture sector and the Tasmanian economy.

Example - Withering syndrome of abalone

Withering syndrome of abalone (WSA) is a bacterial disease that has caused significant impacts in farmed and wild abalone overseas. The disease has contributed to the collapse **of wild abalone populations in the Americas,** and the fishing industries that relied on them. Australia is free from WSA but the disease **could severely deplete Australia's wild abalone** populations which are the basis for the world's largest abalone fishery.

Australia's national aquatic animal health system aims to prevent and minimise the impact of disease. Several elements work together to achieve this: biosecurity (including border, regional and enterprise-level), surveillance, diagnostic capability, emergency **preparedness, veterinary medicines,** and research and development. **These elements support the diverse methods, species, and ecosystems** of the Australian seafood industry. Industry, governments, researchers and service providers all benefit from using **the system and have a role to play in** maintaining the system. When everyone plays their part, the system is at its strongest.

Aquatic animal health management in Australia is integrated within broader **national arrangements and initiatives for** biosecurity, animal welfare, emergency **disease response, and research and** development. AQUAPLAN 2022-2027 **complements and supports these** activities (see Appendix C).

USING THE PLAN

AQUAPLAN 2022–2027 aims to improve Australia's aquatic animal health system by addressing seven objectives: border biosecurity and trade, enterprise and regional biosecurity, surveillance, diagnostic capability, emergency preparedness, veterinary medicines and research and innovation.

Each objective will be pursued through a number of defined activities. In total the plan has 28 activities across its seven objectives. An overview of the plan's objectives and activities is provided on pages 13 to 15. Further descriptive detail on each objective and its supporting activities can be found in objective sections 1 to 7 (pages 16 to 49). A section on plan implementation is also included (page 50).

AQUAPLAN is intended for use by Australia's aquatic animal health community. This includes, but is not limited to:

- Industry, including aquaculture, fisheries, and ornamentals
- Governments, including the Australian, state and territory governments
- Service providers, including laboratories and veterinarians
- Researchers, including universities and tertiary providers of aquatic animal health training.

If you work in any aspect of aquatic animal health within Australia, this strategy is relevant to you. However, it may not be necessary to read this plan from cover to cover as certain parts may be more relevant to you, depending on your role. The plan's activities have been assigned to four specific categories to help you find relevant activities.

Activity categories and symbols used in this plan

APPLY
Activities that apply most directly at a farm or industry sector level

STRATEGISE
Activities that focus on strategy and planning

EXPLORE
Activities that explore novel ideas or approaches

CONNECT
Activities that connect members of the aquatic animal health community and support collaboration

SUMMARY OF OBJECTIVES AND ACTIVITIES

Objective 1:
Border biosecurity and trade.

Industry-government collaboration and communication on Australia's border biosecurity risk management system are strengthened and technical market access barriers are addressed strategically.

- **1.1** Two-way engagement on import policy and decision-making processes
- **1.2** R&D strategic priorities for aquatic risk analyses and import policies
- **1.3** Strategic approach to meet technical requirements and support market access

Objective 2:
Enterprise and regional biosecurity.

Integrated enterprise and regional biosecurity programs are strengthened to support the productivity and sustainability of aquaculture and fisheries.

- **2.1** Enterprise biosecurity plan writing workshops.
- **2.2** Enterprise biosecurity plan implementation support program.
- **2.3** Evaluating and improving enterprise biosecurity plans.
- **2.4** Translocation of broodstock and genetic material
- **2.5** Review current approaches for managing ornamental fish in Australia
- **2.6** National ornamental fish communication campaign.

Objective 3:
Surveillance.

Government and industry investment in the national surveillance system is optimised.

- **3.1** National surveillance strategy
- **3.2** Sector-specific surveillance plans.
- **3.3** Sensitivity of the passive surveillance system.

Objective 4:
Diagnostic capability.

Australia's national diagnostic network for aquatic animal diseases provides reliable testing capability for known and emerging diseases.

- **4.1** Assess the future needs of Australia's diagnostic system.
- **4.2** Technical guidelines for validation of aquatic animal disease diagnostic tests.
- **4.3** Diagnostic accuracy studies for priority aquatic animal diseases.
- **4.4** Novel and emerging diagnostic methods.
- **4.5** Improve Neptune and its database.

Objective 5:
Emergency preparedness.

Industries and governments enhance their capacity and capability, and understand their roles and responsibilities in mounting rapid, appropriate, and collaborative emergency responses.

- **5.1** National priority aquatic animal disease list.
- **5.2** Biosecurity action plans for priority aquatic animal diseases.
- **5.3** Sector-specific simulation exercises.
- **5.4** New or revised contingency planning arrangements.
- **5.5** Practical disease investigation guidelines for new and emerging diseases.

Objective 6:
Veterinary medicines.

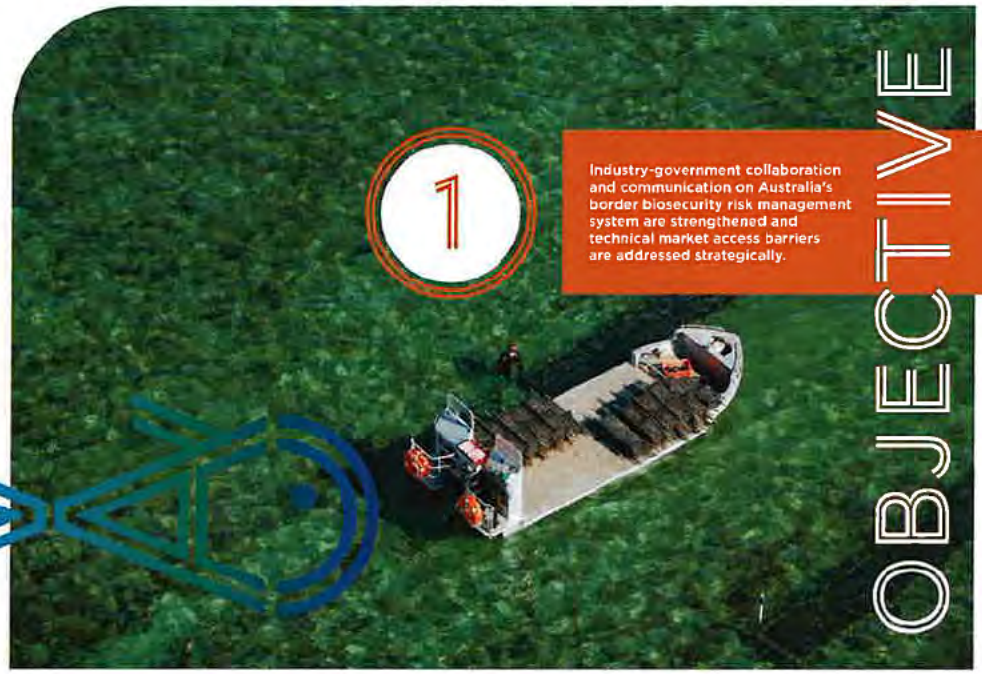
Improved access to veterinary medicines, chemicals and vaccines strengthens management of aquatic animal health and welfare and supports prudent use of antimicrobials and therapeutics.

- **6.1** Understand existing veterinary medicine use.
- **6.2** Aquatic animal minor use permit applications.
- **6.3** Establish antimicrobial resistance baselines for aquaculture sectors.

Objective 7.
Research and Innovation.

Research priorities are driven by industry and government needs and new knowledge is created, made accessible and extended to industry to improve aquatic animal health and welfare.

- **7.1** Research priority setting, engagement, and communication.
- **7.2** Extension and adoption of aquatic animal health research.
- **7.3** AQUAPLAN webinar series.



OBJECTIVE 1

Industry-government collaboration and communication on Australia's border biosecurity risk management system are strengthened and technical market access barriers are addressed strategically.

BORDER BIOSECURITY AND TRADE

Australia is free from many damaging aquatic animal diseases found elsewhere in the world. This provides advantages for market access, aquaculture productivity, fisheries sustainability and for protecting Australia's unique aquatic animals and environments.

Trade is an important part of Australia's $3.15 billion (GVP, 2019-20) aquaculture and fisheries industry, with $1.41 billion of this total value contributed to seafood exports[1]. Imported seafood products are another important component of the trade cycle, valued at an estimated $2.20 billion (2019-20)[2]. Trade in aquatic animal products is facilitated by Australia's biosecurity risk management measures for imported products and by Australia's systems to meet the sanitary requirements of our trading partners for our exported products.

The biosecurity continuum includes measures pre-border, at the border and post-border. Border biosecurity measures are an important component of Australia's biosecurity continuum that aims to preserve and enhance Australia's favourable disease status.

