



Animalplan 2022 to 2027

Progress Report 5

November 2024

© Commonwealth of Australia 2024

Ownership of intellectual property rights

Unless otherwise noted, copyright (and any other intellectual property rights) in this publication is owned by the Commonwealth of Australia (referred to as the Commonwealth).

Creative Commons licence

All material in this publication is licensed under a [Creative Commons Attribution 4.0 International Licence](https://creativecommons.org/licenses/by/4.0/) except content supplied by third parties, logos and the Commonwealth Coat of Arms.



Cataloguing data

This publication is available at agriculture.gov.au.

Department of Agriculture, Fisheries and Forestry

This publication (and any material sourced from it) should be attributed as: *Animalplan 2022 to 2027 Progress Report 5*, Department of Agriculture, Fisheries and Forestry, Canberra, December 2024. CC BY 4.0.

GPO Box 858 Canberra ACT 2601

Telephone 1800 900 090

Web agriculture.gov.au

Disclaimer

The Australian Government acting through the Department of Agriculture, Fisheries and Forestry has exercised due care and skill in preparing and compiling the information and data in this publication. Notwithstanding, the Department of Agriculture, Fisheries and Forestry, its employees and advisers disclaim all liability, including liability for negligence and for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying on any of the information or data in this publication to the maximum extent permitted by law.

Acknowledgements

The authors thank stakeholders for their input into this progress report.

Acknowledgement of Country

We acknowledge the Traditional Custodians of Australia and their continuing connection to land and sea, waters, environment and community. We pay our respects to the Traditional Custodians of the lands we live and work on, their culture, and their Elders past and present.

Contents

| | |
|--|-----------|
| Introduction..... | iv |
| Objective 1: Improve Australia’s preparedness and ability to respond to emergency animal diseases | 1 |
| Objective 2: Improve Australia’s surveillance and diagnostic capacity for animal pests and diseases | 6 |
| Objective 3: Improve the adoption and implementation of biosecurity practices throughout the terrestrial animal industry supply chain | 8 |
| Objective 4: Manage the risk of antimicrobial resistance | 10 |
| Objective 5: Improve animal welfare outcomes relevant to emergency scenarios. | 11 |
| Objective 6: Implement industry sustainability frameworks and plans..... | 12 |
| Objective 7: Improve the integrity of animal health systems..... | 14 |
| Project compendium | 18 |

Introduction

Animalplan 2022 to 2027 (Animalplan) is Australia's first national action plan to strengthen our production animal health system. It follows on from the success of [AQUAPLAN](#), the national plan for aquatic animal industries.

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.

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 both the [Commonwealth Biosecurity 2030](#) roadmap and 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.

Implementation of Animalplan activities is a shared responsibility between government and non-government organisations. The Animalplan Steering Committee, with representation from government and industry, is overseeing the implementation of Animalplan activities.

The Steering Committee prioritises, champions and oversees the implementation of Animalplan activities, and provides updates to Animal Health Australia's (AHA) Members' Forum, the Animal Health Committee (AHC), and the National Biosecurity Committee (NBC). This includes promoting industry and government engagement, and engagement with other stakeholders through events like the Animalplan webinar series.

This report provides an overview of the progress of projects being undertaken across stakeholder groups, that align to the Animalplan objectives and activities.

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

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

| Activity | Lead and key collaborators | Desired outcome by 2027 | Status | Progress update | Next steps |
|--|--|--|--|--|---|
| 1.1. Continue to implement recommendations from emergency responses including EAD incursions, COVID-19, previous EAD simulation exercises and recent natural disasters | Animal Health Australia (AHA), to facilitate engagement across governments and industries; government agencies and peak industry organisations (to lead implementation of recommendations) | Recommendations from emergency responses are actioned to reduce emergency scenario risks to production animal industries | <p>Yet to commence (projects 26, 27)</p> <p>In progress (project 52)</p> <p>Completed (projects 38, 39, 40)</p> | <ul style="list-style-type: none"> • Enhancing decision making on emergency animal disease (EAD) operations (project 26): The AHA Industry Forum EAD Working Group have developed a proposal that looks at building critical awareness around EAD issues, the impacts that could occur and developing resources and training to aid decision making and planning on a national cross-sectoral basis. • EAD Crisis Management planning (project 27): The proposal aims to conduct a stocktake of existing resources and to form a collaborative approach between government and industry (across a range of species) to develop new templates and resources that holistically address the actions and events that may take place in an EAD crisis. Resources developed will be made accessible to other industries. Some industries have since developed their own plans and are sharing them as part of the initial Crisis Management Plan project stocktake. • South Australian (SA) pig biosecurity project (project 52): A digital form was developed and used to collect information on routine farm movements of pigs (including routes) and other products including feed, semen and waste. A verification framework for enhanced on farm biosecurity practices, to mitigate the risk of disease introduction and spread and support assurances of regulators during an EAD outbreak, has been developed in consultation with industry stakeholders and other jurisdictions. A report on | <ul style="list-style-type: none"> • Project 27: Resources developed will be made accessible to industry and government to provide ongoing training and exercise support. This project is expected to finish in June 2025. • Project 52: The project will be guided by the tools and resources developed by industry stakeholders. The project will identify options for publicising the checklists, tools and resources to support producers to reach the required standard of verification in consultation with key stakeholders. |

