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Biosecurity Animal Division

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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.

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Introduction

The National Lumpy Skin Disease (LSD) Action Plan (the Action Plan) was released on 13 October 2022 and sets out national priorities for actions to strengthen Australia's preparedness for an incursion of LSD. It was developed in partnership with governments, industries and other stakeholders. It is envisaged that the Action Plan will be implemented over a period of at least three years.

Of the 27 activities in the Action Plan, 8 have been completed, and 19 are underway and on track. This report provides an overview of each activity's status, priority and next steps. A prioritisation matrix is provided below.

Table 1 Prioritisation matrix

Criteria	High priority (one or more of the following)	Medium priority (one or more of the following)	Low priority (all of the following)
Urgency	Activity is highly time critical.	Activity is less time critical.	Activity is not time critical.
Importance of project	Activity has a high impact on Australia's preparedness for LSD.	Activity has a moderate impact on Australia's preparedness for LSD.	Activity has a lower level of impact on Australia's preparedness for LSD.
Risks to program delivery if not achieved	If not achieved, activity would have a high impact on the success of the program of work or has a high level of dependencies with other activities.	If not achieved, activity would have a moderate impact on the success of the program of work or has some level of dependencies with other activities.	If not achieved, activity would have a low impact on the success of the program of work and has limited dependencies with other projects.

Note: Activities have been prioritised based on urgency and importance of the project and the risks to the success of the National LSD Action Plan program if the project is not delivered successfully.

Objective 1: International engagement

Table O1 Strengthen collaboration and engagement within the region to strategically address the risks of LSD.

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
1.1. Support Indonesia's LSD response	<p>Lead</p> <p>Department of Agriculture, Fisheries and Forestry (DAFF), Department of Foreign Affairs and Trade (DFAT)</p> <p>Collaborators</p> <p>Meat & Livestock Australia (MLA), the Australian Centre for Disease Preparedness (ACDP), overseas partners</p>	This activity aims to ensure Indonesia receives ongoing financial and technical support for their LSD outbreak response to help control and contain the spread of the disease in alignment with the needs identified by the Indonesian Government.	On track	<p>High priority</p> <p>Support for distribution of vaccines and equipment</p> <ul style="list-style-type: none"> Since 2022, the Australian Government has provided 1,435,000 LSD vaccines to the Indonesian government, as well as syringes and needles. DAFF is working with the Indonesian Beef Cattle Industry Association's (GAPUSPINDO) to supply additional foot-and-mouth disease (FMD) and LSD vaccines for use in smallholder farmers in buffer zones around feedlots through a \$169,000 grant awarded to LiveCorp to deliver the requested vaccines. As of July 2025, the vaccines have been purchased, with distribution to occur shortly in accordance with the implementation plan. In April 2025, \$220,000 was provided to LiveCorp to allow for an extension of their biosecurity engagement work with the Indonesian Provincial governments. <p>Laboratory capacity</p> <ul style="list-style-type: none"> DAFF has provided \$1.7 million to the ACDP to deliver diagnostics and capacity building support to Indonesian government laboratories. The primary objective of the Regional Emerging Disease Support (REDS) program is to assist with the implementation and delivery of external quality assurance (QA) programs for LSD and FMD. The REDS program activities have been extended through to 30 June 2027 with additional scope and funding to include activities with relevant laboratories from the Indonesian Quarantine Authority (IQA). The Indonesian Disease Investigation Centre (DIC) Wates is conducting LSD proficiency testing (PT) across Indonesia. <p>In March 2025, a review of the first 12 months of the Indonesian LSD QA program (network quality control and PT) was held via virtual meeting. Attendees included ministry representatives and the REDS project manager and officer.</p> <ul style="list-style-type: none"> At the central quarantine laboratory in Jakarta's (BBUSKHIT) request, the ACDP-PT team conducted an interlaboratory comparison of LSD PCR between ACDP and four IQA laboratories. Following publication of the report to participants by the ACDP-PT provider, REDS delivered an on-line review of PT statistics. REDS supported an informal audit of Round 1 of the LSD PT program delivered by DIC Wates. The informal audit was conducted by a QA technical expert from ACDP in conjunction with audit staff from DIC Wates. The purpose of the informal audit was to review the implementation of the LSD PT program, identify gaps or 	<p>Support for distribution of vaccines and equipment</p> <ul style="list-style-type: none"> The Australian Government is working with Indonesian Ministry of Agriculture (MoA) on further support as requested. <p>Laboratory capacity</p> <ul style="list-style-type: none"> Assist DIC Wates with change management to ensure continuity and sustainability of the LSD external QA programs. Address opportunities for improvement in the LSD PT program, particularly those identified in the March 2025 informal review. Assist DIC Wates to prepare for round 2 of the LSD PT program. DAFF will continue to support laboratory cooperation and capacity building for Indonesian laboratory staff through several activities such as laboratory placements, technical exchanges and participation in the REDS project.

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
				<p>opportunities for improvement in processes, procedures or documentation, and work towards accreditation of the PT program.</p> <p>Technical assistance</p> <ul style="list-style-type: none"> In 2022, DFAT provided \$2.2 million for technical assistance for a range of support activities including disease surveillance and epidemiology, field services and biosecurity surveillance, emergency management and operations, support for national/sub-national project teams, monitoring and evaluation. <p>Other technical and advisory support</p> <ul style="list-style-type: none"> In 2023, 10 Indonesian quarantine officers were trained through the DAFF-funded Biosecurity Training Centre (BTC) at Charles Sturt University (Activity 1.2). As of April 2025, a further 120 officers have been trained in country following a train-the-trainer model. In November 2024, DAFF awarded MLA a \$300,000 grant towards the delivery of the Indonesia Biosecurity Support Program. The program supports industry partnerships between Australia and Indonesia to strengthen Indonesia's capability to address emergency animal diseases (EADs). In 2025, DAFF provided a further \$300,000 to extend this program. \$1.4 million was provided to support a collaborative project with the Food and Agriculture Organization of the United Nations (FAO) Indonesia office to deliver quarantine and EAD response and control efforts in Indonesia. This program has been extended until 31 December 2025. 	
1.2. Build LSD preparedness, technical and diagnostic capability and surveillance in near neighbouring countries	Lead DAFF Collaborators Overseas partners, DFAT, Agriculture Victoria (AgVic)	This activity seeks to build on existing relationships with Papua New Guinea (PNG)'s National Agriculture Quarantine and Inspection Authority (NAQIA) and Timor-Leste's Ministry of Agriculture and Fisheries (MAF) to improve their LSD preparedness, technical and diagnostic capability, and surveillance.	On track	<p>High priority</p> <ul style="list-style-type: none"> DAFF has funded LSD testing capacity in Timor-Leste, with both PCR nucleic acid and ELISA test capability now established in-country through ACDP. PNG and Timor-Leste are part of the DAFF-funded LSD regional vaccine supply agreement (as detailed in activity 5.2.c), giving these countries rapid access to an initial supply of quality LSD vaccines for a disease response should this be required in the future. <p>DAFF has supported establishing a cool room in Dili which is currently housing priority animal disease vaccines. Interim cold-chain arrangements have also been established across 3 border municipalities in Timor-Leste.</p> <ul style="list-style-type: none"> DFAT has been working with AgVic in Timor-Leste to improve laboratory capacity and disease surveillance efforts. An animal health surveillance system based on the EpiCollect platform has been deployed and is now in use which increases the diseases surveillance capacity for Timor-Leste. An animal disease testing laboratory was also installed in Dili in 2022 to increase the capacity to use modern molecular testing methodologies. 	<ul style="list-style-type: none"> The development of a vaccination plan for LSD for PNG, including cold chain arrangements for EAD vaccines, is being supported by DAFF. Through the DFAT-funded PNG Biosecurity Twinning Program, DAFF will partner with PNG's NAQIA to deliver activities to enhance preparedness for LSD and other EADs, including biosecurity risk analysis and a review of EAD response plans.

