



Department of
Primary Industries

Stronger Primary Industries Strategy

2022– 2030



Our Purpose

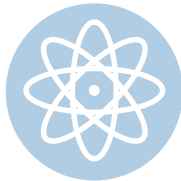
To maximise outcomes for
NSW primary industries,
the communities they
support and the resources
they rely on, both today
and for the future.



Our Functions



Develop evidence informed policy



Undertake R&D and accelerate adoption



Create and manage data and information



License and allocate access to resources



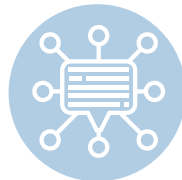
Undertake regulation and compliance



Respond to challenges to primary industries and natural resources



Provide assistance when necessary



Engage with and consult stakeholders



Monitoring and evaluation



Delivery of industry centred training

Our Principles

We are customer, stakeholder and outcomes focused, informed and expert-based

We invest in the wellbeing, safety and engagement of our staff

We will be accountable and transparent, efficient and effective

We seek to be relevant, timely and reliable

We make decisions that are risk aware and proportionate in response

We embrace digital technology, the value of data and the benefits of change



Our Strategic Outcomes

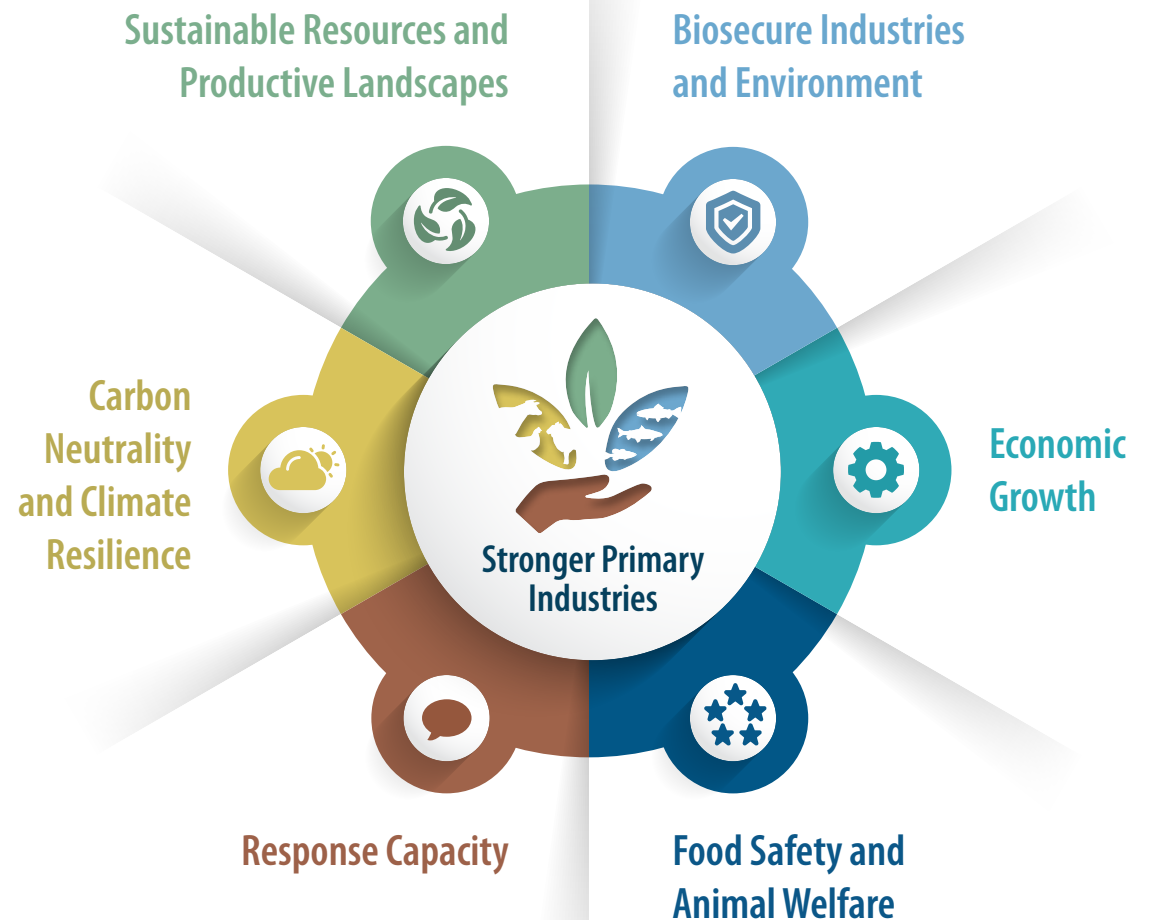
We decided our areas of strategic focus after much discussion with our partners, industry and our staff.