Animalplan 2022 to 2027 Progress Report 05 - November 2024

| Activity | Lead and key collaborators | Desired outcome by 2027 | Status | Progress update | Next steps |
|---|---|--|---|--|---|
| | | | | <p>the project has been distributed to key stakeholders. The report identified tools and other resources required to support the pig industry (producers, veterinarians, auditors and other industry stakeholders) to comply with the expected standards and verify their biosecurity practices in a manner consistent with the best practice guidelines.</p> <p>Completed</p> <ul style="list-style-type: none"> • Exercise Milky Way (project 39): Exercise recommendations have been progressed to government and industry as appropriate. • Exercise Paratus (project 40): the Exercise Paratus program series concluded in June 2024 and the Department of Agriculture, Fisheries and Forestry (DAFF) will continue to address findings from the program series and other exercises. DAFF has also implemented an all-hazards emergency management capability development program to ensure continual improvement. | |
| <p>1.2. Continue to undertake simulation exercises for a variety of EAD scenarios, including identifying and addressing trade ramifications</p> | <p>AHA, Jurisdictions and peak industry organisations</p> | <p>Simulation exercises are completed to reduce industry risks in a variety of emergency scenarios</p> | <p>Completed (project 39)</p> | | |
| <p>1.3. Operationalise AUSVETPLAN manuals and documents across industry supply chains and structures</p> | <p>AHA, Jurisdictions and peak industry organisations</p> | <p>Agreed AUSVETPLAN manuals and documents are applied to reduce vulnerabilities in industry supply chains and structure</p> | <p>In progress (projects 26, 27, 32)</p> | <ul style="list-style-type: none"> • Disposal priority project focusing on pyrolysis and composting as methods for large animal disposal (project 32): Composting and pyrolysis provide alternatives to deep burial and open-air burning that are biosecure and environmentally sound methods of carcass disposal. Further evaluation of these methods is required to ensure they are practical and operational in a large animal disease response. <p>Composting</p> | <ul style="list-style-type: none"> • Project 32: Final results from sample analysis are expected by mid-August 2024. <p>Compost training workshop for agency responders and industry representatives scheduled for 24-25 September 2024.</p> <p>Final Project report expected by 1 November 2024.</p> |

Animalplan 2022 to 2027 Progress Report 05 - November 2024

| Activity | Lead and key collaborators | Desired outcome by 2027 | Status | Progress update | Next steps |
|---|----------------------------------|--|---|---|--|
| | | | | <p>The New South Wales Department of Primary Industries and Regional Development (NSW DPIRD) commenced two large animal carcass composting trials in November 2023 (cattle carcasses) and February 2024 (pig carcasses) respectively. The cattle carcass composting trial is comparing current industry practice with three alternative composting treatments. All of the treatments have achieved the temperatures required for pasteurisation. A novel aspect of the trial includes the insertion of temperature loggers within the carcasses to determine if these areas of the composting process are reaching thermophilic conditions. The pig carcass composting trial compares standard whole carcass composting with grinding of partially composted carcasses. All of the treatments thus far have achieved the time-temperature requirements for pasteurisation. Initial microbiological testing has demonstrated that the material complies with the microbiological thresholds outlined in AS4454 (2012).</p> <p>Pyrolysis The pyrolysis implementation project is currently still in the build phase of the pyrolysis unit. There have been several delays in sourcing materials, some labour issues and the need for design modifications that have led to this delay. Once a handover date for the bespoke mobile pyrolysis unit can be set, transportation to the testing site will be undertaken followed by testing of the unit including emissions testing.</p> <ul style="list-style-type: none"> • Project 26 has been mentioned under activity 1.1 but also aligns with activity 1.3. • Project 27 has been mentioned under activity 1.1 but also aligns with activity 1.3. | <p>Publication of scientific journal papers to be investigated.</p> |
| <p>1.4. Undertake projects, including commissioning</p> | <p>DAFF, government agencies</p> | <p>Existing and/or new decision support tools provide timely and appropriate</p> | <p>In progress (projects 17, 32, 63)</p> | <ul style="list-style-type: none"> • Feral pig modelling (project 17): Biosecurity QLD’s feral pig spatial modelling has improved understanding of feral pig distributions and their ecology which will enable cost-effective strategies | <ul style="list-style-type: none"> • Project 17: An additional research paper has been prepared focussing on feral pig movement before, during and after aerial shooting activities to |