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
1.3. Strengthen relationships in Southeast Asia	Lead DAFF, DFAT Collaborators Relevant state and territory governments, overseas partners	This activity includes establishing an Office of the Chief Veterinary Officer presence in northern Australia, led by the Australian Deputy Chief Veterinary Officer (Deputy ACVO).	On track	High priority <ul style="list-style-type: none"> The Office of the Chief Veterinary Officer has established a presence in northern Australia, led by the ACVO. In July and August 2025, the Australian Minister for Agriculture, Fisheries and Forestry travelled to Indonesia to meet with and strengthen the important relationship with her Indonesian Government counterparts In July 2025, Deputy Secretary Saunders led a senior DAFF delegation to Indonesia to progress biosecurity cooperation activities through a collaborative technical workshop with the IQA. In January 2025, the ACVO met with Indonesian government counterparts in Jakarta to discuss ongoing and future opportunities for biosecurity collaboration between Australia and Indonesia. DAFF has funded enhancements to coordination of regional transboundary animal disease control activities, including LSD, through the World Organisation for Animal Health (WOAH) Sub-Regional Representation for Southeast Asia. 	<ul style="list-style-type: none"> DAFF is continually seeking to build relationships in Southeast Asia, including promoting engagement around LSD and other important animal health issues.
1.4. Engage in international and regional fora	Lead DAFF Collaborators Overseas partners	This activity involves Australia's ongoing engagement and contribution to international and regional fora on LSD.	On track	Medium priority <ul style="list-style-type: none"> In July 2025, a DAFF officer participated in the WOAHLSD Workshop for Asia and the Pacific. Regional updates were provided from participating nations, and an implementation plan for the LSD Prevention and Control Strategy for Association of Southeast Asian Nations member nations was progressed. 	<ul style="list-style-type: none"> This is an ongoing activity with Australian representatives regularly attending meetings of intergovernmental organisations, focused on LSD control and elimination in the Asia Pacific region.

Objective 2: Border biosecurity and trade

Table O2 Augment industry-government collaboration and communication on the border biosecurity risks of LSD to Australia and strategically address technical market access barriers.

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
2.1. Review import policy and LSD risk pathways	Lead DAFF Collaborators Peak industry organisations	This activity will include undertaking robust science-based risk analyses for the import of products from LSD-affected countries to ensure the risk of LSD is managed and achieves Australia's appropriate level of protection.	On track	High priority <ul style="list-style-type: none"> In June 2025, following notifications of LSD outbreaks in Italy and France, both countries have been removed from Australia's LSD-Free Country List. DAFF will continue to monitor the situation internationally and will apply appropriate measures to ensure Australia's biosecurity requirements are met while facilitating safe trade. In March 2025 the final report of the Import risk review for dairy products for human consumption was released. The final report confirms that specific risk management measures are not required for LSD virus (LSDV), as evidence demonstrated that pasteurisation is effective at inactivating LSDV in milk. There will be a transition period for the implementation of the new biosecurity measures which is expected to be a minimum of 12 months. Trade in dairy products will continue under current arrangements while new health certificates are negotiated. In response to the spread of LSD, particularly in Southeast Asia, DAFF has reviewed import permits for products from LSD affected countries and suspended those of concern. Reviewing import policy is an ongoing priority and DAFF maintains contemporary science and risk-based import policies. A review of the risk of entry of LSD from non-regulated pathways has been undertaken (Activity 5.1.a). In December 2023, DAFF published the final review of Australia's current entry requirements for LSD in fresh beef (skeletal muscle) and beef products. The final review advises that certification of country freedom from LSD to cover importation of fresh beef derived exclusively from bovine skeletal muscle from approved countries is unnecessary on biosecurity grounds. Negotiation of revised health certificates continues. 	<ul style="list-style-type: none"> DAFF is actively considering its import policy settings for a range of commodities by regarding the available science and nature of the biosecurity risks.
2.2. Develop a strategic approach to minimising export trade disruptions	Lead DAFF Collaborators DFAT, the Australian Livestock Exporters'	This activity will take a strategic approach to minimising disruptions to trade by analysing	On track	High priority <ul style="list-style-type: none"> In consultation with industry, and state and territory governments, DAFF finalised the LSD trade preparedness strategy. This strategy identifies priorities to mitigate trade losses that could result from an outbreak of LSD. DAFF is implementing the LSD trade preparedness strategy, which included a comprehensive review of current export certification across multiple commodities 	<ul style="list-style-type: none"> DAFF continues to make positive progress in accordance with the identified priorities. This includes pre-emptively identifying certification where animal health statements could better align with science-based recommendations.