Border biosecurity measures are implemented in accordance with the Australian Government's *Biosecurity Act 2015* and consistent with Australia's international obligations. These include the Sanitary and Phytosanitary Agreement of the World Trade Organization (WTO) and the aquatic animal health standards of the World Organisation for Animal Health (WOAH).

A key internationally recognised mechanism of developing border biosecurity measures is through risk analyses. These underpin an objective and transparent approach to evaluating animal health risks and developing the least trade restrictive measures required to reduce those risks to an acceptable level. The Australian Government conducts risk analyses in accordance with the *Biosecurity Act 2015* which is consistent with the international standard for Import Risk Analyses adopted by the WOAH.

A common challenge for aquatic animal risk analyses is a lack of sufficient scientific information. In some cases, information may be so lacking that detailed analysis is simply not possible—this is particularly the case for new and emerging diseases. Research is fundamentally important to provide data to inform estimates of likelihood of entry, exposure and establishment, and the consequences of disease establishment and spread to farmed and wild aquatic animals, including fisheries resources.

Australia imports a wide variety of aquatic animal products including seafood and aquatic animal feeds. Consumers benefit from access to global supply chains that allow for diverse consumer choices at globally competitive prices. Ornamental fish are the only significant imports of live aquatic animals into Australia and, unmanaged, would present a high risk of disease entry into Australia. The management of aquatic animal health risks associated with ornamental fish includes pre-border, at border and post-border biosecurity measures and regulation of privately-owned ornamental fish quarantine facilities.

Australia's aquaculture and fisheries industries are export orientated. Key exports largely comprise of high value commodities such as, but not limited to rock lobster, abalone, salmon and tuna. Australia's favourable disease status supports market access for seafood exports. However, trading partners are increasingly requiring assurance that export products meet their sanitary requirements. This trend is likely to continue and Australia's aquatic animal health management systems will need to evolve to maintain and expand market access into the future. Through AQUAPLAN 2014–2019, progress was made on aspects of technical market access. One example is the abalone health accreditation program that successfully delivered market access opportunities. Border biosecurity was also an objective of AQUAPLAN 1998–2003.

Activity 1.1

Two-way engagement on import policy and decision-making processes.

This activity will provide a means for increased stakeholder understanding of and engagement in risk analyses and other import policy setting processes. In addition to the legislated consultation processes of formal Biosecurity Import Risk Analyses, it has been acknowledged that increased engagement and understanding by industry and government stakeholders would strengthen decision-making processes. A program of two-way communication will be established to facilitate greater information exchange and increase transparency. This activity will increase shared understanding of Australia's border biosecurity risk management system and cultivate industry-government collaboration and communication on border biosecurity issues.

Activity 1.2

R&D strategic priorities for aquatic risk analyses and import policies.

This activity will engage stakeholders to identify strategic research priorities that will address information gaps to inform import biosecurity policies. There is an ongoing need for research to support and inform the risk assessment process for aquatic animals imported into Australia. There are some common gaps in knowledge, particularly for emerging diseases, that include the susceptibility of Australian species, impacts on wild populations, and the stability of pathogenic agents in different commodities. Offshore or pre-border intelligence gathering will also be considered; to better track known and/or emerging pathogens. Through a collaborative approach to identifying research priorities this activity will focus research investment on the highest priority research issues to support import biosecurity policies. This activity will complement activities 1.1 and 7.1.

Activity 1.3

Strategic approach to meet technical requirements and support market access.

This activity will engage stakeholders to develop a strategic and prioritised approach to addressing technical market access opportunities. Australia's strong aquatic animal health management systems provide numerous opportunities to meet importing country sanitary requirements. However, the requirements may change over time and new disease challenges may emerge. Through this activity, stakeholders will be engaged to identify and prioritise strategic opportunities and vulnerabilities that may be addressed to improve or secure market access. Some possible examples include identifying sector-specific surveillance or health accreditation programs. This activity will provide a strategic mechanism to prioritise and address aquatic animal industries' technical market access challenges and needs.

Objective 1 Activities

Activity		Expected benefits/outcome	Lead and key collaborators	Resources
1.1	Establish a program of two-way engagement activities that supports collaboration and communication on issues surrounding import policy and decision-making processes.	Increased stakeholder understanding of, and engagement in, import policy setting processes, including risk analyses.	**Lead** DAFF Industry peak bodies **Collaborators** State and territory governments	Principally in-kind
1.2	Identify agreed RD&E strategic priorities to inform and support aquatic IRAs and import policies based on the best available evidence.	Strategic research priorities are identified to address significant gaps in aquatic animal health knowledge to inform import biosecurity policies.	**Lead** FRDC AAHBCP* **Collaborators** Industry peak bodies, DAFF	Principally in-kind Draws on outcomes of activities 1.1 and 7.1
1.3	Develop a strategic approach to meet the technical requirements of Australia's trading partners and support market access opportunities for industry.	A strategic approach to address technical market access opportunities and vulnerabilities is developed collaboratively by industries and governments.	**Lead** DAFF **Collaborators** Industry peak bodies	Direct resources for consultation and analysis

[illegible]

*FRDC AAHBCP is the Fisheries Research and Development Corporation Aquatic Animal Health and Biosecurity Coordination Program.

OBJECTIVE 2

Integrated enterprise and regional biosecurity programs are strengthened to support the productivity and sustainability of aquaculture and fisheries.

ENTERPRISE AND REGIONAL BIOSECURITY

Enterprise biosecurity describes the systems put in place to protect aquatic businesses (or "enterprises") from disease. It is a systematic way of reducing business-level risks and forms a foundation for the management of aquatic animal health. It is important for business risk management to reduce the likelihood of a serious disease outbreak occurring, and to reduce the impact if it were to occur.

The application of biosecurity practices by aquaculture and fisheries enterprises supports business productivity and profitability by maintaining and improving animal health and welfare.

Enterprise biosecurity is a key component of the broader biosecurity system. Collective implementation of biosecurity measures by aquaculture enterprises reduces the risk of disease at both the regional and national level, as well as for aquatic ecosystems, including fisheries resources. Enterprise biosecurity integrates with other elements of the biosecurity system and the six other objectives of AQUAPLAN.

Responsibilities for enterprise and regional biosecurity extend beyond aquaculture industries to other users of aquatic resources and environments. This includes commercial, recreational, and customary fisheries, public users, and governments. Each of these parties have responsibility to implement measures to minimise and manage risk. However, this objective focuses deliberately on enterprise and regional level biosecurity where it is expected that gains in health management and business outcomes can be made.

Substantial progress has been made through the previous AQUAPLANs to develop generic and sector-specific biosecurity planning guidance documents. Most recently, a survey of aquaculture businesses identified future needs to support the development and implementation—or refinement—of enterprise-specific biosecurity plans. Building on these activities, this objective will support individual enterprises to develop biosecurity measures that are practical, cost-effective and make sense for a farm's specific priorities and risks. There are three key stages to on-farm biosecurity plan implementation: 1) developing a fit-for-purpose auditable biosecurity plan, 2) implementing the plan, and 3) continually measuring its effectiveness and appropriateness. Activities of this objective address all three stages.

Domestication and genetic improvement are key avenues for increasing productivity by pursuing desirable traits such as disease resistance, improved growth, food conversion, or environmental tolerance. Domestication also provides opportunities to strengthen biosecurity by producing animals of a known health status, for example, specific pathogen free stock. However, for domestication programs to reach their full potential and be applied nationally, the biosecurity risks associated with the movement of live aquatic animals need to be effectively managed, so that translocations can occur safely. Domestic translocation of genetic material needs to be addressed to promote investment in breeding programs and support the long-term growth and productivity of the aquaculture industry.

The ornamental aquarium fish trade in Australia is worth an estimated $350 million annually[4] and includes commercial fish breeding facilities, wholesale traders, retail outlets and fish hobbyists. Unmanaged ornamental fish can present a significant risk of transmitting aquatic animal diseases leading to outbreaks or incursions, particularly in freshwater habitats. National management of ornamental fish has been guided by the *Strategic approach to the management of ornamental fish in Australia* (published in 2006). A review of this national strategy and an associated national communication campaign would contribute to managing the aquatic animal disease risks associated with ornamental fish.

Activity 2.1

Enterprise biosecurity plan writing workshops.

This activity will deliver a series of biosecurity plan writing workshops for interested sectors where businesses can develop or review their enterprise biosecurity plan. The workshops will be interactive, driven by the needs of attendees and provide an opportunity to work with peers and other experts. The output will be a fine-tuned or drafted enterprise biosecurity plan that is business relevant and practical. This activity will support development of fit for purpose biosecurity plans that systematically identify and manage biosecurity risks at an enterprise level.