Animalplan 2022 to 2027 Progress Report 05 - November 2024

| Activity | Lead and key collaborators | Desired outcome by 2027 | Status | Progress update | Next steps |
|--|--|---|--|--|--|
| and undertaking research, to further develop economic analyses and epidemiological modelling tools supporting rapid decision making in EAD responses for priority diseases | | information to effectively support EAD responses | Completed (project 22, 15) | <p>for feral pig management. To date, three scientific papers have been published, one each in the Australian Veterinary Journal (2022), Wildlife Research (2023) and Australian Mammalogy (2023). In addition to formal journal papers, the project has put together a comprehensive publicly available report on the effectiveness and efficiencies of feral pig control tools and an internal-only report on the capacity of QLD feral pig stakeholders to control feral pigs.</p> <ul style="list-style-type: none"> • Project 32 has been mentioned under activity 1.3 but also aligns with activity 1.4. • Future of Australian Animal Health (Project 63) (NEW): This project will use a participatory foresight approach to explore potential challenges and opportunities for animal health in the future. It aims to support industry and government decision-makers in envisioning preferable futures and determining how Australia may need to adapt as part of a future-ready approach. | <p>support refinement of control measure strategies.</p> <p>This paper is undergoing final pre-publication approval prior to submission to the journal Biological Invasions.</p> <p>A report on the analysis of habitat use data from additional sites to validate habitat suitability maps and previously generated habitat preference findings to validate model applicability has been drafted. Final habitat suitability maps for inclusion in the report will be added following completion of a modelling workshop in December 2024.</p> |
| 1.5. Implement innovative technologies and training to meet national EAD education and training needs | AHA, Jurisdictions, Australian Veterinary Association (AVA), CSIRO Australian Centre for Disease Preparedness (ACDP) and Veterinary Schools of Australia and New Zealand (VSANZ) | Innovative technologies and training methods are adopted and implemented to improve EAD education and training needs for animal health professionals and supply chain participants. | Completed (projects 25, 28, 33, 41) | <p>Other relevant activities</p> <ul style="list-style-type: none"> • The National Biosecurity Training Hub was created as a centralised platform for online biosecurity training for industry, government and community. The hub was developed to build and support biosecurity preparedness and response capacity and capability. More information on the hub can be found here. <p>Completed</p> <ul style="list-style-type: none"> • A syndromic surveillance system to detect emerging animal biosecurity threats (project 28): NSW DPIRD, collaborating with researchers from Charles Sturt University, completed a social research project to identify key drivers and barriers to participation in syndromic surveillance. An article outlining the findings is being developed for publication in a scientific journal. | |

Animalplan 2022 to 2027 Progress Report 05 - November 2024

| Activity | Lead and key collaborators | Desired outcome by 2027 | Status | Progress update | Next steps |
|---|---|--|------------------------|---|--|
| 1.6. Investigate existing systems or trial new systems for national EAD data management in multi-jurisdictional responses | DAFF and Jurisdictions | EAD data, including surveillance and traceability data, is captured, analysed, managed and shared across jurisdictions and utilised for decision making purposes | Yet to commence | | |
| 1.7. Implement activities identified in the National LSD Action Plan | As identified in the National LSD Action Plan | Governments, industries and other relevant stakeholders undertake coordinated and effective actions to mitigate the risks of LSD | In progress | <ul style="list-style-type: none"> Quarterly updates on the National LSD Action Plan are provided on the DAFF website. | <ul style="list-style-type: none"> As indicated in the quarterly updates on the DAFF website. |

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

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

| Activity | Lead and key collaborators | Desired outcome by 2027 | Status | Progress update | Next steps |
|--|---|---|---|---|--|
| 2.1. Implement actions under National Animal Health Surveillance Business Plan (NAHSBP) and National Animal Health Diagnostic Business Plan (NAHDBP) | As identified in the NAHSBP and NAHDBP | National surveillance and diagnostic capability and capacity for animal diseases adequately manage biosecurity risks and support early detection | <p>In progress (projects 2, 6, 7, 8, 9, 51, 54, 55, 56, 57, 58, 59, 61, 62)</p> <p>Completed (projects 1, 3, 4, 5, 6, 10, 18, 28, 36, 42)</p> | <ul style="list-style-type: none"> Regular updates on the National Animal Health Diagnostic Business Plan (NAHDBP) are provided on the DAFF website. | <ul style="list-style-type: none"> As indicated in the updates on the DAFF website. |
| 2.2. Develop and implement novel technologies, such as point-of-care (POC) animal testing and genomics, to address gaps in diagnostic capacity | SCAHLs, Peak industry organisations, Rural Research and Development Corporations (RDCs) | <p>A number of novel technologies are adopted and implemented that improve Australia's surveillance and diagnostic capacity.</p> <p>Australia has a well-developed policy and legislation on the use of POC diagnostic tests in notifiable diseases</p> | <p>In progress (projects 2, 8, 9, 51, 59)</p> <p>Completed (projects 1, 3, 10, 11)</p> | <ul style="list-style-type: none"> Projects 2, 8, 9, 51 and 59: Regular updates on the NAHDBP are provided on the DAFF website. | |