	Council, LiveCorp, MLA, other industry groups, state and territory governments	which export markets and products would be affected if there is an LSD incursion in Australia.		<p>to identify certificates that do not align with internationally recognised scientific standards.</p> <ul style="list-style-type: none"> • DAFF, in consultation with industry, has identified key priorities for engagement to pre-emptively mitigate these trade risks, and has already progressed this work with several markets. • Whilst trading partner reactions cannot be anticipated in the event of an LSD incursion, to date approximately \$761 million worth of exports previously at risk could now continue without disruption. • Consultation with jurisdictions, industry and AHA is continuing to clarify and promote consistency in national zoning approaches to minimise disruptions to international trade in the event of an EAD. In June 2024, DAFF led a dedicated workshop for industry stakeholders, AHA and participating jurisdictions covering zoning for trade in the event of EAD outbreaks. The aim of the workshop was for the Commonwealth, state and territory governments and industry to develop a shared understanding of the concept of zoning for disease control and trade, and a common approach for the implementation of zoning following an EAD outbreak. • Trade in live cattle exports was maintained to key regional export markets following temporary disruptions related to questions regarding Australia's LSD status in 2023. • As mentioned in Activity 1.1, DAFF has agreed on a laboratory cooperation and capacity building program for IQA laboratories and staff. The first component of this program, a visit by ACDP experts to the IQA central laboratory occurred in June 2024. 	<ul style="list-style-type: none"> • This is an ongoing, high priority activity with regular consultation with key industry groups. • DAFF is reviewing existing EAD materials to identify gaps for preparedness. This includes the preparation of communication 'toolkits' to ease burden if these diseases are detected in Australia. • Following the workshop held by DAFF in June 2024, Victoria (Vic) supported by DAFF, will organise a workshop for jurisdictions to consider the operational challenges of implementing zoning for EADs in further detail. This workshop is currently planned for August 2025. • DAFF is updating the <i>Australia's freedom from lumpy skin disease</i> dossier.
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Objective 3: Diagnostic capability and capacity

Table O3 Ensure that Australia's national diagnostic network provides reliable LSD testing capability and capacity.

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
3.1. Improve national and regional LSD diagnostic capability and capacity	Lead ACDP, Laboratories for Emergency Animal Disease Diagnosis and Response (LEADDR) Collaborators DAFF	National testing capability for LSD will be transferred from ACDP to all state and territory government laboratories through the existing LEADDR network. Regional testing capacity is also being supported by ACDP (Activity 1.2).	Completed	<p>High priority</p> <ul style="list-style-type: none"> The LEADDR network have successfully completed 4 PT rounds of LSDV PCR and 3 rounds of Capripox ELISA. <p>Network quality controls (NQC) for both PCR and ELISA were distributed to LEADDR laboratories. Participating labs have been uploading their NQC results to the LEADDR reporting portal.</p> <p>An import permit exists for the Innovative Diagnostics (ID) Screen® Capripox ELISA kit. ID Screen® Capripox ELISA kits have been sent to all LEADDR network laboratories participating in the serological testing.</p> <ul style="list-style-type: none"> A series of laboratory workshops and practical exercises, named Exercise Waterhole, were held from September to November 2023, to assess the ability of Australia's laboratory network to respond to an outbreak of LSD while also responding to other animal disease threats. <p>In July 2025, the Exercise Waterhole report was published. The report covers several key findings and 18 recommendations. The recommendations aim to strengthen the animal health laboratory network's ability to respond to EADs and other biosecurity threats. The Subcommittee for Animal Health Laboratory Standards have begun prioritising actions to address these recommendations.</p> <ul style="list-style-type: none"> Under a whole of government EAD preparedness program, Vic is strengthening its laboratory capacity for both rapid and sustained responses to disease outbreaks. In September 2023, the National eDNA Reference Centre completed a comprehensive literature review on the feasibility of environmental DNA/RNA (eDNA/RNA) testing of a number of viruses, including LSDV. A report highlighting the existing assays and suitability for testing the technology as a complimentary surveillance method was submitted to DAFF. A copy of the report can be obtained by contacting: scienceandresearch@aff.gov.au. The Northern Australia biosecurity sequencing project at Berrimah Veterinary Laboratory continues to build high-throughput sequencing capacity in northern Australia through several collaborative diagnostic and surveillance projects. 	<ul style="list-style-type: none"> Completed in August 2025. The LSD PT project within the LEADDR network for both Capripox PCR and ELISA has concluded. With LSD testing capability transferred to all state and territory governments. PT for both Capripox PCR and ELISA will continue as part of the ongoing LEADDR PT program.
3.2. Improve the diagnostic	Lead ACDP Collaborators	There are a range of diagnostic testing options	On track	<p>Medium priority</p> <ul style="list-style-type: none"> Negative samples to support development of serological tests (ELISA) in Australian animals have been collected through DAFF's Northern Australia Quarantine Strategy (NAQS). 	<ul style="list-style-type: none"> Further collection of negative samples through NAQS will occur to support development of serological tests (ELISA).

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
testing options at ACDP	DAFF	available for LSD at ACDP. Despite this, the development of new and improved diagnostic tests is important for detecting and managing an LSD incursion in alternative ways and progressing research.		<ul style="list-style-type: none"> • A project at ACDP on LSDV whole genome sequencing database and workflow development has been finalised. ACDP now has access to robust and repeatable whole genome sequencing procedures for timely LSDV detection and characterisation. • A project at ACDP to assess several 'Differentiating Infected from Vaccinated Animals' (DIVA) assays to ensure emerging variant and recombinant wild-type strains of LSDV in animals can be effectively differentiated from the attenuated vaccine strain was completed in February 2025. Three DIVA PCR assays were evaluated. The Haegeman assay showed the best performance, effectively identifying both vaccine and wild-type strains, including recombinant LSDV. It is recommended as a complementary test to the pan-capripoxvirus assay for LSD diagnosis. • In 2024, ACDP utilised its international networks to obtain a recombinant, field relevant strain of LSDV to support ongoing preparedness activities. • After securing the appropriate regulatory approvals, ACDP participated in an international Capripox (inactivated) PT round for serology and molecular diagnostic workflows in July 2023 with formal participation in the program in 2023 and 2024. • An immunohistochemistry (IHC) staining protocol to identify LSDV in tissues using rabbit antibodies was completed in 2023. This successfully highlighted LSDV in infected/positive control fixed tissue sections. The antibodies also successfully highlighted sheep pox and goat pox viruses in appropriate fixed samples. • A series of cell lines was also established for the production of monoclonal antibodies against the LSDV P32 antigen. One clone was identified as being better suited for IHC. A large batch of this antibody was then prepared and affinity purified for diagnostic use. This antibody has been successfully used to highlight LSDV in infected formalin-fixed, paraffin-embedded tissue sections as part of an IHC staining protocol. • Commercialisation of an indirect ELISA for detection of antibodies against LSDV is progressing. A beta version of the ELISA kit has been manufactured and received at ACDP. • Verification of virus isolation methods for LSDV using cell culture is continuing. A virus neutralisation test for LSDV has been implemented and is undergoing verification. 	<ul style="list-style-type: none"> • ACDP will continue their participation in the International Capripox PT rounds. • A comparative evaluation with other in-house and commercial ELISAs using sera held at ACDP is due for completion in 2025. • Further rounds of IHC, using the large batch of affinity purified monoclonal antibody, will be undertaken to optimise the detection of viral antigen in fixed tissues.
3.3. Explore point-of-care LSD testing	Lead ACDP, the Sub-Committee on Animal Health	This activity will explore the development and use of novel point-of-care (POC) tests to screen for	On track	Medium priority <ul style="list-style-type: none"> • In July 2025, the SCAHLS formed the POC testing validation task group to review and develop a POC testing validation template informed by the AHC's POC tests guidelines for use in potential applications. • The AHC POC testing task group was established in 2021 to examine national policy issues related to POC testing for both notifiable and endemic diseases. The task 	<ul style="list-style-type: none"> • Development of public facing POC test guidelines has commenced and further engagement with industry is planned.