Activity 2.2

Enterprise biosecurity plan implementation support program.

This activity will deliver a program for farm managers to access a panel of trusted subject-matter experts to support implementation of fit-for-purpose biosecurity practices. The program will also be open to fishers, where needs are identified. Once an enterprise biosecurity plan is developed, the next step is to apply it on site and address specific challenges that arise. This activity will provide business managers access to subject-matter experts to refine and operationalise their biosecurity plans.

Activity 2.3

Evaluating and improving enterprise biosecurity plans.

This activity will deliver training for business managers and other interested industry members to evaluate the effectiveness of their biosecurity plans and to identify ways to improve them over time (e.g., through incorporation into a quality management system). Implementing biosecurity plans requires substantial investment of resources, making it essential that businesses have the tools to evaluate its effectiveness and continually adapt as the business develops, or risks change. Effective biosecurity planning provides powerful evidence to support trade, creates business opportunities and demonstrates adherence to existing regulatory requirements. The training will use the principles of self-auditing and will be developed with industry, for industry, to ensure it is practical and fit-for-purpose. This activity will empower businesses to monitor the effectiveness of their biosecurity plans and cultivate a culture of continuous improvement that supports adaptation to changing risks or operating conditions.

Activity 2.4

Translocation of broodstock and genetic material.

This activity will investigate the barriers to, and opportunities for, the domestic translocation of high value aquatic animals (e.g. broodstock) and genetic material. There will be increasing importance placed on domestication and selective breeding of aquatic animals to improve desirable characteristics such as growth and disease resistance. This activity will explore current and expected translocation needs of industry, existing regulation, and possible frameworks for managing biosecurity risks. This activity will provide recommendations for how translocation of high value animals and genetic material can be facilitated while effectively managing biosecurity risks.

Activity 2.5

Review current approaches for managing ornamental fish in Australia.

This activity will support revision of the nationally agreed approaches for managing ornamental fish in Australia. Management of ornamental fish is complex and entails risks associated with invasive pest species and aquatic animal diseases. Much work has been undertaken nationally to improve management of ornamental fish, guided by the *Strategic approach to the management of ornamental fish in Australia* published in 2006. This activity will contribute to the revision of this national strategy to ensure it continues to provide for sound management of the aquatic animal health risks associated with ornamental fish.

Activity 2.6

National ornamental fish communication campaign.

This activity will contribute to the development and implementation of a national communication campaign on ornamental fish to instil behavioural change in target stakeholder groups (including aquarium shops and the general public). This activity will build on previous state and territory focused campaigns and will raise awareness nationally of the aquatic animal diseases risks associated with ornamental fish and educate target stakeholders on how to effectively manage those risks. The effectiveness of the communication campaign will be assessed through a series of stakeholder surveys and will provide recommendations on priorities and approaches for any further initiatives. This activity will provide stakeholders with clear and consistent messaging on the disease risks associated with ornamental fish and contribute to their effective management.

Objective 2 Activities

Activity		Expected benefits/outcome	Lead and key collaborators	Resources
2.1	Develop and deliver sector-specific biosecurity plan writing workshops	Workshop attendees have developed or refined an enterprise biosecurity plan that is specific to their business	**Lead** Peak industry bodies **Collaborators** Commonwealth, state and territory governments, FRDC	Direct for facilitators; in-kind for participants
2.2	Develop an on-farm biosecurity support program for farm managers to implement fit for purpose biosecurity practices	Farm managers have worked with subject-matter experts to refine their biosecurity plan and solve challenges in implementing the plan	**Lead** Peak industry bodies **Collaborators** Commonwealth, state and territory governments	Direct for subject matter experts; in-kind for participants Draws on outcomes of activity 2.1.
2.3	Develop a continual improvement training program to support the evaluation and improvement of on-farm biosecurity plans and practices	Farm managers and other interested industry members have been trained in tools to evaluate the effectiveness of their biosecurity plan and improve and adapt the plan over time to meet changing risks.	**Lead** Peak industry bodies **Collaborators** Commonwealth, state and territory governments	Direct for trainers; in-kind for participants Draws on outcomes of activity 2.2.
2.4	Identify barriers to and opportunities for the domestic translocation of broodstock and genetics	Opportunities, needs, and barriers to domestic translocation of high value animals and genetic material have been clarified, and options for developing a national approach to domestic translocation have been identified.	**Lead** SCAAH* **Collaborators** Peak industry bodies	Direct to coordinate stakeholder consultation and analysis

* The Sub-Committee on Aquatic Animal Health (SCAAH) is an advisory committee to Animal Health Committee (AHC). SCAAH provides high-level scientific, technical and strategic advice to AHC, supporting policy and program development regarding national aquatic animal health. SCAAH [illegible] representation from the Australian, State, Northern Territory and New Zealand governments, CSIRO ACDP, and Australian universities.

Activity		Expected benefits/outcome	Lead and key collaborators	Resources
2.5	Contribute to a review of the 'strategic approach to the management of ornamental fish in Australia' (2006)	Aquatic animal health issues are considered in the review of the 'strategic approach to the management of ornamental fish in Australia' and where appropriate, the strategy is revised to support sound management of aquatic animal health risks associated with ornamental fish.	**Lead** EIC* Freshwater Vertebrates and Invertebrates working group, and industry **Collaborators** SCAAH	Principally in-kind; direct for publication
2.6	Develop a national ornamental fish communication campaign to instil behavioural change in target stakeholder groups.	Target stakeholder groups have an increased understanding of the disease risks posed by ornamental fish species in Australia and have the information available to help them take greater responsibility for effectively managing those risks.	**Lead** Industry peak bodies **Collaborators** EIC Freshwater Vertebrates and Invertebrates working group	Direct for preparation and dissemination of materials and for measuring impact

Note: the 'activity lead' is expected to drive the activity (i.e., develop and implement the project plan, source available funding [where required] and to liaise with key collaborators to achieve the expected benefits and outcomes (refer to page 30 on implementation)).

* The Environment and Invasives Committee is responsible for providing national policy leadership on the identification, prevention and management of invasive plant, vertebrate and invertebrate species that adversely impact the environment, economy and community.

3

OBJECTIVE

Government and industry investment in the national surveillance system is optimised

SURVEILLANCE

Surveillance is fundamentally important for early detection of disease, demonstration of Australia's disease status and market access. It also underpins many aquatic animal health management decisions on issues such as regional biosecurity, translocation policy and on-farm risk management measures.

There has been significant investment in Australia's aquatic animal health surveillance system, including through each of the three previous AQUAPLANs. These investments have built an enviable surveillance system that is efficient and fit for purpose. However, surveillance needs are changing, driven by changes within industry and the environment, technological advances, the changing requirements of trading partners, and new disease threats. Australia's national surveillance system will need to evolve to address and preferably anticipate some of these changes – this is the focus of this objective.

There are many drivers for industry sectors to take an increasingly strategic view of surveillance. Australia's aquaculture and fisheries sectors face different combinations of challenges and opportunities with respect to emerging disease threats, climate change, market access, domestication, and genetic selection of stock. Strategic consideration of sector-specific surveillance needs will assist sectors to address future challenges, take advantage of opportunities and ensure surveillance investments are targeted to the highest priority needs.

Australia's passive surveillance system underpins many key surveillance needs such as early detection and claims for historical freedom from disease. Passive surveillance is also known as observer-initiated surveillance, meaning that it relies on an observer viewing a health event, reporting it and subsequent investigation identifying or excluding infectious disease.

Passive surveillance operates constantly; whenever animals are being observed by a farmer, fisher, veterinarians, or others. However, the sensitivity* of Australia's passive surveillance system to detect certain diseases has not been calculated. By determining the sensitivity of the system, its ability to meet certain needs, such as early detection, can be determined and the system optimised.

This objective will take a strategic view of Australia's surveillance system at the national and sector-specific level and will identify how Australia's surveillance system can be strengthened to meet future needs. The objective will contribute to fundamental needs of our aquatic animal health system such as demonstrating disease status and ensuring early detection of emerging and exotic diseases.

* Sensitivity in this context refers to the ability of the passive surveillance system to detect the occurrence of aquatic emergency animal diseases should they be present.

Activity 3.1

National surveillance strategy.