Our partners, across industry and government, said:

- NSW should target \$30 billion GVP for primary industries by 2030;
- they are targeting net zero emissions;
- there are big societal challenges that primary industries can help solve; and
- they want to see us make focused, bigger, bolder investments.

Building off this, our Strategic Outcomes set the foundation for DPI to make more impactful investments, while delivering on our purpose of maximising outcomes for NSW primary industries, the communities they support and the resources they rely on, both today and for the future.

Our Strategic Outcomes will be underpinned by best practice systems, processes and governance arrangements.



Our Strategic Priorities

Sustainable Resources and Productive Landscapes

- Assess and monitor natural resource health for sustainability
- Govern natural resource use through modern policy and frameworks
- Regulate natural resource access now and for the future
- Improve the quality of the natural resource base



Carbon Neutrality and Climate Resilience

- Expand options for cost effective emissions reductions or avoidance
- Increase carbon storage and sequestration
- Adoption of energy efficient and renewable energy technologies
- Quantify vulnerability and opportunities to climate changes and support adaptation



Response Capacity

- Anticipate and prepare for adverse events
- Timely and proportionate response
- Minimise impact of events
- Deliver rapid assistance and support sustained recovery



Biosecure Industries and Environment

- Lead the preparation for and prevention of future biosecurity threats
- Coordinate timely and risk proportionate responses
- Rapidly and efficiently contain biosecurity threats
- Work in partnerships to minimise impacts to primary industries and the environment from endemic biosecurity threats



Economic Growth

- Improve access to a capable workforce
- Support high value, new and emerging industries and new product development
- Develop zero waste and circular economy opportunities
- Drive use of food for improved health and consumer outcomes
- Partner for productive, efficient and resilient food and fibre supply



Food Safety and Animal Welfare

- Prepare for and reduce the occurrence of food safety risks
- Respond to and contain foodborne illnesses and food incidents
- Continuously improve the welfare of animals
- Ensure communities expectations around animal welfare are being met





Biosecure Industries and Environment

Primary industries, environment and the community are protected from the increasing threat and impact of pests, weeds, disease and other biological incursions

STRATEGIC OUTCOME NARRATIVE

Our primary industries and environment are continually under threat from outbreaks of potentially devastating pests and diseases. As the agency responsible for administering the NSW biosecurity legislation, DPI has the responsibility to ensure industries and the environment are protected from the threat of incursion, and to respond rapidly and effectively to minimise the impacts through our response if one does occur. Our access to markets and continual pursuit of premium value for our products mean that we need to ensure effective management through strong traceability and market assurance programs.

STRATEGIC PRIORITIES

Lead the preparation for and prevention of future biosecurity threats

Coordinate timely and risk proportionate responses

Rapidly and efficiently contain biosecurity threats

Work in partnership to minimise impacts to primary industries and the environment from endemic biosecurity threats

STRATEGIC INTENT

Prepare for and prevent future and emerging biosecurity threats through improved prediction and early detection using innovative technologies, modelling, planning and understanding of risk pathways.

Provide timely responses informed through active surveillance, rapid diagnostics and leading traceability systems. Ensure decisions around eradication and management are proportionate to the risk the biosecurity threat presents.

Contain pests, weeds and disease outbreaks efficiently to minimise adverse impacts on primary industries and the environment, while also maximising product integrity and market access opportunities.