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
	Laboratory Standards (SCAHLs) and the Animal Health Committee (AHC) Collaborators DAFF and state and territory governments	potential LSD cases during an outbreak situation.		<p>group comprised nominated representatives from the Commonwealth, all Australian jurisdictions, ACDP, AHA, Wildlife Health Australia (WHA), and James Cook University (JCU).</p> <p>In February 2025, the AHC POC testing task group completed the development of POC test guidelines and subsequently disbanded. At the March 2025 AHC face-to-face meeting, AHC endorsed the guidelines which will support decision-makers to determine and approve the use of POC tests specifically for diseases and infections on the national lists of notifiable diseases of terrestrial animals and reportable diseases of aquatic animals. While the guidelines are currently for internal use by decision makers, there has been strong interest and support from industry for a public document.</p> <ul style="list-style-type: none"> • DAFF engaged a consultant to support the AHC working group in 2022. A broad range of stakeholder consultation was undertaken covering technical, operational and policy issues relating to the use of POC testing in Australia for all animal diseases. Their final report, including recommendations, was submitted to AHC in January 2023. • New South Wales (NSW) have developed capacity to undertake POC testing for LSDV in the event of an outbreak using portable PCR machines. • Vic has developed several loop mediated isothermal amplification (LAMP) POC primer sets for a test directed against LSD. They have been trialled against clinical LSD samples in Shimla, India with success and the test has been further developed to increase its speed. • Queensland's (Qld) has developed a portable PCR test combined with a lateral flow device which was verified by ACDP in early 2023 and is ready for in-field trials internationally. • In 2024, SA acquired LAMP POC testing machines and work is continuing to explore potential use in the field during EAD responses. 	<ul style="list-style-type: none"> • The improved LAMP POC primer sets developed by Vic will be taken to India where they can be tested against numerous LSD clinical samples stored at the Veterinary University at Palampur. External funding for this mission has been sourced and laboratory and field staff are scheduled to visit later in 2025. • On behalf of jurisdictional government and industry stakeholders, ACDP continues to undertake assessment of LSD POC diagnostics suitable for field deployment.

Objective 4: Surveillance

Table O4 Optimise government and industry investment in LSD surveillance.

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
4.1.a. Develop a national LSD surveillance strategy	Lead AHC, AHA Collaborators DAFF, CSIRO/ACDP, Australian Meat Industry Council, peak industry organisations	This activity aims to develop a national LSD surveillance strategy that will assist with detecting an LSD incursion as early as possible.	On track	Medium priority <ul style="list-style-type: none"> The National Veterinary Epidemiology and Surveillance Advisory group (NVESAG) is progressing an evaluation of Australia's existing surveillance for LSD and delivery of a surveillance strategy, in consultation with relevant industry stakeholders. The outcome of this work will be to deliver recommendations for future surveillance system maintenance and enhancements. This is scheduled to be completed before the end of 2025. A progress update was delivered to AHC in May 2025 and presented to government and industry stakeholders at the National LSD Action Plan Review Workshop in June 2025. AHA participates in and contributes to the AHC NVESAG, which is led and chaired by DAFF. In August 2023, and in response to regional trade issues related to live animal exports DAFF published a report demonstrating Australia's freedom from LSD, which collated data on disease investigations for cattle with skin lesions, feral animal surveillance undertaken by NAQS, inspections at export abattoirs and pre-export inspection of cattle and buffalo prepared for export (Activity 2.2). 	<ul style="list-style-type: none"> The NVESAG will deliver a national LSD surveillance strategy to AHC for endorsement before the end of 2025.
4.1.b. Develop a wild and free-roaming bovid surveillance strategy	Lead State and territory governments Collaborators NAQS, NT Cattlemen's Association, other industry groups	This activity aims to develop a surveillance strategy to identify the locations, numbers and population dynamics of wild and free roaming bovid populations.	On track	Medium priority <ul style="list-style-type: none"> Wild animal surveillance for a potential LSD incursion is already part of the NAQS program. Further surveillance is undertaken by state and territory governments, including through the National Significant Disease Investigation Program. NAQS targeted surveillance strategy includes routine LSD serology on feral bovids (cattle, buffalo, banteng). Since routine testing commenced March 2022, there have been 239 feral bovids tested from 22 surveys in the NT and Western Australia (WA). All tests have returned negative serological results. Exclusion testing also occurs on any bovid skin lesions and internal lesions, which are clinically suggestive of LSD. Of the 239 feral bovids tested for serological exposure to LSD, 130 animals with lesions were tested for LSDV using PCR. No PCR positives have been detected either. WHA is exploring the feasibility of developing a network to engage with feral animal managers on matters of wildlife health. Such a group may ultimately have value for this program, but work is still preliminary. 	<ul style="list-style-type: none"> As outlined in activity 4.1.a, the National Veterinary Epidemiology and Surveillance Advisory Group is considering current national LSD surveillance activities. NAQS will continue with LSD targeted surveillance in feral bovid populations, expanding surveillance into any feral cattle that may be inhabiting national parks in Qld.