This activity will develop a national aquatic animal health surveillance strategy that describes what is needed from the national surveillance system, now and into the future. The strategy will identify, common needs, objectives, responsibilities, priority areas for investment and how they can be funded sustainably. The strategy will be developed collaboratively by investers in aquatic animal health surveillance, including industry and governments. It will provide a framework against which sector-specific surveillance plans (activity 3.2) can be developed. This activity will provide an agreed national approach for the surveillance system to underpin confidence in Australia's disease status and ability to rapidly detect and respond to diseases.

Activity 3.2

Sector-specific surveillance plans.

This activity will develop sector-specific surveillance plans that identify priority surveillance objectives and how these can be achieved at a sector level. Participating sectors, in consultation with governments, will agree on desired surveillance outcomes and identify the necessary surveillance activities to achieve them, including for specific diseases. Issues such as data sharing, active surveillance activities and the role of passive surveillance will be addressed and mechanisms to share domestic disease reporting and surveillance data will be formalised. Sustainable funding to implement the surveillance plans will need to be considered. This activity will identify sector-specific and operational surveillance goals and in doing so, support confidence in disease-status for market access, translocation of animals, and increased opportunities for effective responses through early detection of disease.

Activity 3.3

Sensitivity of the passive surveillance system.

This activity will investigate the sensitivity of the passive surveillance system to detect an example disease in a specific sector as a pilot study. The methodology for this activity will be informed by previous studies that have quantified the sensitivity of the passive surveillance systems for some terrestrial animal diseases. From this analysis, strengths and weaknesses in the system will be identified and used to provide recommendations for improvement. The analysis may act as a benchmark of sensitivity from which interventions to improve the performance of the passive surveillance system can be measured over time. This activity will contribute to understanding the sensitivity of the passive surveillance system and identify the areas that need to be addressed to strengthen it.

Objective 3 Activities

Activity		Expected benefits/outcome	Lead and key collaborators	Resources
3.1	Develop a national surveillance strategy for aquatic animal diseases	A national surveillance strategy is developed that guides how investors in aquatic animal health surveillance will strengthen the system and address changing needs and technologies.	**Lead** SCAAH **Collaborators** Peak industry bodies	Principally in-kind Direct to facilitate consultation
3.2	Develop sector-specific surveillance plans to identify surveillance objectives and how they will be achieved	Interested industry sectors have identified and prioritised their surveillance objectives (including data sharing) in cooperation with governments and have a plan for how they will achieve these.	**Lead** Peak industry bodies **Collaborators** Commonwealth, state and territory governments	Principally in-kind Direct for consultation and drafting Draws on outcomes of activity 3.1
3.3	Understand the sensitivity of the passive surveillance system for an example sector and disease	The sensitivity of passive surveillance is quantified for an example sector and disease as a pilot study, and strengths and weaknesses of the system are identified.	**Lead** DAFF **Collaborators** Peak industry bodies, state and territory governments	Direct for research project In-kind for consultation

Here, the 'activity lead' is expected to drive the activity (i.e., develop and implement the project plan, source available funding [where required]) and to liaise with key collaborators to assess the expected benefits and outcomes (refer to page 50 on Implementation).

4

Australia's national diagnostic network for aquatic animal diseases provides reliable testing capability for known and emerging diseases

OBJECTIVE

DIAGNOSTIC CAPABILITY

Australia's national diagnostic network for aquatic animal diseases has been developed over time to support the many functions of Australia's aquatic animal health management system. These include confirmation or exclusion of exotic diseases, implementing disease management measures, enterprise health accreditation and demonstration of regional or national disease status.

The investment in Australia's diagnostic network and diagnostic methods has been substantial and has resulted in significant strength for testing reliability and capacity.

Australia's diagnostic network draws on nodes of expertise throughout national and state government laboratories, research laboratories and private service providers. The high standard of diagnostic service is built upon quality research, validation of methods, diagnostic and laboratory standards, and programs to support quality assurance. However, despite these strong and established elements, Australia's diagnostic network must continue to evolve.

Many factors are driving changing needs and providing opportunities for our diagnostic system. There is growing demand for diagnostic services due to increasing requirements of trading partners, emerging diseases and the growing needs of industry to monitor stock health status. New opportunities are also emerging through technologies such as high throughput sequencing, point of care tests and autonomous or remote monitoring systems. While demand and opportunities are increasing, the number of specialist aquatic diagnosticians are diminishing. Consideration is required to ensure expertise is available to meet the demand for services. These drivers of change will need to be considered and planned for if affordable and reliable diagnostic services are to continue to serve the needs of industries and governments.

DESPITE THESE STRONG AND ESTABLISHED ELEMENTS, AUSTRALIA'S DIAGNOSTIC NETWORK MUST CONTINUE TO EVOLVE

Diagnostic test validation is a fundamentally important process for determining the performance of a diagnostic test for defined purposes of use. Australia follows the WOAH standards for validation of diagnostic methods to demonstrate their accuracy. Validation is expensive but can provide substantial return on investment by allowing optimisation of surveillance programs and reducing their cost, while also providing confidence in the evidence they produce. For example, by determining the performance of methods on pooled samples, the number of tests required might be reduced with very significant cost savings.

New diagnostic approaches and technologies are being developed that are becoming powerful tools for field and laboratory application. While these new technologies are proving valuable, their appropriate application and reliability must be determined. By exploring and evaluating new technologies (e.g. for whole genome sequencing or environmental DNA), Australia's diagnostic network will be able to take advantage of opportunities and avoid any pitfalls from possible inappropriate use.

As technologies change so do fields of diagnostic expertise. Specialist aquatic histopathologists are becoming less common despite the ongoing value of their skills – particularly for research and disease investigation of new and unknown diseases. Neptune, Australia's aquatic animal health information system, was established to collate and share aquatic animal health information, including digitised histopathology slide collections. There is a need for ongoing maintenance of the information assets in Neptune if it is to continue to serve the needs of the aquatic animal health community, including to provide a resource for training.

Activity 4.1

Assess the future needs of Australia's diagnostic system.

This activity will assess the future needs of end-users from Australia's aquatic animal disease diagnostic system such as industry and governments. Stakeholder consultation will inform the future demands on the diagnostic system over the next 5-10 years and how new technologies could contribute to meeting those demands. Based on the views of stakeholders, including anticipated growth and changes within industry, priority areas for investment in the diagnostic system—including research and policy—will be identified. This activity will provide stakeholders with a direction for the future development of Australia's diagnostic system for aquatic animal diseases.

Activity 4.2

Technical guidelines for validation of aquatic animal disease diagnostic tests.

This activity will develop national technical guidelines for each of the different stages of validation of aquatic animal disease molecular diagnostic tests. Although international standards are available to guide validation they can be applied with varying rigour. Through this activity, national technical guidelines will be developed that provide a consistent standard of rigour for applying the international standards when validating diagnostic methods to be used within Australia. The activity will provide stakeholders (including industry, governments, and laboratories) with a clear and consistent approach to the validation of diagnostic tests.

Activity 4.3

Diagnostic accuracy studies for priority aquatic animal disease diagnostic tests.

This activity will evaluate the validation level of existing diagnostic tests for priority aquatic animal diseases and prioritise those that require additional validation. The activity will be informed by the action plans developed through activities 5.1 and 5.2. Prioritisation will also be informed by several factors including the current level of validation, importance for border or regional biosecurity, importance for on farm health management, and potential return on investment. Diagnostic accuracy studies will be conducted for the highest priority diagnostic tests and identified purposes of use. This activity will provide end-users with greater access to fit for purpose diagnostic tests of known performance.

Activity 4.4

Explore the use of novel and emerging diagnostic methods.

This activity will explore the use of novel and emerging diagnostic methods (for example, pond-side test kits, environmental DNA and non-lethal sampling methods such as sentinels) for aquatic animal health surveillance and management. Methods will be identified and prioritised for further assessment based on their suitability to address the needs of Australia's aquatic animal health management system, and where warranted, national guidelines will be developed for their evaluation, interpretation, and use. This activity will contribute to an increased diversity in diagnostic capability and capacity, while ensuring that identified diagnostic tests are fit for purpose and reliable.

Activity 4.5

Improve Neptune and its database.

This activity will improve the utility and functionality of Neptune, Australia's national system for storing and sharing aquatic animal disease information and resources. Neptune contains a database of all published records of aquatic animal pathogens from crustaceans, finfish, and molluscs in Australia. It also includes a digitised library of histological slides. Neptune's database will be enhanced to provide additional content, including histological slides for reference and training purposes. Neptune will be promoted within the aquatic animal health community using a targeted communication campaign and training to encourage the input of new data. This activity will enhance the value of Neptune's information system and will further engage users in sharing and accessing resources to build its value.