Support strong engagement and innovation across government, the community and industry to share biosecurity responsibilities and minimise impacts of biosecurity threats. Develop pest and disease resistance options and new approaches to address landscape management of invasive species.

MEASURES

All reported biosecurity incidents are responded to within set timeframes by 2022.
Effective response to all biosecurity incursions by 2030.



STRATEGIC PRIORITIES

Biosecure Industries and Environment

Lead the preparation for and prevention of future biosecurity threats

Coordinate timely and risk proportionate responses

Rapidly and efficiently contain biosecurity threats

Work in partnerships to minimise impacts to primary industries and the environment from endemic biosecurity threats

KEY DELIVERABLES

Develop operational response plans and strengthen the capability to respond to emergency pests, weeds and diseases in both terrestrial and aquatic systems.



Identify and leverage productive partnerships with other agencies, community, the tertiary sector and industry to support surveillance and early detection practices.



Maintain a trained critical workforce (Internal and external) with access to technical resources and infrastructure.

Develop and adopt novel solutions and treatments for biosecurity responses and improved surveillance.

Ensure DPI and allied agencies have capacity and capability to undertake compliance operations.

Ensure collections, reporting and recording systems in place.

Assess and forecast biosecurity risks, including changes caused by climate, market trends and trade policy. Incentivise industry to adopt resilient practices and technology.

Enhance laboratory diagnostics capacity for the top 200 diseases and pests for NSW, through fast tracking the development of methods, tools and systems to rapidly detect and diagnose priority diseases and pests.

Implement new surveillance and early detection approaches that enable rapid eradication of target high risk pests, weeds and disease species.



Embed leading systems and enhanced analytic techniques that support improved prediction, risk assessment and response decisions and actions.

Provide expert advice, informed by research and investigation, on best practice responses to biosecurity outbreaks.

Embed citizen science platforms to achieve buy-in on early reporting and biosecurity initiatives.

Bolster vaccine capability for key pests and diseases.

Develop funding mechanisms for new pest and disease detections in NSW including emergency responses for all hazards and national cost shared national responses (e.g. RIFA, Khapra, AI).

Develop and implement risk-based compliance activities to manage non-compliance risks that could threaten the ability to respond to a biosecurity threat.



Deliver priority actions for surveillance, monitoring and traceability including instant and scalable electronic tracing of plants, animals and people movements.

Pilot the use of GS1 data standards to identify properties and support traceability systems that are data agnostic.

Scope and trial a system of farm contractor tracing for the viticulture industry based on Covid-19 QR code tracing systems with inherent adaptability and scalability for other sectors.

Undertake research to ensure there is a range of containment and management strategies available for the priority biosecurity threats.

Ensure there are clear arrangements in place with partners and other jurisdictions to ensure strong containment and management of biosecurity threats.

Drive greater stakeholder adoption of biosecurity measures that enable rapid and efficient containment of biosecurity threats.

Provide compliance education and training for partners, industry and stakeholders to drive behaviour change in support of containment programs (improved voluntary compliance)

Robust preparedness, planning and prioritisation framework to support strategic investment in biosecurity continuum.

Undertake research to protect NSW from priority endemic pests and diseases and their impacts such as **improved surveillance (of aquatic pests) with eDNA** and other technologies.

Undertake research to protect NSW from priority endemic pests and diseases and their impacts through **development of disease and pest resistant crops and livestock**.



Undertake research to protect NSW from priority endemic pests and diseases through improved **landscape and management tools and strategies**.

Deploy an artificial intelligence enabled Border Camera system to better target non-compliant operators. Pilot with the management of cattle tick border controls.

Deliver a pipeline of up to 5 biocontrol agents to address key pests, weeds and diseases.

Monitor for resistance to chemical controls for key pests, weeds and diseases to initiate quick implementation of new management strategies when required.

Implementation of new management strategies to deal with resistance to chemical controls when required.

Implement improved in-field diagnostics and real time monitoring.

Increase adoption of best practice through use of behavioural science-based stakeholder education/vocational training.