Animalplan 2022 to 2027 Progress Report 05 - November 2024

| Activity | Lead and key collaborators | Desired outcome by 2027 | Status | Progress update | Next steps |
|--|----------------------------|--|------------------------|-----------------|------------|
| 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 | DAFF | Surveillance requirements are identified, understood, and implemented to improve market access and support Australia's disease status claims | Yet to commence | | |

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

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

| Activity | Lead and key collaborators | Desired outcome by 2027 | Status | Priority progress update | Next steps |
|--|---|--|--|--|--|
| 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 | Peak Industry Organisations, Jurisdictions, AHA | 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 | In progress (projects 37, 52) | <ul style="list-style-type: none"> Enhancement of One Biosecurity System (project 37): Work on the Enhancement of the SA One Biosecurity program to include a pig module has been placed on hold. Project 52 has been mentioned under activity 1.1 but also aligns with activity 3.1. | <ul style="list-style-type: none"> Project 37: Development of tools and resources to improve the level of preparedness and verification of on-farm biosecurity practices will be retained for potential future inclusion should work resume. |
| 3.2. Share knowledge across animal industries and jurisdictions to strengthen quality assurance programs, on-farm biosecurity systems, biosecurity extension programs and regulatory activities | AHA, Peak Industry Organisations | 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 and zoning. | <p>In progress (projects 37, 52)</p> <p>Completed (project 28)</p> | <ul style="list-style-type: none"> Project 37: has been mentioned under activity 3.1 but also aligns with activity 3.2. Project 52 has been mentioned under activity 1.1 but also aligns with activity 3.2. <p>Other relevant activities</p> <ul style="list-style-type: none"> The Farm Biosecurity awareness campaign is a joint initiative between AHA and Plant Health Australia (PHA) on behalf of their members. The program’s goal is to help producers reduce the risks posed by diseases, pests and weeds to their crops and livestock. Farm Biosecurity provides information about on-farm biosecurity measures, which help prevent both endemic and exotic diseases, pests and weeds from entering and becoming established on farms. It encourages producers to identify risks to their livestock, crops and plant products, and to minimise those risks through good practices. | |

Animalplan 2022 to 2027 Progress Report 05 - November 2024

| Activity | Lead and key collaborators | Desired outcome by 2027 | Status | Priority progress update | Next steps |
|--|--|--|---|--|--|
| 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 | Peak Industry Organisations, AHA, DAFF | 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 | In progress (projects 12, 52, 63) Completed (project 20) | <ul style="list-style-type: none"> • Smallholder risk and communication research (project 12): The pilot project in NSW tested an efficient, data-driven approach to locating smallholders (including pig owners) and determining their biosecurity risk level and engagement needs. • Project 52 has been mentioned under activity 1.1 but also aligns with activity 3.3. • Project 63 has been mentioned under activity 1.4 but also aligns with activity 3.3. | <ul style="list-style-type: none"> • Project 12: The final report is being reviewed. |
| 3.4. Continue developing biosecurity guidelines for the supply chains of novel small-scale industries | AHA, AgriFutures and novel industries | Biosecurity guidelines are updated or developed for novel small-scale production animal industries and communicated effectively | In progress (project 52) Completed (project 43) | <ul style="list-style-type: none"> • Project 52 has been mentioned under activity 1.1 but also aligns with activity 3.4. | |

Objective 4: Manage the risk of antimicrobial resistance

Table 4 Activity to manage the risk of antimicrobial resistance (AMR).

| Activity | Lead and key collaborators | Desired outcome by 2027 | Status | Priority progress update | Next steps |
|---|--|---|--|--|------------|
| <p>4.1. Implement AMR activities as identified in the One Health AMR Master Action Plan and Australia’s Animal Sector Antimicrobial Resistance Action Plan 2022 to 2027</p> | <p>Governments, industries and other relevant stakeholders undertake coordinated and effective actions to mitigate the risks of antimicrobial resistance (AMR)</p> | <p>Governments, industries and other relevant stakeholders undertake coordinated and effective actions to mitigate the risks of AMR</p> | <p>In progress (projects 44, 53)</p> <p>Completed (project 13, 24)</p> | <ul style="list-style-type: none"> <p>Australia’s Animal Sector Antimicrobial Resistance Action Plan 2023 to 2028 (project 44): The Action Plan was published September 2023, launched via a webinar in October 2023 and implementation has commenced. In September 2024, AHC established an AMR Task Group to identify national priority activities in the Action Plan that require government leadership and to consider how to best provide future leadership for those activities. New South Wales (NSW) and Victoria (Vic) will co-chair the AMR Task Group and will operate for an initial period of 12 months.</p> <p>Defining ‘appropriateness of antimicrobial use’ framework for the Australian animal sector (project 53): An antimicrobial stewardship (AMS) assessment framework will be developed for use by companies to identify areas for improvement. This follows on from a previous CSIRO project “Quantifying antimicrobial usage (AMU) in Australian companion and production animals” as it will define quantitative and/or qualitative indicators that can be used to provide context for AMU data, and highlight gaps in antimicrobial stewardship that impact all Australian-specific animal health contexts.</p> <p>The draft framework has been completed and is in the process of being published. A framework for the wildlife sector is being finalised as a sector-level action plan with discussions on expansion to include the zoo and aquariums sectors. Negotiations with each industry are ongoing as to the process and resourcing required for adaptation and completion of a national level AMS assessment.</p> | |

Objective 5: Improve animal welfare outcomes relevant to emergency scenarios.