4.1.c. Review arthropod vector monitoring programs	Lead DAFF, state and territory governments Collaborators CSIRO, AHA	This activity will review Australia's current arthropod vector monitoring programs (including in near neighbouring countries) and investigate if there are opportunities or the need to adapt these programs to be relevant to LSDV surveillance.	On track	Medium priority <ul style="list-style-type: none"> In June 2025, DAFF contracted ACDP to assess whether existing PCR assays available in jurisdictional laboratories can reliably detect the presence of LSD contaminated mosquitoes within pooled samples collected from mosquito traps. If successful, this tool could be used as a non-invasive surveillance method to support understanding of LSD spread in cattle populations during an outbreak, without the need to muster animals. This study design could also be used to investigate the feasibility of testing for LSD virus in other vector species. Vic's collaborative research project with ACDP is continuing to evaluate vectors of importance for spread and maintenance of LSD within Vic. Work on this project commenced in June 2023 and is continuing as planned. DAFF contracted ACDP in 2024 for the assessment of buffalo fly as a potential vector for LSD in Australia. This project aimed to gain a greater understanding of the buffalo fly's ability to transmit LSD. The project was completed in April 2025, with results showing buffalo flies can acquire LSDV, and may act as short-term mechanical vectors in an Australian outbreak. These results should be interpreted cautiously as only low quantities of virus were recovered from fly mouth parts. 	<ul style="list-style-type: none"> In June 2024, the milestone report for Vic's collaborative research project with ACDP was accepted, with the project on target to be completed in December 2025.
4.2. Undertake training and awareness activities	Lead DAFF, state and territory governments	This activity seeks to develop training programs and raise awareness of the increased risk of LSD and other animal disease threats in the Australian livestock population.	On track	Medium priority <ul style="list-style-type: none"> In June 2025, a cohort of 40 Australian veterinarians and animal health officers took part in the European Commission for the Control of Foot-and-Mouth Disease (EuFMD) virtual real-time training course on FMD, LSD and sheep and goat pox. This online training course is designed to improve the capability of our front-line personnel to detect, report and respond to EADs. An Innovative Surveillance Solutions workshop, attended by government, industry, and research leaders, was held in Cairns in June 2025. The workshop explored emerging technologies to strengthen EAD surveillance in northern Australia. The Northern Australia Coordination Network (NACN) was established with \$4.3 million in funding to bring together NT, Qld, WA and Commonwealth governments in partnership with key industries and local communities to improve Australia's surveillance and preparedness coordination in the north. All NACN partners are working together to deliver communications, training, awareness and surveillance activities across northern Australia to help further develop capability to protect Australia from EADs including LSD. <p>In May 2025, NACN partners participated in Exercise Raintree to test their capability to respond to an EAD. It used an outbreak scenario of LSD within a herd located in remote NT. Attendees included representatives from government and livestock industries from</p>	<ul style="list-style-type: none"> All jurisdictions continue to deliver engagement and awareness activities, highlighting the risk of EADs like LSD. This ensures producers and other relevant stakeholders know who to contact when they encounter unusual signs of disease. DAFF is collaborating with EuFMD on the delivery of 3 interactive webinars for EuFMD virtual real-time training and real-time training alumni in July and August 2025. These 'refresher training' webinars will cover the current global situation of FMD and LSD and outline Australia's

				<p>across Qld, NT and WA participating as members of either the state coordination centre (in Darwin) or the forward command post (remote cattle station).</p> <p>NACN is supporting the Northern Australian Biosecurity Strategy Network (NABSnet) through the procurement of a veterinary advisor based in far north Qld to work alongside the existing NABSnet veterinary advisor, supporting private veterinarians performing significant disease investigations across northern Australia, which includes LSD exclusions.</p> <p>Regular presentations are given on NAQS surveillance, with a focus on current priority diseases. Audiences include producer groups, veterinarians, state and territory government stakeholders.</p> <ul style="list-style-type: none"> • Fee-for-service community animal health reporting activities occur through Indigenous Ranger groups. These include reporting to highlight unusual sickness in cattle or buffalo residing within First Nations controlled lands. • Topwatch! Public awareness material is distributed at agricultural shows, schools, producer forums and to rangers, with personnel available for any questions. Material such as calendars, brochures and factsheets highlight the risk of various diseases including LSD. • Regular engagement and discussion with NABSnet veterinarians encourage LSD exclusion and reporting. The network provides ongoing support for veterinarians in northern Australia via newsletters, contact through the NABSnet Veterinary Adviser, online resources and subsidies for significant disease investigations and EAD exclusions, and an annual masterclass, which was most recently held in Townsville in March 2025. <p>The NABSnet northern Australia Cattle Skin Survey will continue into 2026, to provide evidence on what is typically causing skin lesions in cattle in northern Australia. Since the Skin Survey began in May 2023, there have been 101 submissions with over 188 samples submitted. All samples have tested negative for LSD and the most common histological diagnosis has been dermatitis likely due to insect hypersensitivity.</p> <ul style="list-style-type: none"> • In February 2024, NSW Department of Primary Industries (NSW DPI) conducted an exercise based on LSD to test “just in time” training modules that were developed for surveillance and tracing response staff. An NSW multi-agency exercise to test existing disposal planning was held in February 2024 with the Engineering functional area leading the exercise and government staff participating. <p>NSW DPI and Local Land Services have been undertaking a targeted surveillance and engagement program in NSW saleyards since October 2022. This work focuses on examining cattle for signs consistent with LSD or FMD and undertaking confirmatory sampling. So far 771 inspections have been performed across 34 saleyards. The initial review of the data suggests that this surveillance over time could provide supporting evidence for absence of disease if an incursion were to occur elsewhere in Australia.</p> <p>NSW DPI released issue 8 of EAD Vet Wrap in May 2025 – a quarterly newsletter to keep veterinary professionals up to date with EAD preparedness activities and provide updates on what is happening in NSW and beyond. The next issue is expected in August 2025.</p>	<p>current preparedness activities, including vaccine arrangements.</p> <ul style="list-style-type: none"> • NABSnet will continue to accept skin survey samples from private vets in the 2025-26 financial year with continued emphasis on encouraging LSD exclusion testing.
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				<ul style="list-style-type: none"> • To test the Australian Capital Territory's (ACT) biosecurity response capability 'Exercise Capital Standstill', an FMD exercise scenario involving multiple government directorates was run in May 2024. This exercise was beneficial to understanding the ACT's capacity to respond to a major EAD incident. • In 2024, DAFF commissioned the University of Melbourne to develop a new online training module based on an outbreak of LSD in cattle. This training material was developed for veterinarians and veterinary students to support detection, investigation and reporting of EADs. • Under its whole of government EAD preparedness program, Vic has been undertaking extensive work to raise awareness of biosecurity risks with livestock keepers and encouraging best practice measures to effectively manage these risks. Vic has held 158 biosecurity planning workshops targeted at mixed farming businesses and remote areas to assist with the development of 1,664 farm biosecurity plans, has held 297 awareness events for 272,121 producers and other stakeholders. There have been 3,026 enrolments in eLearning modules and 1,885 listens to the 12 podcasts to support the sector's awareness of EAD events. • SA officers are undertaking training and awareness activities to a wide range of stakeholders including private veterinarians, abattoirs, livestock agents, producers, stock feed manufacturers and transporters. SA continues to engage in staff training utilising NSW "Just in time" training and EuFMD modules which also cover LSD. SA officers continue to visit saleyards across the state with enhanced awareness for LSD. In early 2024, SA officers finished distribution of glovebox skin sampling kits and training of producers in remote areas of SA. This enables them to take samples that can be sent to a laboratory for testing. • In 2023, Qld officers completed training to upskill in disease investigation procedures and techniques to increase capability and capacity for an EAD response. Training sessions are being conducted annually. In 2024, a pilot disease investigation workshop was delivered to cattle industry staff, promoting EAD awareness and reporting and is being adapted for delivery to local government. Biosecurity Qld has conducted 12 face-to-face and virtual response readiness training courses for staff, elected officials, and emerging leaders of agricultural peak industry bodies. Qld is conducting twice yearly EAD investigation training workshops for private veterinarians in collaboration with the University of Queensland (UQ) and JCU. • In 2023, WA completed training for private practitioners including EAD awareness and sample submissions. In April 2024, WA commenced an EAD Veterinary reserve training program. 	
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Objective 5: Preparedness and response

Table O5 Enhance the LSD preparedness and emergency response capacity and capability of industries and governments, and clearly define roles and responsibilities.