Objective 4 Activities

Activity		Expected benefits/outcome	Lead and key collaborators	Resources
4.1	Assess Australia's aquatic animal health diagnostic capability and capacity for the next 5-10 years and identify a strategic approach to meet those future needs	The capability and capacity of Australia's diagnostic system for aquatic animal diseases is assessed and the future needs of its end-users and service providers are identified.	**Lead** SCAAH **Collaborators** Industry peak bodies	Direct to facilitate consultation and report drafting; in kind for participants
4.2	Develop national technical guidelines for the validation of aquatic animal disease molecular diagnostic tests	National technical guidelines for validation of aquatic animal disease molecular diagnostic tests are developed.	**Lead** SCAAH **Collaborators** SCAHLS*	In-kind
4.3	Undertake diagnostic accuracy studies for priority aquatic animal disease diagnostic tests	The validation status of priority aquatic animal disease diagnostic tests is identified, and diagnostic accuracy studies are conducted for prioritised tests.	**Lead** CSIRO-ACDP **Collaborators** SCAAH	Direct for diagnostic accuracy studies Draws on outcomes of activities 4.2, 5.1 and 5.2.
4.4	Explore the use of novel and emerging diagnostic methods and develop national policy guidelines for their evaluation, validation, interpretation, and use.	New and emerging diagnostic methods are prioritised for further assessment based on their suitability to address the needs of Australia's aquatic animal health management system, and where warranted, national guidelines are developed for their evaluation, interpretation, and use.	**Lead** SCAAH **Collaborators** Industry peak bodies, researchers, SCAHLS	Direct for laboratory assessments Draws on outcomes of activity 4.1.
4.5	Improve the utility, usability and functionality of Neptune and its aquatic animal disease database	Neptune's database is enhanced to incorporate additional content and is promoted within the aquatic animal health community to increase access and contributions to its resources.	**Lead** CSIRO-ACDP **Collaborators** DAFF, SCAAH	Direct for data acquisition

Note the 'activity lead' is responsible to drive the activity (i.e., develop and implement the project plan, source available funding [where required] and collaborate with key collaborators to achieve the expected benefits and outcomes (refer to page 50 on implementation).

* The Subcommittee on Animal Health Laboratory Standards (SCAHLS) provides technical advice to Chief Veterinary Officers around Australia on animal health laboratory issues. SCAHLS coordinates several essential laboratory functions to support Australia's national animal health system.

OBJECTIVE 5

Industries and governments enhance their capacity and capability, and understand their roles and responsibilities in mounting rapid, appropriate, and collaborative emergency responses.

EMERGENCY PREPAREDNESS

Emergency aquatic animal disease outbreaks are a substantial threat to aquatic animal production and aquatic environments.

The nature of emergency aquatic animal diseases makes them difficult to predict and manage as they are often highly pathogenic and have the potential to affect both wild and captive populations. New and emerging aquatic animal diseases* are common, and eradication is challenging where outbreaks occur in open systems due to the presence of wild reservoir hosts.

If an emergency response is to be effective preparation before the event is essential. Through previous AQUAPLANs, efforts have focused on developing contingency plans (AQUAVETPLAN) and governance structures (e.g. national coordination mechanisms) to support an effective and timely response.

The focus of this objective is to identify the highest priority disease threats and strengthen preparedness and risk mitigation for them. The first step will be to identify priority exotic diseases that present the greatest concern to industries and government. Action plans will be developed for these diseases that address identified gaps in preparedness or risk mitigation.

Australia has a world-leading system of contingency planning arrangements in place for aquatic animal disease outbreaks. However, there is an on-going need to test contingency arrangements for priority diseases to ensure that they remain fit-for-purpose. Testing will be achieved through exercises based on possible outbreak scenarios. A subsequent activity will be to update or create contingency arrangements to reflect any gaps identified through the exercises or biosecurity action plans.

Emerging diseases are challenging because reliable diagnostic methods are often not available and epidemiological information to guide responses may be absent. These circumstances present challenges for decision making and disease investigation because there may be competing priorities between the need to learn about a disease and the need to contain or eradicate it.

While the circumstances of each outbreak differ, general principles and approaches apply and if they are documented they can be used to guide responses to emerging diseases.

Trust, transparency, effective communication, clear responsibilities and common goals are key elements of a successful response. While no activity is specifically dedicated to these issues, all activities in this objective will support the building of trust and understanding among industry and governments. These elements can then be drawn on in a disease outbreak and facilitate collaboration in high pressure situations.

IF AN EMERGENCY RESPONSE IS TO BE EFFECTIVE, PREPARATION BEFORE THE EVENT IS ESSENTIAL

* According to the WOAH Aquatic Code, an emerging disease is "(a) a change of known pathogen agent, or its spread to a new geographic area or species; or (b) a newly recognised or evolved pathogenic agent". Emerging diseases characteristically are poorly understood which creates challenges for surveillance and management.

Activity 5.1

National priority aquatic animal disease list.

This activity will identify exotic aquatic animal diseases that are a shared priority for industry and government to invest in targeted preparedness and risk mitigation activities. Development of priority disease lists was a recommendation of the *Review of the capacity of Australia's biosecurity system and the underpinning intergovernmental Agreement on Biosecurity (2012)*. The list will be developed through a detailed analysis of the possible consequences of disease establishment and spread and consultation with relevant stakeholders. Similar priority lists have been developed for terrestrial animal, plant, and environmental sectors. For each of the listed diseases a biosecurity action plan will be developed (through activity 5.2) to guide resource allocation for preventing disease outbreaks and preparing to respond effectively should outbreaks occur. Development of a sound priority disease list will ensure that other activities identified in this plan are targeted at the agreed highest priority disease risks.

Activity 5.2

Biosecurity action plans for priority aquatic animal diseases.

This activity will build on activity 5.1 and develop biosecurity action plans for each of the identified priority diseases. The biosecurity action plans will address planning activities across all major areas of the biosecurity system, such as surveillance, response planning, risk management and risk assessment, and prioritise action on any identified gaps. Collaboration among industry, government and relevant stakeholders will be fundamental to identify and implement shared priority actions. The action plans will be a living document and used to guide resource allocation towards identified gaps. This activity will provide a systematic approach to improve risk mitigation and preparedness for Australia's highest priority aquatic animal diseases.

Activity 5.3

Sector-specific simulation exercises.

This activity will deliver a series of sector-specific emergency disease simulation exercises focusing on exotic disease outbreak scenarios that involve industry and government participants, and other relevant stakeholders. Priority diseases identified in activity 5.1 will be the subject of the exercises in accordance with needs identified in the biosecurity action plans developed under activity 5.2. The exercises will have a strong focus on technical aspects of a response and will test the fitness-for-purpose of existing contingency planning arrangements (e.g. AQUAVETPLAN). This activity will build partnerships, cultivate a shared understanding of managing a response and identify ways to strengthen contingency planning before a disease outbreak occurs.

Activity 5.4

New or revised contingency planning arrangements.

This activity will enhance Australia's contingency plans for emergency aquatic animal diseases outbreaks based on the outcomes and priorities identified through activities 5.1, 5.2, and 5.3. An agreed workplan will be developed to guide this activity. The focus will be on improving existing AQUAVETPLAN manuals and may also develop new manuals or guidance documents where they are prioritised. This activity will enhance Australia's contingency planning arrangements for the highest priority aquatic animal diseases and ensure they are fit-for-purpose and practical for industry and government needs.

Activity 5.5

Practical disease investigation guidelines for new and emerging diseases.

This activity will develop practical disease investigation guidelines that clearly and concisely outline the investigation process for new and emerging aquatic animal diseases. The disease investigation process will be outlined in a step-by-step manner that ties together available contingency plans and diagnostic standards (for example, AQUAVETPLAN and Australian and New Zealand Standard Diagnostic Procedures). This activity will complement Activity 5.4 and will provide businesses, laboratories and field and government staff with increased confidence and certainty during disease investigations. This in turn will lead to more effective and efficient emergency aquatic animal disease investigations.