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

| Activity | Lead and key collaborators | Desired outcome by 2027 | Status | Priority progress update | Next steps |
|---|--|--|-----------------|--------------------------|------------|
| 5.1. Address terrestrial production animal welfare risks in emergency scenarios and incorporate findings in relevant policy and crisis response documents | AHA, in collaboration with jurisdictions and peak industry organisations | Emergency response plans for terrestrial production animal supply chains manage animal welfare risks | Yet to commence | | |

Objective 6: Implement industry sustainability frameworks and plans

Table 6 Activity to implement sustainability frameworks and plans.

| Activity | Lead and key collaborators | Desired outcome | Status | Priority progress update | Next steps |
|--|--|--|--|--|---|
| <p>6.1. Share knowledge (such as the development of benchmarks) between industries to implement industry sustainability frameworks and plans</p> | <p>Peak industry organisations, DAFF</p> | <p>Industry organisations and producers share ideas, adopt and implement sustainability frameworks and plans that improve animal health and welfare outcomes</p> | <p>In progress (project 23, 60)</p> | <ul style="list-style-type: none"> <p>Australian Agriculture Sustainability Framework (AASF) (project 23): The purpose of the AASF is to communicate the sustainability status and goals of the Australian agricultural sector to markets and the community. It will provide the whole-of-Australian agriculture narrative about sustainability to assist in market access and it will provide a translation layer to assist supply chain companies, finance and investors to better understand and report on Australian agricultural sustainability.</p> <p>AASF Stage 2 is reaching its midway point with a number of projects maturing and delivering outcomes. The first double Materiality Assessment (against impact and financial significance) of AASF has been completed by ERM, confirming that the 17 Principles are fit for purpose. ERM have provided recommendations which will inform the strategy and operations of AASF along with some minor enhancements to the framework.</p> <p>Other projects making progress are the AASF Guidelines and Pilots led by KPMG. Six case studies demonstrating how AASF is being used are complete and Guidelines are complete, which assist foundational through to advanced users to apply the framework.</p> <p>The first of the NFF-led pilots with Nutrien as lead partner has recently commenced. Other pilots with a bank & retailer are underway.</p> <p>CSIRO has established four Working Groups from industry, research and government (including ABARES and ABS) to complete the build of the Data Ecosystem which will advise DAFF on the investment required to establish the institutional arrangements and generation of data required to enable sustainability reporting at national through to farm scale.</p> | <ul style="list-style-type: none"> <p>Project 23: AASF Pilots, Data Ecosystem & Materiality assessment will be used to inform the continuing work on strategy and operations for the AASF. An update to the Framework will be complete by mid-2025.</p> |

Animalplan 2022 to 2027 Progress Report 05 - November 2024

| Activity | Lead and key collaborators | Desired outcome | Status | Priority progress update | Next steps |
|----------|----------------------------|-----------------|--------|---|------------|
| | | | | <ul style="list-style-type: none"> Materiality Assessment for the Australian Beef Sustainability Framework (ABSF) (Project 60): Meat & Livestock Australia (MLA) has engaged a consultant to undertake the materiality assessment. Work has begun to review existing literature, analyse the external landscape, conduct peer reviews, and synthesise findings to take to stakeholder interviews and engagement. This assessment will inform and update the themes and priorities for the ABSF report, and will aim to better align reporting expectations against sustainability reporting standards. Specific interest is given to the Global Reporting Initiative Standards. | |

Objective 7: Improve the integrity of animal health systems

Table 7 Activities to improve the integrity of animal health systems.

| Activity | Lead and key collaborators | Desired outcome by 2027 | Status | Priority progress update | Next steps |
|--|-------------------------------------|--|---|---|------------|
| 7.1. Develop cost-effective national traceability registers or systems for agreed animal industries that do not have one | Peak industry bodies, AHA, SAFEMEAT | Cost-effective national traceability registers or systems are developed for agreed animal industries | <p>In progress (project 45)</p> <p>Completed (project 46)</p> | <ul style="list-style-type: none"> Alpaca NLIS (project 45): The Australian Alpaca Association, with assistance from AHA, has joined the National Livestock Identification System (NLIS) for alpacas in a voluntary capacity. | |