Carbon Neutrality and Climate Resilience

Primary industries are contributing to net zero by 2050 and adapting to climate change while maintaining productivity growth

STRATEGIC OUTCOME NARRATIVE

Primary industries can make a significant contribution to the goal of net zero emissions in NSW. This goal needs to be achieved without the loss of productive capacity from the sector, with the abatement enduring, resilient and credible. Primary industries are also one of the sectors most impacted by changes in the climate. There is a need to ensure that the vulnerability and opportunities for different primary industries sectors are well understood and appropriate adaptive responses are developed to ensure the ongoing strength and resilience of these industries.

STRATEGIC PRIORITIES

Expand options for cost effective emissions reductions or avoidance

Increase carbon storage and sequestration

Adoption of energy efficient and renewable energy technologies

Quantify vulnerability and opportunities, and support adaptation

STRATEGIC INTENT

Develop and support the availability of new knowledge, technologies and management practices to reduce emissions while maintaining productivity in livestock, grains and rangeland production systems. Support the uptake and adoption of new practices.

Develop new approaches to, and cost-effective measurement of, carbon storage and sequestration within primary industries production systems, including blue carbon. Understand the risk of reversal, develop technologies and management practices to minimise this risk, and support adoption by industry.

Support adoption of energy efficient and renewable technologies to reduce energy costs and improve energy security. Optimise the co-existence of renewable energy and agricultural activity.

Understand and predict the risks and opportunities that climate change brings to primary industries. Support primary industries to adapt to climate change, increased climate variability and extreme events through new technologies, management practices and production systems.

MEASURES

By 2030 achieve a net reduction of 9.1MT GHG emissions from primary industries in NSW through abatement and sequestration.
Minimising the climate impacts on Total Factor Productivity by an average of -7.9% by 2030.



STRATEGIC PRIORITIES

Carbon Neutrality and Climate Resilience

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KEY DELIVERABLES



Develop science based and commercial partnerships (including the NSW Decarbonisation Hubs) to undertake research and trials to develop on-farm practices that will reduce emissions through priority projects.

Support the delivery of the NSW Net Zero Plan and the Primary Industries Productivity and Abatement Program through the implementation of 'quick win' projects that demonstrate emission reduction practices.

Establish at least 4 of DPI's research stations as carbon neutral pilot farms to demonstrate new technologies and innovations at a commercial scale.

Quantify the opportunities for primary industries to reduce emissions including a review of key policy barriers impacting landholders in carbon markets.

Development of supply chain emissions traceability platforms to support market access.



Building capacity within primary industries and service providers to maximise opportunities for carbon sequestration.

Develop, demonstrate and pilot novel carbon storage and sequestration technologies across primary industries, e.g. soil, timber and blue carbon pilot sites to demonstrate and communicate their role in carbon sequestration.



Undertake research to value both the co-benefits and risks associated with carbon storage in different carbon pools.

Demonstrate the productivity and environmental benefits of sequestering and storing carbon within primary production systems, timber and natural habitats and develop a framework for measuring and reporting the full ecosystem service benefits.

Inventory the State's carbon assets managed by DPI or our stakeholders, identifying storage potential to prioritise investment in the highest priority assets.

Inform and influence policy, legislative and compliance frameworks for primary industries outcomes in carbon storage.

Develop cost effective monitoring and measurement technologies that reduce the transaction costs for land managers to engage in carbon markets.

Increase uptake in the primary industries sector of energy efficient and renewable energy technologies, and their enablers.

Pursue regulation changes that encourage renewable energy projects on State forest land.

Undertake research to support government and industry to pursue innovations and **opportunities for energy from waste**, particularly within the agricultural, fisheries and forestry supply chains.

Partner across government to optimise outcomes for primary industries within renewable energy zones and special activation precincts.

Increase uptake of energy efficient and renewable energy technologies in DPI asset base to trial new technologies and provide de-risked demonstration examples of existing technologies for industry, with a focus on technologies that support increased renewable heating, electrification and/or uptake of low carbon fuel alternatives to replace fossil fuels.