Objective 5 Activities

Activity		Expected benefits/outcome	Lead and key collaborators	Resources
5.1	Develop a national priority aquatic animal disease list	Priority aquatic animal diseases have been identified and agreed by industry and governments. A priority disease list has been developed.	**Lead** DAFF **Collaborators** Industry peak bodies, state and territory governments	In-kind
5.2	Develop biosecurity action plans for national priority aquatic animal diseases that identify gaps in preparedness or risk mitigation for those diseases	Biosecurity action plans have been collaboratively developed for each priority disease, and gaps identified where resources need to be applied to improve preparedness or risk mitigation.	**Lead** DAFF **Collaborators** Industry peak bodies, state and territory governments	Direct to develop action plans Draws on outcomes of activity 5.1.
5.3	Develop and deliver sector-specific simulation exercises for industry and governments to test and strengthen preparedness arrangements	A series of sector-specific simulation exercises have tested existing contingency planning arrangements and identified opportunities to strengthen arrangements.	**Lead** DAFF **Collaborators** Peak industry bodies, state and territory governments	Direct to plan, hold and report on exercises. In-kind participation Draws on outcomes of activities 5.1 and 5.2.
5.4	Build on existing national contingency planning arrangements to support industry and government needs during a response	A work plan to review and revise existing AQUAVETPLAN manuals and develop new manuals or guidance documents (where they are prioritised) is developed and delivered.	**Lead** DAFF **Collaborators** Peak industry bodies, SCAAH	Direct and In-kind Draws on outcomes of activities 5.1, 5.2 and 5.3.
5.5	Develop practical disease investigation guidelines for new and emerging aquatic animal diseases	Practical disease investigation guidelines are developed that outline the investigation process for new and emerging aquatic animal diseases.	**Lead** SCAAH **Collaborators** Industry peak bodies, FRDC, AAHBCP	Direct for drafting and consultation. In-kind for stakeholder review

Note: the 'activity lead' is expected to drive the activity (i.e., develop and implement the project plan, source available funding (where required) and to liaise with key collaborators to achieve the expected benefits and outcomes (refer to page 50 on implementation).

OBJECTIVE 6

Improved access to veterinary medicines, chemicals and vaccines strengthens management of aquatic animal health and welfare, and supports prudent use of antimicrobials and therapeutics.

VETERINARY MEDICINES

Australia's aquatic animal industries require timely access to safe, appropriate, and effective veterinary chemical products—including medicines, vaccines, and antimicrobials (collectively referred to hereafter as *veterinary medicines*).

Veterinary medicines are used to prevent or alleviate animal diseases by administration of the product to animals or their environment. They are an important tool for managing aquatic animal health and welfare. However, inappropriate usage of veterinary medicines can affect trade and have adverse consequences on human and animal health.

Improved access to safe and appropriate veterinary medicines was a focus of both AQUAPLAN 2005-2010 and AQUAPLAN 2014-2019 and considerable progress was made through those plans. However, due to the size and diversity of the Australian aquaculture industry, market failures for registration and supply of veterinary chemicals remain. The minor use permit (MUP) process is viewed as a means for addressing these market failures; however, the expertise required and cost to prepare applications is an obstacle for many sectors and business.

Many sectors would benefit from a nationally coordinated approach for the development of permit applications to the Australian Pesticides and Veterinary Medicines Authority (APVMA), leading to efficiencies and MUPs that have broader benefit.

Antimicrobial resistance (AMR) is a significant international issue that threatens the effectiveness of antimicrobials to treat some diseases of animals and humans. Measures to reduce AMR encompass a range of health management issues such as prudent antimicrobial use, vaccination, and biosecurity and husbandry measures to prevent or minimise disease.

National and international efforts to reduce the development of AMR are likely to affect regulations for veterinary chemical use in aquaculture (and animal production broadly) and will likely impact on trade and market access. It will be important that Australia's aquaculture industries can demonstrate ongoing efforts to support the management of AMR.

IT WILL BE IMPORTANT THAT AUSTRALIA'S AQUACULTURE INDUSTRIES CAN DEMONSTRATE ONGOING EFFORTS TO SUPPORT MANAGEMENT OF AMR

Activity 6.1

Understand existing veterinary medicine use.

This activity will undertake a cross-sectoral survey of the aquaculture industry and aquatic veterinarians to better understand the use of veterinary medicines, including antimicrobials, and to identify the needs and priorities of the sectors over the next 5 to 10 years. The survey results will establish a baseline for veterinary medicine use and will be used to identify the veterinary medicine needs and priorities of the aquaculture industry. This activity will complement other activities under this objective and will inform the development of future actions at both the national and sector-specific level.

Activity 6.2

Aquatic animal minor use permit applications.

This activity will develop a nationally consistent approach to facilitate future aquatic animal MUP applications with the APVMA and to maintain existing permits and registrations. This activity will build on the progress of the previous two AQUAPLANs to decrease the duplication of MUPs across the aquaculture industry and harmonise the research data generated through the MUP application process. Through this activity industry's access to safe and effective veterinary chemicals will be improved through a coordinated and efficient process.

Activity 6.3

Establish antimicrobial resistance baselines for aquaculture sectors.

This activity will establish antimicrobial resistance (AMR) baselines for interested industry sectors within the Australian aquaculture industry. The activity will be undertaken in three phases. Pilot studies conducted with the salmon and barramundi industries will be reviewed to inform the development of this activity and to identify the key benefits of AMR surveillance for industry (phase 1). An industry-government workshop will be held to discuss the outcomes of the review, identify industry needs and to develop the design and objectives of an AMR active surveillance program for aquaculture sectors (phase 2). Interested sectors will then participate in the AMR active surveillance program developed (phase 3). This activity will strengthen the Australian narrative on AMR in aquaculture by establishing baselines for aquaculture sectors.

Objective 6 Activities

Activity	Expected benefits/outcome	Lead and key collaborators	Resources
6.1 Understand existing veterinary medicine use to identify industry needs and priorities	A cross-sectoral survey is undertaken to better understand veterinary medicine use and priorities across the aquaculture industry.	**Lead** DAFF **Collaborators** Industry peak bodies, SCAAH Aquatic Veterinary Medicines working group	Direct for survey design and analysis Draws on the aims of activity 6.2
6.2 Develop a nationally consistent approach to facilitate future aquatic animal minor use permit applications	A nationally coordinated approach to facilitate applications for aquatic animal minor use permit applications to the APVMA and to maintain existing permits and registrations.	**Lead** SCAAH Aquatic Veterinary Medicines working group **Collaborators** Peak industry bodies, University of Adelaide	Direct for national coordination; FRDC funding has been provided Draws on outcomes of activity 6.1
6.3 Conduct active surveillance to establish baseline antimicrobial resistance (AMR) across interested industry sectors	Baseline AMR data is established for interested sectors within the Australian aquaculture industry. The importance and key benefits of AMR surveillance in aquaculture are communicated with industry in an effective and collaborative manner.	**Lead** DAFF **Collaborators** Peak industry bodies, state and territory governments	Direct for AMR surveillance activities

Note the 'activity lead' is expected to drive the activity (i.e., develop and implement the project plan, source available funding [where required]) and to liaise with key collaborators to achieve the expected benefits and outcomes (refer to page 50 on implementation).

OBJECTIVE 7

Research priorities are driven by industry and government needs and new knowledge is created, made accessible and extended to industry to improve aquatic animal health and welfare.

RESEARCH AND INNOVATION

The rapid growth of aquaculture over recent decades has been supported by significant advances in knowledge and technology, including improved understanding of cultured species, aquatic animal diseases and their epidemiology, treatment, and management methods.

Innovation is fundamentally important to support ongoing strengthening of aquatic animal health management systems. Innovation is also important to address new challenges such as emerging diseases and to drive continual improvement in areas such as productivity and sustainability.

Some circumstances of aquatic animal health management place greater demands on research and innovation. These include the diversity and relatively unique fauna of Australian aquatic animal species, diseases that are unique to Australia, the relatively short history of domestication of aquatic species, and the variety of production systems and environments.

Australia has well-established institutional arrangements for fisheries and aquaculture research, development and extension (RD&E), including for aquatic animal health. Through the Fisheries Research and Development Corporation (FRDC) industries and governments co-invest in aquatic animal health RD&E priorities. These investments are made on an industry sector basis, or at a national level through the FRDC's Aquatic Animal Health and Biosecurity Coordination program (AAHBCP), which was established through AQUAPLAN 1998–2003. Additional investments have been made by government and industry through different mechanisms such as Cooperative Research Centres, Australian Research Council grant programs, and state government programs and institutions.

Australia's aquatic animal health research community extends through academic institutions, private sector organisations and government research entities. The research community includes many internationally recognised scientists that are leading experts in their fields. Additionally, applied research is often conducted by industry or in close collaboration with industry within their operating environments.

Despite Australia's well-established and successful arrangements for aquatic animal health RD&E, the opportunities and importance of innovation demands that more be done in this area. Through this objective, AQUAPLAN will drive improvements to ensure that investments are made in areas of greatest benefit, and that new knowledge is shared effectively and in a way that facilitates adoption and application by end-users. Importantly, research and innovation are common themes that will be essential in supporting many other activities in this plan to continue to build on Australia's world's best practice, evidence-based and innovative aquatic animal health system.