Animalplan 2022 to 2027 Progress Report 05 - November 2024

| Activity | Lead and key collaborators | Desired outcome by 2027 | Status | Priority progress update | Next steps |
|--|--|---|---------------------------------------|---|--|
| 7.2. Implement mechanisms to streamline or automate animal and animal product traceability data across agreed industries and make this accessible to all supply chain participants | Integrity Systems Company (ISC), in collaboration with peak industry organisations, DAFF | Existing or new mechanisms are implemented with high adoption rates from supply chain participants to improve collation of traceability data across information systems | In progress (projects 34, 47, 48, 49) | <ul style="list-style-type: none"> • Agricultural Traceability Enhancement: Australian Government contribution (project 34): The Australian Government is investing in grants and initiatives to support traceability arrangements, evidence-based credentials, and better use of data and technology. This includes delivery of symposiums, supporting value-added benefits to First Nations people, exhibiting Australia's practice and innovation, building trust in Southeast Asian markets, and improving reporting and livestock traceability. These initiatives assist implementation activities under the <i>National Agricultural Traceability Strategy 2023 to 2033</i>. • The National Agricultural Traceability Strategy 2023 to 2033 (project 47): The National Agricultural Traceability Strategy 2023 to 2033 (the strategy) was launched in July 2023 by Australian Agriculture Ministers to provide a nationally coordinated approach to enhancing traceability for biosecurity, trade, food safety and other outcomes. The strategy was co-designed by Australian government and industry stakeholders and will support modernising and further strengthening Australia's tracking and tracing capabilities. • National mandatory individual electronic identification (eID) for sheep and goats (project 48): The Sheep and Goat Traceability Task Force (SGTTF) continues to meet regularly to inform sheep and goat eID national implementation efforts. To support ongoing implementation efforts across government and industry, the SGTTF has developed a national Sheep and goat eID National Implementation Plan and a set of National Principles – implementation of individual eID for sheep and goats. PIRSA is supporting the implementation and adoption of electronic identification in sheep and goats (project 48) according to the national implementation framework. • NLIS Database Uplift project (project 49): Work is underway to uplift the National Livestock Identification System (NLIS) Database and its supporting systems. The project is being delivered by ISC in consultation with Australian government and industry stakeholders. Please visit Integrity Systems for more information about the NLIS Database Uplift Project and opportunities. PIRSA is an active contributor to the NLIS Uplift project (project 49). | <ul style="list-style-type: none"> • Project 34: Key activities are outlined at the Agricultural Traceability Grants and Agricultural Traceability Projects webpages. • Project 47: The first 5-year implementation plan for the strategy is expected to be launched soon and will provide guidance on key activities and timeframes to address priority areas for action, which will lead to achieving the desired outcomes of the strategy. • Project 48: Key implementation milestones and activities underway by jurisdiction are outlined in the national Sheep and Goat Traceability Task Force - DAFF (agriculture.gov.au). PIRSA's eID Advantage Program will promote the adoption of eID in Sheep and goats through extension videos, webinars and factsheets. • Project 49: Key activities are outlined at the National Livestock Identification System (NLIS) Database Uplift Project and Integrity Systems |

Animalplan 2022 to 2027 Progress Report 05 - November 2024

| Activity | Lead and key collaborators | Desired outcome by 2027 | Status | Priority progress update | Next steps |
|--|---|--|-------------------------------|---|---|
| 7.3. Use traceability systems to provide feedback to supply chain participants on animal health outcomes | AHA, Meat Standards Australia (MSA) and supply chain participants | Existing or strengthened traceability systems provide improved feedback to supply chain participants on animal health outcomes occurring at relevant points of supply chains | In progress (projects 34, 50) | <ul style="list-style-type: none"> • Project 34 has been mentioned under activity 7.2 but also aligns with activity 7.3. • MyFeedback data (project 50): myFeedback is a new industry-based tool which brings together MSA, carcass data, and disease and defect data from multiple sources including myMSA, allowing for aggregated benchmarking by supply chain, region, state/territory or national. The system provides industry-first combined reporting on the impact of disease incidence in comparison to carcass quality traits. Through these tools, the platform enables producers to make data-driven decisions on-farm, centred around improving the animal health and quality of livestock, in line with market requirements. By collating animal disease and defect data, alongside carcass and eating quality information, producers can more accurately benchmark their performance. | <ul style="list-style-type: none"> • Project 50: More information is available at MLA MSA 2023-2024 Annual Outcomes Report. Producers can register for a myFeedback account via myMLA. Processors can register interest to join myFeedback by contacting the MSA team: msaenquiries@mla.com.au |