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
5.1.a. Undertake risk mapping of the likelihood of entry, establishment and spread of LSD	Lead DAFF Collaborators State and territory governments, AHC, other partners	This activity aims to undertake risk mapping of geographical areas that may have a higher likelihood of entry, establishment and spread of LSD.	Completed	High priority <ul style="list-style-type: none"> DAFF commissioned a risk assessment examining the potential for an incursion through non-regulated pathways (such as windborne spread) by external consultants. This work will guide future modelling and vector studies and aid in targeting future surveillance activities. The risk assessment and modelling has been released on DAFF's website and published in the Journal of Preventative Veterinary Medicine. A summary of this risk assessment and modelling work was presented to industry representatives at a webinar on 4 May 2023. A recording of this presentation is available through the National Farmers Federation. 	Completed in May 2023
5.1.b. Develop epidemiological modelling systems for LSD	Lead DAFF Collaborators State and territory governments, AHC, other partners	This activity will focus on the development of systems for the epidemiological modelling of vector-transmitted disease outbreaks. The system will be used to integrate data from jurisdictional and national datasets.	On track	High priority <ul style="list-style-type: none"> An LSD epidemiological model was developed using the Australian Animal Disease Spread (AADIS) platform to assess areas in Australia where LSD may spread and compare different control strategies, including the use of vaccination. A report on the AADIS modelling is being finalised and a communication plan developed for its release. Release of the findings from the AADIS modelling work has been delayed due to competing priorities. The model and some key findings were presented to government and industry stakeholders at the National LSD Action Plan Workshop in June 2025. UQ has made technical improvements to the development of a geospatial risk assessment model that includes a wind dispersion sub-model. The research team prepared a scientific manuscript which has been submitted to a peer reviewed journal. This model aims to support Australia's onshore and offshore surveillance and response plans by providing an evidence-based reference on probable LSDV entry points. 	<ul style="list-style-type: none"> DAFF will work with stakeholders to decide on how the AADIS model may be expanded to cover a greater range of control options.

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
5.2.a. Develop a national LSD vaccination strategy	Lead AHC, AHA Collaborators CSIRO, Cattle Australia, the AHC Vaccine Expert Advisory Group (VEAG), other partners	This activity will establish a national LSD vaccine working group to develop a national LSD vaccination strategy, including options on how to best apply vaccination during a response and how to identify vaccinated animals.	On track	High priority <ul style="list-style-type: none"> A Vaccine Operational Task Group (VOTG) was established under the AHC Sub-Committee on Emergency Animal Disease (SCEAD) and have developed national operational planning documentation to support the development of a national LSD vaccination strategy including standard operating procedures and a document on the visual identifiers for FMD and LSD vaccinated cattle. Jurisdictions have also been developing their own policies and LSD vaccination plans which were shared through the VOTG. 	<ul style="list-style-type: none"> DAFF will shortly commence work to undertake a literature review of global approaches to the use of vaccines to manage LSD outbreaks to inform how LSD vaccination may be used in Australia. Informed by DAFF's literature review, the AHC NVESAG will continue developing a national LSD vaccination strategy in consultation with relevant industry stakeholders. It will be informed by work on Activity 5.2.c and updates to AADIS modelling on likely scenarios and the number of doses of vaccine required.
5.2.b. Access an LSD vaccine appropriate for use within Australia	Lead DAFF	Commercially available LSD vaccines will be evaluated to assess their suitability for emergency use in Australia.	Completed	High priority <ul style="list-style-type: none"> International suppliers of homologous LSD vaccines were contacted in 2022 to determine if they could produce a vaccine in compliance with quality standards that could be certified by a competent authority recognised by Australia. In 2023, a suitable vaccine was identified and the Australian Pesticides and Veterinary Medicines Authority (APVMA) issued a Consent to Import and Emergency Use Permit for the vaccine produced by MSD Animal Health. In 2024, a DAFF import permit was issued for the MSD Animal Health LSD vaccine, to ensure the vaccine can be imported into Australia if it is ever needed. 	Completed in November 2024

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
5.2.c. Investigate options for the timely supply of LSD vaccines	Lead DAFF, AHA Collaborators State and territory governments, peak industry organisations	This activity aims to investigate options to secure access to LSD vaccines in the event of an outbreak, including the possibility of investment in an LSD vaccine bank modelled on the Australian FMD Vaccine Bank.	On track	High priority <ul style="list-style-type: none"> At the June 2025 National LSD Action Plan Workshop, vaccine supply arrangements, and modelling to inform vaccination planning, were presented to government and industry stakeholders. In November 2023, DAFF presented on the Regional LSD Vaccine Supply Arrangement at the AHC Stakeholder Forum. In March 2024, DAFF presented on the same topic to government and industry stakeholders. In October 2023, DAFF officers met with representatives from AHA to discuss the Regional LSD Vaccine Supply Arrangement and the possibility of a co-funded LSD vaccine supply arrangement for use in Australia in the event of an outbreak. In June 2023, DAFF entered into a Regional LSD Vaccine Supply Arrangement with an international LSD vaccine manufacturer, MSD Animal Health, to supply 300,000 doses of LSD vaccines to Australia or other regional countries if required. 	<ul style="list-style-type: none"> DAFF will work with AHA and relevant stakeholders to progress options for the timely supply of LSD vaccine as more information (such as further modelling results and the development of a national LSD vaccination strategy (Activity 5.2.a)) becomes available.
5.3. Review the national LSD response strategy	Lead AHA, AHC, DAFF, AUSVETPLAN Technical Review Group Collaborators Peak industry organisations	This activity aims to ensure the national LSD response strategy is fit-for-purpose and well aligned with the national LSD vaccination strategy.	On track	High priority <ul style="list-style-type: none"> Updates have been made to the AUSVETPLAN <i>response strategy: Lumpy skin disease</i> version 5.2 across several sections, including regarding the use of vaccination in a response. These updates are currently awaiting approval as version 5.3. In 2022, a joint government and industry exercise was developed by AHA to test components of the latest version of the AUSVETPLAN Response Strategy for LSD. Following the 2022 exercise (Exercise LSD2), the AUSVETPLAN <i>response strategy: Lumpy skin disease</i> underwent updates with AHC endorsing the updated manual in October 2023. A number of items identified in the exercise were determined to be out of scope of AUSVETPLAN and were referred to other responsible parties for completion. 	<ul style="list-style-type: none"> Once updates are approved, the AUSVETPLAN <i>response Strategy: Lumpy skin disease</i> version 5.3 will be published on the AHA website. This publication will complete this activity. Once the LSD vaccination strategy is developed, an alignment of benefits and outcomes will be undertaken.