Increase primary producer and community understanding of opportunities of adopting carbon efficient operations.



Understand the vulnerability of different primary industries to climate change.

Develop adaptation options, including use of genomic trait selection and advanced gene technology to build resilience.



Understand how key threats such as biosecurity incursion risks are predicted to shift under climate change, and develop response options.



Demonstrate the role that digital technologies can play in adapting to a changing and more variable climate.

Use on-ground pilots to assess how real-time sensor data can aid adaptation and profitability across primary industries including horticulture, livestock, fisheries, biosecurity, and biodiversity.

Understand the vulnerability of aquatic environments and habitats to climate change. Develop adaptation options to build resilience.



Economic Growth

Primary Industries benefit the wider community through food as medicine, zero waste, food and fibre supply chain security, while underpinning growth and resilience in regional communities, and seeking opportunities to contribute to 'closing the gap' for indigenous peoples.

STRATEGIC OUTCOME NARRATIVE

Regional communities and the NSW economy rely on a vibrant and resilient primary industries sector. Improving access to a capable workforce, as well as automating aspects of production are key drivers of economic growth. The primary industries sector also has the opportunity to bring benefits to the wider community through problems such as chronic disease through food as medicine, achieving zero waste through the circular economy, supply chain resilience and producing food when and where it is needed. A vibrant, strong and prosperous primary industries sector is one that delivers benefits for all people in NSW.

STRATEGIC PRIORITIES

Improve access to a capable workforce

Support high value, new and emerging industries and new product development

Develop zero waste and circular economy opportunities

Drive the use of food for improved health and consumer outcomes

Partner for productive, efficient and resilient food and fibre supply

STRATEGIC INTENT

Remove barriers to participation and increase access to a secure and capable workforce. Support the development of skills within the existing workforce. Work with industry to secure access to a workforce to meet seasonal and changing workforce needs.

Support establishment and growth in NSW of high value, new and emerging industries and products. Assist industry to secure access to premium markets.

Support initiatives to minimise waste from primary industries and participate in the development of viable circular economies in regional areas.

Accelerate food production and value adding to improve consumer and health outcomes. Work with industry to meet the challenge of addressing chronic disease through a 'food as medicine' approach.

Partner with industry to ensure the food and fibre supply chain is productive, efficient, resilient and able to respond to shocks. Support the development and uptake of technology that improves supply chain resilience and efficiency.

MEASURES

Increase GVP of primary industries in NSW to \$23.6 billion by 2030.



Economic Growth

STRATEGIC PRIORITIES

Improve access to a capable workforce

Support high value, new and emerging industries and new product development

Develop zero waste and circular economy opportunities

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KEY DELIVERABLES

Pursue the removal of barriers and maximise opportunities to support a mobile seasonal workforce.

Improve the industry and government understanding of future workforce needs through improved data, and develop strategies to secure access to a capable workforce.

Deliver targeted workforce development training to lift workforce participation. For example, AgSkilled 2.0 industry training program for cotton, grains horticulture, viticulture and rice sectors.



Continue the commitment to training and capacity building of Aboriginal people. For example, the Aboriginal Rural Training Program and its delivery into rural and remote communities with indigenous educators and trainers.

Increase the opportunity for industry to innovate and modernise the workforce through AgTech.

In partnership with industry, develop a seafood product innovation and adoption strategy to increase value of NSW seafood species, with an emphasis on lesser known and under-utilised species.

Continue to develop the plant protein industry with region specific, climate resistant and disease resistant plant material.

Research in-transit and post-harvest technologies that can be applied to meet market quarantine protocols in export or inter-state product movements.



Deliver a honey bee genetic improvement program to improve the productivity, pollination performance and pest and disease resilience of managed honey bee colonies in Australia.

Review legislation, regulations and government incentive program guidelines to ensure they are accessible and attractive to high value, new and emerging industries. This includes the development of new opportunities such as ecosystem services.

Deliver an animal protein strategy that will improve the value of current products through pre and post-harvest treatments to differentiate products on factors such as eating quality, safety (microbial), and human nutritional value (fatty acids, mineral profiles).