Table 8.1 Animalplan Acronyms

| | | | |
|---------------|--|---------------|---|
| AASF | Australian Agriculture Sustainability Framework | HTS | High Throughput Sequencing |
| ABARES | Australian Bureau of Agricultural and Resource Economics | IFAT | Immunofluorescence antibody test |
| ABS | Australian Bureau of Statistics | ISC | Integrity Systems Company |
| ABSF | Materiality Assessment for the Australian Beef Sustainability Framework | LEADDR | Laboratories for EAD Diagnostic and Response |
| ABGD | Australian Biosecurity Genomic Database | LSD | Lumpy skin disease |
| ACDP | Australian Centre for Disease Preparedness | MLA | Meat & Livestock Australia |
| AHA | Animal Health Australia | MSA | Meat Standards Australia |
| AMR | Antimicrobial resistance | NAHDBP | National Animal Health Diagnostic Business Plan |
| AMU | Antimicrobial usage | NAHSBP | National Animal Health Surveillance Business Plan |
| ASFV | African swine fever virus | NATA | National Association of Testing Authorities |
| AVA | Australian Veterinary Association | NATS | National Agriculture Traceability Strategy |
| BTV | Bluetongue virus | NLIS | National Livestock Identification System |
| CSIRO | Commonwealth Scientific and Industrial Research Organisation | PCR | Polymerase Chain Reaction |
| DAFF | Department of Agriculture, Fisheries and Forestry | PHA | Plant Health Australia |
| DIVA | Differentiating Infected from Vaccinated Animals | POC | Point of Care |
| DPIRD | Department of Primary Industries and Regional Development (NSW) | PRNT | Plague reduction neutralisation test |
| EAD | Emergency Animal Disease | PT PCR | Proficiency Testing Polymerase Chain Reaction |
| eID | Electronic identification | qPCR | Quantitative Polymerase Chain Reaction |
| ELISA | Enzyme linked immunosorbent assays | SCAHLs | Sub Committee on Animal Health Laboratory Standards |
| EP | Equine piroplasmiasis | SGTTF | Sheep and Goat Traceability Task Force |
| ERM | Environmental Resources Management | TGP | Traceability Grants Program |
| FMD | Foot-and-mouth disease | VSANZ | Veterinary Schools Australia and New Zealand |

Project compendium

Table 8.2 Active Projects referred to under objectives above

| Project number | Project name | Activity alignment | Contact |
|----------------|--|--------------------|--|
| 2 | Evaluation of antibody-detecting immunoassays for LSD in cattle and buffalo | 2.1, 2.2 | animalhealthlaboratories@aff.gov.au |
| 6 | Northern Australia biosecurity sequencing (NABSeq): High Throughput Sequencing (HTS) network and facility to enhance northern Australian biosecurity | 2.1 | animalhealthlaboratories@aff.gov.au |
| 7 | Lumpy skin disease testing capacity building in the LEADDR network | 2.1 | animalhealthlaboratories@aff.gov.au |
| 8 | Development & evaluation of a POC test network for emergency animal disease diagnosis | 2.1, 2.2 | Animalhealthlaboratories@aff.gov.au |
| 9 | MicroRNA biomarkers for improved detection of animal diseases in a John's disease model | 2.1, 2.2 | Cameron.Stewart@csiro.au |
| 12 | Smallholder risk and communication research | 3.3 | adpr@aff.gov.au |
| 17 | Feral pig modelling | 1.4 | Robyn.Grob@daf.qld.gov.au |
| 23 | Australian Agriculture Sustainability Framework (AASF) | 6.1 | National Farmers' Federation |
| 26 | Enhancing decision making on EAD operations | 1.1, 1.3 | aha@animalhealthaustralia.com.au |
| 27 | EAD Crisis Management Planning | 1.1, 1.3 | aha@animalhealthaustralia.com.au |
| 32 | Disposal priority project focusing on pyrolysis and composting as methods for large animal disposal | 1.4 | Animal.biosecurity@dpi.nsw.gov.au |
| 34 | Agricultural Traceability Enhancement: Australian Government contribution | 7.2, 7.3 | nationaltraceabilitysummit@aff.gov.au |
| 37 | Enhancement of One Biosecurity System | 3.1, 3.2 | Department of Primary Industries and Regions, South Australia |
| 44 | Australia's Animal Sector Antimicrobial Resistance Action Plan 2022 to 2027 | 4.1 | DAFF |
| 45 | Alpaca NLIS | 7.1, 7.3 | aha@animalhealthaustralia.com.au |
| 48 | National mandatory individual electronic identification (eID) for sheep and goats | 7.2 | DAFF |
| 49 | NLIS Database Uplift project | 7.2 | DAFF |
| 50 | MyFeedback data | 7.3 | MSA (MLA) |
| 51 | Equine piroplasmiasis diagnostic capability development | 2.1, 2.2 | animalhealthlaboratories@aff.gov.au |