Activity 7.1

Research priority setting, engagement, and communication.

This activity will develop an efficient and enduring approach to aquatic animal health RD&E priority setting that identifies the highest priority needs of end-users (including industries and governments). Priority setting is fundamentally important to success at later stages of the RD&E lifecycle, leading ultimately to adoption by end-users (addressed by activity 7.2). This activity will engage relevant parties to develop an approach led by the FRDC AAHBCP and its research partners. Through a collaborative and efficient research priority setting process, RD&E investments can be applied to issues that will have the greatest impact for end-users.

Activity 7.2

Extension and adoption of aquatic animal health research.

This activity will assess how the aquatic animal health R&D extension and adoption system is currently working and identify opportunities for improvement. The activity will identify ways for the RD&E system to deliver outputs that can and will be implemented by end-users. For this to be achieved, the engagement of end-users in priority setting (through activity 7.1) needs to be built on to ensure end-user needs are met and that the research lifecycle is not considered complete until end-users adopt the research outputs or outcomes. This activity will identify RD&E system improvements that provide for meaningful research outcomes and maximise return on investment.

Activity 7.3

AQUAPLAN webinar series.

This activity will develop and deliver a webinar series on aquatic animal health activities of interest to Australia's aquatic animal health community. The webinar series will cover a range of topics linked to AQUAPLAN activities and will provide opportunities for industry, governments, and researchers to present and exchange information. The webinar series will also provide a means for research outcomes to be routinely shared with end-users (Activity 7.2) and interested stakeholders in a manner that promotes collaboration and the exchange of ideas. It will build on the successful webinar series developed under AQUAPLAN 2014–2019. This activity will be a key initiative to cultivate engagement and meaningful discussion on AQUAPLAN activities among Australia's aquatic animal health community.

AQUAPLAN WILL DRIVE IMPROVEMENTS TO ENSURE THAT INVESTMENTS ARE MADE IN AREAS OF GREATEST BENEFIT

Objective 7 Activities

Activity		Expected benefits/outcome	Lead and key collaborators	Resources
7.1	Develop an enduring approach to collaborative RD&E priority setting, engagement, and communication.	An efficient research priority setting, engagement, and communication process is collaboratively developed.	**Lead** FRDC AAHBCP subprogram **Collaborators** Industry peak bodies, SCAAH, universities.	In-kind
7.2	Identify barriers to and opportunities for extension and adoption of aquatic animal health RD&E	Barriers to and opportunities for extension and adoption inform RD&E system improvements that ensure that research is not considered complete until it is extended by end-users, and opportunities for adoption identified, maximising return on investment.	**Lead** FRDC AAHBCP subprogram **Collaborators** Industry peak bodies, Commonwealth, state and territory governments	Direct for consultation and analysis
7.3	Develop and deliver the AQUAPLAN webinar series	A webinar series is delivered for Australia's aquatic animal health community that provides meaningful engagement and extension opportunities for AQUAPLAN activities.	**Lead** DAFF **Collaborators** Industry and governments.	In-kind

Note: the "activity lead" is expected to drive the activity (i.e., develop and implement the project plan, source available funding where required) and to liaise with key collaborators to achieve the expected benefits and outcomes (refer to page 58 on implementation).

IMPLEMENTING THE PLAN

Approach to implementation

The objectives and activities of this plan were developed collaboratively among industries and governments (Appendix A and B). Implementation of the plan will also emphasise a collaborative approach. There are four pillars that will underpin implementation (Figure 1), and these will be used to develop the **implementation, communication and engagement, and monitoring and evaluation plans**.

A mid-term review will play a key role in monitoring progress and allowing for flexibility to adapt if priorities or circumstances change. For example, aquatic emergency animal disease events can cause substantial shifts in priorities.

It is recognised that over the five-year term of the plan, additional activities aligned with the objectives of the plan may be identified as priorities by stakeholders. The development and delivery of additional activities aligned to the objectives of the plan is encouraged. These may be captured in the mid-term review of the plan, or stakeholders can report these additional activities as part of the regular progress reporting on implementation, which will assist in demonstrating the overall benefit of AQUAPLAN.

Figure 1 **Four pillars of AQUAPLAN implementation**

Roles and responsibilities

Clarity on roles and responsibilities is important for implementation. To successfully implement AQUAPLAN, everyone must play their part to build and share their expertise, strengths, and capabilities.

Representatives from the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF), the state and territory governments and industry peak bodies will share responsibility for the implementation of AQUAPLAN. An industry-government workshop will be held annually to help guide implementation of the plan and to represent industry and governments shared interests (Figure 2).

Representatives from DAFF will provide central coordination of AQUAPLAN, by liaising with industry and governments, activity leads, and collaborators as required to progress AQUAPLAN's implementation, communication and engagement, and monitoring and evaluation plans (Figure 2).

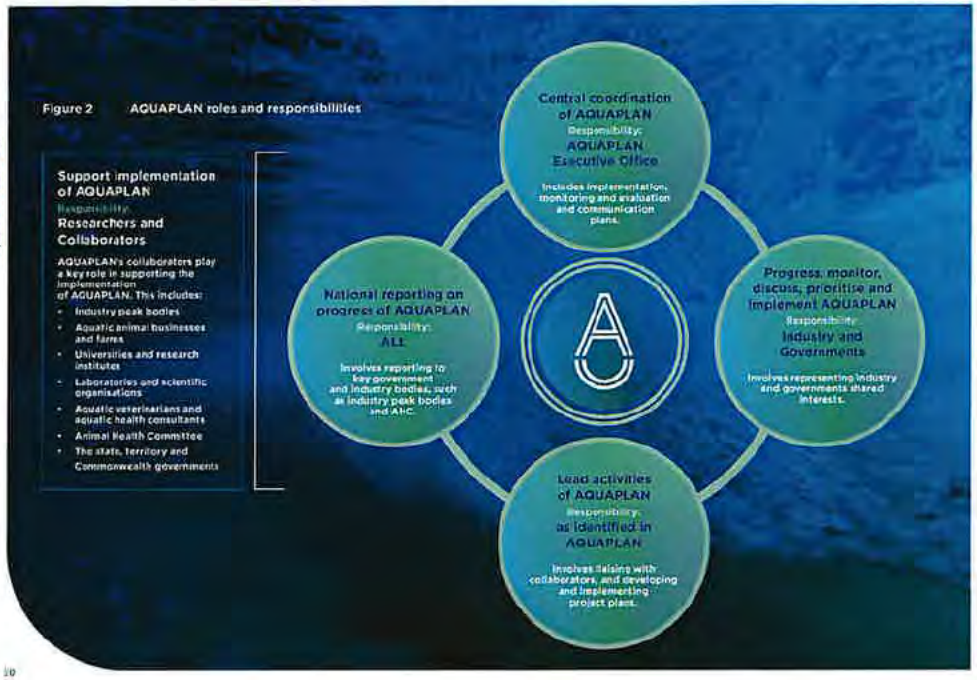
It will be the responsibility of the activity leads to drive their nominated activities. This includes liaising with collaborators, developing and implementing the activities' project plan, and sourcing available funding (where required) (Figure 2).

Implementation will require collaboration with others in the aquatic animal health community, including universities, laboratories, aquaculture and fisheries businesses, aquatic health consultants and veterinarians, the FRDC, and other scientific organisations (Figure 2). It will be the responsibility of everyone to champion the plan and to report on its progress (Figure 2).

All activities in AQUAPLAN will be collaborative, cultivate ownership and will aim to realise benefit for the aquatic animal health community.

ALL ACTIVITIES IN AQUAPLAN WILL BE COLLABORATIVE, CULTIVATE OWNERSHIP AND WILL AIM TO REALISE BENEFIT FOR THE AQUATIC ANIMAL HEALTH COMMUNITY

Figure 2 AQUAPLAN roles and responsibilities



CONCLUSION

The world's aquatic environments provide extraordinary values – for food production, human nutrition, commerce and as an important haven for biodiversity. These values have been recognised by the United Nations in the sustainable development goals[9] and by the High Level Panel for a Sustainable Ocean Economy[9].

Aquatic environments are increasingly important for human nutrition and we are witnessing a global revolution in how aquatic animals are produced and consumed. Aquaculture, as the fastest growing food production sector is driving this revolution. It now produces more food for human consumption than capture fisheries and has contributed to a doubling of per capita seafood consumption since the 1950s (despite a doubling of human population over the same period)[9]. New aquatic animal species are also being domesticated at a rate about 100 times faster than terrestrial plants or animals at any time in human history[9].