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
5.4. Prepare to manage exported livestock in transit and in preparation for export during an incursion	Lead DAFF Collaborators AHC, LiveCorp, MLA, live animal exporters	This activity involves the development of a framework for contingency plans (including preparedness, logistics, biosecurity and welfare) for Australian livestock consignments which are within the export process, including those that are loading or those that have departed but not yet arrived in their destination country.	On track	Medium priority <ul style="list-style-type: none"> DAFF has drafted a policy framework for broader export livestock incident management procedures. These incidents include the detection of a disease such as LSD and FMD in Australia as they relate to livestock exports. Due to some elements of the policy taking longer than expected, DAFF is continuing to work through options relating to the development of the policy. DAFF is continuing to work with interested stakeholders to finalise operating principles for managing livestock conveyances, including the possible return of vessels carrying livestock to Australia and other contingency arrangements. In December 2023, changes were made to the <i>Export Control (Animals) Rules 2021</i> to allow DAFF to require the moving or loading of livestock for export to stop in circumstances where the Director of Biosecurity reasonably suspects that an animal disease, infection or infestation is present in Australia. The changes are designed to prevent or significantly reduce the potential health and welfare impacts to livestock about to be, or in the process of being, loaded for export, and mitigate potential damage to Australia's reputation as a trusted trading nation more broadly. In late 2023, DAFF received \$8.8 million over 2 years to support the continuation of the livestock export trade, including funding to develop a national approach to manage livestock in transit and when they may need to return to Australia. 	<ul style="list-style-type: none"> Options for the policy are expected to be presented to the Agriculture Senior Officials' Committee meeting by the end of 2025, followed by presentation to the subsequent Agriculture Ministers' Meeting.

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
5.5. Investigate arthropod vector control options	Lead DAFF Collaborators State and territory governments	This activity will review Australia's current arthropod vector control options (including in near neighbouring countries) and investigate if there are opportunities to improve these or put in place plans to prevent the spread of disease.	Completed	Medium priority <ul style="list-style-type: none"> A National Vector Management Advisory Group (NVMAG) was established under AHC, tasked with developing an LSD vector management guide in the event of an outbreak, and compiling a list of available chemical control products for LSD vectors. NVMAG have completed their tasks and disbanded. The LSD Vector Management Guide has been published on the DAFF website. This manual provides technical information to inform the development of operational plans for managing vector (insect) populations involved in transmitting LSDV. It is designed to be used as an evidence-based reference to assist Australian governments to develop tailored operational plans for vector management once the extent and nature of an outbreak is understood. 	<ul style="list-style-type: none"> Completed in August 2025.

Objective 6: Awareness and communication

Table O6 Facilitate stronger engagement between governments and industry through a comprehensive and adaptable communication strategy for LSD.

Activity	Lead and key collaborators	Description	Status
6.1 Develop a comprehensive and sustained LSD communication plan to raise awareness and understanding of the disease, risk and preparedness activities	Lead The National Biosecurity Committee Engagement Network (NBCEN), peak industry organisations. Collaborators DAFF	This activity will develop a comprehensive and sustained LSD communication plan to raise awareness and understanding of the disease, risk and preparedness activities.	Completed in November 2023
6.2. Develop a communication plan for use during an LSD emergency response	Lead NBCEN	This activity will develop a communication plan that could be used during an incursion of LSD.	Completed in February 2024

Objective 7: Research and innovation

Table O7 Improve Australia's LSD preparedness and response through research priorities driven by industry and government needs, and ensure new knowledge is freely accessible.

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
7.1. Set national priorities for LSD research, engagement and communication	Lead DAFF, the National Animal Biosecurity Research, Development and Extension (RD&E) Strategy (AHA), AHC	This activity will seek to bring together industry, government and other stakeholders to identify, prioritise and undertake important LSD-related research and preparedness activities.	Completed	Low Priority <ul style="list-style-type: none"> In June 2025 a workshop was held by DAFF to review the National LSD Action Plan and discuss key areas under the Action Plan. This workshop identified knowledge gaps and future RD&E opportunities. 	<ul style="list-style-type: none"> Completed in August 2025. DAFF will develop a summary of the outcomes from the workshop to send to relevant stakeholders.
7.2. Investigate new technology LSD vaccines	Lead ACDP, Elizabeth Macarthur Agricultural Institute (EMAI) Collaborators DAFF, state and territory governments, industry, MLA	This activity will seek research interest in developing alternative vaccine technologies that can be deployed both in Australia and internationally to control the further spread of LSD.	On track	Medium Priority <ul style="list-style-type: none"> Qld's government and UQ continue to work collaboratively to develop a prototype single-dose microencapsulated subunit vaccine for LSD with DIVA capabilities. UQ is exploring the development of a self-amplifying RNA vaccine with DIVA capabilities in collaboration with researchers from South Korea and Thailand. DAFF conducted an open market discovery process, seeking responses from potential vaccine manufacturers about the possible development of novel LSD and other livestock vaccines and the potential for Australian-based vaccine production capability. Tiba Biotech made mRNA constructs effective at generating serological responses in mice-based antigens considered to be most likely to induce neutralising antibody responses against LSDV. NSW DPI had tested 6 vaccine constructs in rabbits and cattle at EMAI. Collaborators at the Canadian Food Inspection Agency (CFIA) Winnipeg have shown virus neutralising antibodies from rabbits, cattle and sheep. Results suggested improved efficacy with combinations of antigens. One of the 6 antigens gave poor serological responses so it will not be used in vaccines but is available for DIVA capability as it presents in infected cattle. 	<ul style="list-style-type: none"> EMAI assessed vaccines that contain multiple antigens to identify superior immune responses. The best performing vaccines will be tested for efficacy in cattle in Germany. Ethics approval has been submitted for the efficacy studies. Initial payment has been made and challenge studies to follow FMD challenge experiment are expected in 2025. Collaborators in Winnipeg have vaccinated sheep, with serological assessment and virus challenge experiments to follow. Cattle challenge studies are planned overseas.