Animalplan 2022 to 2027 Progress Report 05 - November 2024

| Project number | Project name | Activity alignment | Contact |
|----------------|--|-------------------------|--|
| 52 | South Australian pig biosecurity project | 1.1, 3.1, 3.2, 3.3, 3.4 | Department of Primary Industries and Regions, South Australia |
| 53 | Defining 'appropriateness of antimicrobial use' framework for the Australian animal sector | 4.1 | DAFF |
| 54 | Improve national diagnostic capability for glanders | 2.1 | Animalhealthlaboratories@aff.gov.au |
| 55 | Assessment and improvement of national bluetongue serological capability - a comparative study of commercial and in-house ELISAs | 2.1 | Animalhealthlaboratories@aff.gov.au |
| 56 | Improvement of serological testing for flaviviruses in Australian livestock | 2.1 | Animalhealthlaboratories@aff.gov.au |
| 57 | Towards validation of a microRNA-based diagnostic test for Johne's disease | 2.1 | Animalhealthlaboratories@aff.gov.au |
| 58 | Assessment of molecular DIVA capabilities for lumpy skin disease virus | 2.1 | Animalhealthlaboratories@aff.gov.au |
| 59 | Quality assurance for HTS as an infectious agent discovery tool | 2.1, 2.2 | Animalhealthlaboratories@aff.gov.au |
| 60 | Materiality Assessment for the Australian Beef Sustainability Framework | 6.1 | info@mla.com.au |
| 61 | The Australian Biosecurity Genomic Database: Phase 3 | 2.1 | Animalhealthlaboratories@aff.gov.au |
| 62 | Building a sustainable national sample identification system for animal diagnostics - A pilot study using pre-barcoded sample collection tubes | 2.1 | Animalhealthlaboratories@aff.gov.au |
| 63 | Future of Australian Animal Health (2030-2035) | 1.4, 3.3 | DAFF |

Animalplan 2022 to 2027 Progress Report 05 - November 2024

Table 8.3 Completed Projects referred to under objectives above

| Project number | Project name | Activity alignment | Contact | Completed in: |
|----------------|--|--------------------|--|---|
| 1 | Australian Biosecurity Genomic Database for notifiable terrestrial animal viruses | 2.1, 2.2 | Peter.Mee@agriculture.vic.gov.au | Progress report 2 February 2024 |
| 3 | Developing lumpy skin disease and African horse sickness whole genome sequencing workflows | 2.1, 2.2 | animalhealthlaboratories@aff.gov.au | Progress report 1 November 2023 |
| 4 | Establishing networked serological testing capability for African Swine Fever | 2.1 | animalhealthlaboratories@aff.gov.au | Progress report 2 February 2024 |
| 5 | Sample Tracking and Reporting System (STARS) enhancement | 2.1 | animalhealthlaboratories@aff.gov.au | Progress report 2 February 2024 |
| 10 | Developing immunohistochemistry test for Lumpy Skin Disease | 2.1, 2.2 | animalhealthlaboratories@aff.gov.au | Progress report 2 February 2024 |
| 11 | Consultancy for policies, strategies and operating guidelines for POC testing for infectious disease | 2.2 | animalhealthlaboratories@aff.gov.au | Progress report 1 November 2023 |
| 13 | Antimicrobial resistance survey in the pig industry | 4.1 | raymond.chia@australianpork.com.au | Progress report 3 May 2024 |
| 15 | Carcass Disposal - Destroy and Let Lie | 1.4 | Robyn.Grob@daf.qld.gov.au | Progress report 4 August 2024 |
| 18 | National laboratory simulation exercise planning | 2.1 | animalhealthlaboratories@aff.gov.au | Progress report 1 November 2023 |
| 20 | Building EAD preparedness in domestic abattoirs | 3.3 | adpr@aff.gov.au | Progress report 3 May 2024 |
| 22 | Risk assessment for the introduction of lumpy skin disease (LSD) into Australia through non-regulated pathways | 1.4 | adpr@aff.gov.au | Progress report 1 November 2023 |
| 24 | Mitigating on-farm antimicrobial resistance risks for livestock industries | 4.1 | peter@coombeconsulting.com.au | Progress report 4 August 2024 |
| 25 | Virtual Reality to support FMD training (phase 2) | 1.5 | DAFF | Progress report 1 November 2023 |
| 28 | A syndromic surveillance system to detect emerging animal biosecurity threats | 1.5, 2.1, 3.2 | animalplan@aff.gov.au | Progress report 5 November 2024 |
| 33 | Independent expert review of the veterinary science education capability of Australia and New Zealand | 1.5 | eo@vsanz.org.au | Progress report 2 February 2024 |
| 36 | National laboratory simulation exercise (Exercise Waterhole) | 2.1 | animalhealthlaboratories@aff.gov.au | Progress report 2 February 2024 |
| 38 | AUSVETPLAN Response strategy: Lumpy skin disease | 1.1 | aha@animalhealthaustralia.com.au | Progress report 3 May 2024 |
| 39 | Exercise Milky Way | 1.1, 1.2 | aha@animalhealthaustralia.com.au | Progress report 5 November 2024 |
| 40 | Exercise Paratus | 1.1 | DAFF | Progress report 5 November 2024 |
| 41 | An augmented reality app to demonstrate the signs of four sheep EADs | 1.5 | aha@animalhealthaustralia.com.au | Progress report 1 November 2023 |
| 42 | AUSVETPLAN Management manual: Laboratory preparedness | 2.1 | aha@animalhealthaustralia.com.au | Progress report 4 August 2024 |
| 43 | National Biosecurity Manual | 3.4 | aha@animalhealthaustralia.com.au | Progress report 3 May 2024 |
| 46 | Deer Traceability | 7.1 | Agrifutures Australia | Progress report 4 August 2024 |