In Australia, the value of aquatic environments is substantial. They are critical to economic, cultural, recreational and environmental values (see 'drivers' on page 10). In 2019-2020, the gross value of aquaculture production in Australia exceeded capture fisheries for the first time. While fisheries will continue to supply high quality and sustainable seafood, it is Australia's aquaculture industry where production growth is expected.

Industry and the Australian Government share an ambitious goal to expand the value of Australia's agricultural production, including seafood, to $100 billion by 2030[10]. Forecasts show that Australia's seafood industry will be one of the fastest growing sectors over that time and the forecasts are backed by substantial private investment in significant new aquaculture projects, expansion of existing enterprises and exciting prospects for production of new species. The Australian Government has also invested significantly in the 2030 goal across 7 themes, including trade and biosecurity[11].

Despite the exciting prospects for aquatic animal industries there are significant threats to aquatic environments and the health of aquatic animal populations. The United Nations Environment Program describes the triple planetary crisis – climate change, biodiversity loss, and pollution.

These challenges apply to aquatic environments and potentially exacerbate the impact of aquatic animal diseases.

If investment is to be maximised, growth sustained, livelihoods and cultural and environmental assets protected – the health of aquatic animals must be managed effectively at national, regional and enterprise levels. Not only is disease one of the greatest threats to aquatic animal populations, but healthy and thriving animals provide the best and most sustainable outcomes for all. This is the role of AQUAPLAN.

The vision of AQUAPLAN has never been more important – to improve the productivity and profitability of aquatic animal industries and protect aquatic environments.

THE VISION OF AQUAPLAN HAS NEVER BEEN MORE IMPORTANT – TO IMPROVE THE PRODUCTIVITY AND PROFITABILITY OF AQUATIC ANIMAL INDUSTRIES AND PROTECT AQUATIC ENVIRONMENTS

APPENDIX A

Organisations involved in the development of AQUAPLAN 2022-2027

INDUSTRY

- Australian Abalone Growers Association
- Australian Barramundi Farmers Association
- Australian Prawn Farmers Association
- Australian Southern Bluefin Tuna Industry Association
- Clean Seas Kingfish
- National Aquaculture Council*
- Oysters Australia
- Pearl Producers Australia
- Pet Producers Industry Association (ornamental fish industry)
- Southern Rock Lobster Limited
- Tasmanian Salmonid Growers Association

NATIONAL

- Animal Health Australia
- Commonwealth, Department of Agriculture, Fisheries and Forestry
- CSIRO Australian Centre for Disease Preparedness
- Fisheries Research and Development Corporation
- Northern Australia aquaculture institutional industry situational analysis project
- Sub-Committee on Aquatic Animal Health

JURISDICTIONS

- New South Wales, Department of Primary Industries
- Northern Territory, Department of Industry, Tourism and Trade
- Queensland, Department of Agriculture and Fisheries
- South Australia, Department of Primary Industries and Regions
- Tasmania, Department of Natural Resources and Environment
- Victoria, Department of Jobs, Precincts and Regions
- Western Australia, Department of Primary Industries and Regional Development.

* Note that during the development process, NAC was disbanded, and at the time of drafting, work was underway to consider national approach as industry representation into the future.

APPENDIX B

Process to develop AQUAPLAN 2022-2027

AQUAPLAN 2022-2027 was developed collaboratively by governments, aquaculture and fishing industries and other organisations. Industries and governments worked together at every stage of the process to develop the plan.

Development of the plan was guided by a steering group (with equal industry and government membership) that was supported by a secretariat provided by DAFF. The following graphic shows the key steps to develop the plan commencing from late 2019 to mid-2022.

APPENDIX C

Linkages

Australia's arrangements for aquatic animal health management are integrated with those of the OIE and national biosecurity, animal welfare, emergency disease response and research and development initiatives and arrangements. AQUAPLAN 2022-2027 was developed in consideration of other national strategic plans and agreements, including:

- the **Intergovernmental Agreement on Biosecurity** (IGAB) – an agreement that aims to strengthen partnerships between the Australian, state and territory governments and improve the national biosecurity system by identifying roles and responsibilities and outlining collaboration priorities.
- the **Commonwealth Biosecurity 2030 Roadmap** – provides a clear and practical roadmap to direct and guide projects, initiatives and investments associated with the Australian Government's biosecurity remit. Annual action plans will be developed to guide its delivery and ensure transparency.
- the **National Biosecurity Strategy** (under development at the time of writing) – will align current and future efforts of key stakeholders across the system in a common purpose, enhancing the long-held commitment to shared responsibility with a clear and transparent commitment to action and investment.
- the **National Aquaculture Strategy** (2017-2027) (NAS) – a 10 year strategy that outlines the industry-government actions required to double the current value of Australia's aquaculture industry to $2 billion a year by 2027.
- the **National Antimicrobial Resistance Strategy** (2020 and Beyond) (2020 AMR Strategy) – builds on Australia's first national AMR strategy 2015-2019. The 2020 strategy sets a 20 year vision to protect the health of humans, animals and the environment, and aligns with the the **World Health Organisation's Global action plan on AMR**.
- the **Fisheries Research and Development Corporation's (FRDC) R&D Plan (2020-2025)** – this strategy conveys a shared vision for the future, the outcomes required to pursue that vision, and the enabling strategies to achieve them.
- the **Strategic approach to the management of ornamental fish in Australia** (published 2006) – provides recommendations for the management and regulation of the ornamental fish trade in Australia.
- the **National Environmental Biosecurity Response Agreement** (NEBRA) – this agreement sets out emergency response arrangements, including cost-sharing arrangements, for biosecurity incidents that primarily impact the environment and/or social amenity and where the response is for the public good. It applies to aquatic animal diseases if they meet the eligibility criteria.

AQUAPLAN 2022-2027 was also developed in consideration of the **FRDC's Aquatic Animal Health and Biosecurity Coordination Program** and the common sector-specific needs reflected in:

- the Australian Abalone Growers' Association Research, Development and Extension (RD&E) Plan 2020-2025 (available on the FRDC's website)
- the Australian Barramundi Farmers' Association Strategic Plan 2020-2025
- the Australian Prawn Farmers' Association Strategic Plan 2020-2025
- the Australian Southern Bluefin Tuna Industry Association Research, Development and Extension (RD&E) Plan 2020-2025 (available on the FRDC's website)
- the Oysters Australia Strategic Plan 2020-2025
- the Southern Rock Lobster Limited Strategy 2022 (available on the FRDC's website)
- the Tasmanian Salmonid Growers' Association strategic areas of RD&E.

For more information on the FRDC's industry partnership agreements (IPAs) and current sector plans refer to the FRDC's website.

Although not directly linked, AQUAPLAN 2022-2027 will complement the activities of the first national strategic plan for terrestrial animal health, Animalplan 2022-2027. Animalplan provides a vision for a better national animal health system by 2025 and identifies activities to be delivered over the next five years for the benefit of the terrestrial animal sector.

THE INDUSTRY AND GOVERNMENT PARTNERSHIPS THAT ARE FUNDAMENTAL TO ACHIEVING THE COMMON GOALS OF THE PLAN HAVE BEEN GIVEN PARTICULAR EMPHASIS IN AQUAPLAN 2022–2027

APPENDIX D

Acronyms and abbreviations

Acronym or abbreviation	Meaning
AHC	Animal Health Committee
AMR	Antimicrobial resistance
APVMA	Australian Pesticides and Veterinary Medicines Authority
AQUAPLAN	Australia's National Strategic Plan for Aquatic Animal Health
AQUAVETPLAN	Australia's Aquatic Veterinary Emergency plan
DAFF	Australian Government Department of Agriculture, Fisheries and Forestry
FRDC	Fisheries Research and Development Corporation
FRDC AAHBCP	Fisheries Research and Development Corporation Aquatic Animal Health and Biosecurity Coordination Program
NAC	National Aquaculture Council
WOAH	World Organisation for Animal Health
SCAAH	Sub-Committee on Aquatic Animal Health
SCAHLS	Sub-Committee on Animal Health Laboratory Standards
SIA	Seafood Industry Australia

REFERENCES

For more information:

Visit **AQUAPLAN – Australia's national strategic plan for aquatic animal health** using the hyperlink or QR code provided:

www.agriculture.gov.au/agriculture-land/animal/aquatic/aquaplan

How to be involved:

Visit the links provided above for up-to-date information on:

- the progress of AQUAPLAN and its activities including progress reports
- the implementation of AQUAPLAN
- the AQUAPLAN webinar series

Or contact the Aquatic Pest and Health Policy section at: **aquaplan@aff.gov.au**