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
				<ul style="list-style-type: none"> In 2023, NSW, Qld and Commonwealth governments through MLA, invested in a \$4.95 million project to support research into messenger ribonucleic acid (mRNA) vaccines for livestock, including LSD. This project aims to deliver an mRNA LSD vaccine construct that has undergone in-vivo efficacy testing. <p>mRNA vaccines have been shown to give high serological response and protection against challenge with Border disease virus in sheep. Progress has been made on mRNA dose and formulation optimisation.</p> <p>NSW government has invested a further \$8.8 million in this program with matching funds (60:40) from the MLA Donor Company. mRNA vaccine production capacity is being developed by the University of NSW RNA Institute and built into the NSW RNA pilot facility.</p>	
7.3. Develop modelling tools to support LSD preparedness and response	<p>Lead DAFF, Centre of Excellence for Biosecurity Risk Analysis (CEBRA)</p> <p>Collaborators State and territory governments</p>	This activity will seek investment in other modelling tools to hone Australia's LSD preparedness and response (in addition to epidemiological modelling tools developed under Activity 5.1.b).	On track	<p>Medium Priority</p> <ul style="list-style-type: none"> A package of decision support tools for outbreak responses was developed in June 2024, including epidemiological analyses and an epidemiological forecasting model. A project on Enhancing Models for Rapid Decision-Support in EAD Outbreaks (HASTE) has begun to support the uptake and operationalisation of epidemiological models for decision-making during outbreak response. This project is funded by the Australian Research Data Commons. <p>In May and June 2025, the HASTE initiative held its first scenario planning workshops in NSW and Queensland, using an LSD simulation to explore how modelling can inform real-time outbreak decisions. The sessions highlighted opportunities to improve planning through better integration of modelling, cost forecasting, and consideration of social license.</p> <p>In June 2025, the second HASTE stakeholder workshop brought together over 30 experts to advance preparedness for emergency animal disease outbreaks. The workshop provided updates on progress midway through the project and invited participants, including government, research, and laboratory stakeholders, to help shape the remaining work. Discussions highlighted six key themes for enhancing impact, including co-design, communication, model trust, and sustainability. Building on the foundations of the December 2024 workshop, this session reinforced HASTE's collaborative, data-driven approach to improving outbreak decision-making.</p> <p>In December 2024, a workshop was held to support biosecurity emergency outbreak preparedness through the HASTE initiative. The workshop highlighted insights into modelling approaches for</p>	<ul style="list-style-type: none"> Follow-on work under the HASTE project is underway from 2024 to 2026.

Activity	Lead and key collaborators	Description	Status	Priority progress update	Next steps
				<p>biosecurity decision-making and explored potential future work, such as additional in-person meetings on outbreak management and enhanced support for decision-makers.</p> <ul style="list-style-type: none"> To strengthen national real-time modelling capabilities during an outbreak response, a stakeholder workshop was held in August 2022 to identify gaps and priorities for real-time modelling activities during an outbreak response, using LSD as the test case. Outputs from the workshop has guided the development of modelling tools and workflows to support decision making during an emergency response. 	

Objective 8: Recovery

Table O8 Mitigate the economic and social effects of an outbreak of LSD by developing options for a recovery strategy .

Activity	Lead and key collaborators	Description	Status
8.1. Develop options for an LSD recovery strategy	Lead DAFF, in consultation with other Australian Government agencies as appropriate	This activity will develop options for a LSD recovery strategy in consultation with other Australian Public Service agencies as appropriate, to assist in overall preparedness in the event of an LSD outbreak.	Completed in November 2023

Glossary

Acronym	Definition
AADIS	Australian Animal Disease Spread
ACDP	Australian Centre for Disease Preparedness
ACT	Australian Capital Territory
ACVO	Australian Chief Veterinary Officer
AgVic	Agriculture Victoria
AHA	Animal Health Australia
AHC	Animal Health Committee
AIHSP	Australia Indonesia Health Security Partnership
APVMA	Australian Pesticides and Veterinary Medicines Authority
AUSVETPLAN	Australian Veterinary Emergency Plan
BBUSKHIT	Balai Besar Uji Standar Karantina Hewan, Ikan Dan Tumbuhan (central quarantine laboratory in Jakarta)
BTC	Biosecurity Training Centre
CFIA	Canadian Food Inspection Agency
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAFF	Department of Agriculture, Fisheries and Forestry
DFAT	Department of Foreign Affairs and Trade
DIC	Indonesian Disease Investigation Centre
DIVA	Differentiating Infected from Vaccinated Animals
EAD	Emergency animal disease
ELISA	Enzyme-linked immunosorbent assay
EMAI	Elizabeth Macarthur Agricultural Institute
eDNA/RNA	Environmental deoxyribonucleic acid/ribonucleic acid
EuFMD	European Commission for the Control of Foot-and-Mouth Disease
FAO	Food and Agriculture Organisation of the United Nations
FMD	Foot-and-mouth disease
GF-TADs	Global Framework for the progressive control of Transboundary Animal Diseases
ID	Innovative Diagnostics
IHC	Immunohistochemistry
IQA	Indonesian Quarantine Agency
JCU	James Cook University
LAMP	Loop mediated isothermal amplification
LEADDR	Laboratories for Emergency Animal Disease Diagnosis and Response
LiveCorp	Australian Livestock Export Corporation
LSD	Lumpy skin disease
LSDV	Lumpy skin disease virus
MAF	Timor-Leste's Ministry of Agriculture and Fisheries
MLA	Meat & Livestock Australia
MoA	Indonesian Ministry of Agriculture

mRNA	Messenger ribonucleic acid
NABSnet	Northern Australian Biosecurity Strategy Network
NACN	Northern Australia Coordination Network
NAQIA	Papua New Guinea's National Agriculture Quarantine and inspection Authority
NAQS	The Department of Agriculture, Fisheries and Forestry's Northern Australian Quarantine Strategy
NBCEN	National Biosecurity Committee Engagement Network
NQCs	Network quality controls
NSW	New South Wales
NSW DPI	New South Wales Department of Primary Industries
NT	Northern Territory
NVESAG	National Veterinary Epidemiology and Surveillance Advisory Group
NVMAG	National Vector Management Advisory Group
PCR	Polymerase chain reaction
PNG	Papua New Guinea
POC	Point-of-care
PT	Proficiency testing
QA	Quality assurance
Qld	Queensland
RD&E	Research, Development and Extension
REDS	Regional Emerging Disease Support
SA	South Australia
SCAHLs	Sub-Committee on Animal Health Laboratory Standards
SCEAD	Sub-Committee on Emergency Animal Disease
SSBA	Security-Sensitive Biological Agent
UQ	University of Queensland
Vic	Victoria
VOTG	Vaccine Operational Task Group
WA	Western Australia
WHA	Wildlife Health Australia
WOAH	World Organisation for Animal Health