Develop the NSW native food industry through exploration of new species that can be commercialised, delivery of ecosystem services and indigenous employment opportunities.

Increase value of recreational fishing and hunting

Support the development of a robust market that delivers natural capital and eco-system services.



Partner with industry and research providers to support the development of place-based solutions to waste and the development of a circular economy.

Understand the current waste streams in primary industries and identify opportunities to minimise or use these, including identifying any regulatory barriers.

Mitigate the potential risks from the circular economy through unintended consequences and risks to market access.

Partner across government to improve regulation of waste management including support for implementation of commitments in the NSW Plastics Action Plan and the NSW Waste and Sustainable Materials Strategy.

Work with NSW Health to develop a forward research strategy for "Food as Medicine". Establish partnerships with industry to develop new areas of research.

Undertake research to determine grazing management and feeding strategies to increase the amount of Omega-3 in lamb and beef.

Establish the Advanced Gene Technology Centre (inc. Plant Transformation Centre) that will focus on the use of advanced genetic technologies.

Explore the opportunities for pharmaceutical crop development in NSW. Understand the barriers to wider commercialisation and production.

Establish 3 new strategic R&D alliances with industry to prioritise research and development resources towards building increased resilience in the supply chain.

Partner with industry to develop new tools and management practices to increase profitability and productivity, reduce resource use and maintain ecosystem health.

Partner with industry to implement the NSW Dairy Industry Action Plan to set the foundation for a successful and profitable future for the NSW dairy industry.

Support adoption of new digital technology, including automation, through research and development programs and to support investment and installation.

Support new knowledge and capabilities in supply chain resilience.

Work across government and industry to set the strategic direction for innovative research ecosystems to optimise the investments from government and industry.

Optimise water productivity and sustainability in rainfed and irrigated agricultural systems to minimise impacts on environment and to build resilience through managed variability.



Food Safety and Animal Welfare

Markets and consumers are confident that industries and business meet high standards of food safety and animal welfare

STRATEGIC OUTCOME NARRATIVE

People expect their food to be safe. People also expect that high standards of animal welfare are upheld when animals are used for companionship, food, fibre, recreation, work, education, exhibition and research. In meeting these outcomes, the health and safety of consumers is protected, and the community is confident that animal welfare is protected and enhanced. NSW industries need to continually assess and adjust to consumer and community expectations, must be forward looking and invest to meet these changing expectations.

| STRATEGIC PRIORITIES | Prepare for and reduce the occurrence of food safety risks | Respond to and contain foodborne illnesses and food incidents | Continuously improve the welfare of animals | Ensure community expectations around animal welfare are being met |
|----------------------|---|--|---|---|
| STRATEGIC INTENT | The health and safety of consumers is protected by understanding the exposure pathways, emerging hazards, evidence-based standards and compliance. Collaboration and shared data across the supply chain are used to target interventions and predict patterns and the likelihood of an incident or outbreak occurring. | Reduce the social and economic cost of foodborne illness and food incidents through rapid response, sound traceability systems and coordinated management of outbreaks or incidents. | Continuously seek to improve animal welfare outcomes through the development of new tools and practices. Engage with stakeholders so they understand their animal welfare accountabilities. | Ensure animal welfare policy and legislative frameworks, standards, compliance and surveillance approaches for the prevention of cruelty to animals are evidence- and risk-based and deliver good animal welfare outcomes. Improve the knowledge and skills of stakeholders to lift compliance. |
| MEASURES | Reduction in high priority foodborne illnesses: <ul style="list-style-type: none"> • Salmonella - 10% reduction by 2022 and 25% reduction by 2025 • Campylobacter - 15% reduction by 2030 All urgent food safety incidents are responded to within 24 hours by 2022 Increased community confidence that animal welfare outcomes are being continuously improved. | | | |



STRATEGIC PRIORITIES

Food Safety and Animal Welfare

Prepare for and prevent the occurrence of food safety risks

Respond to and contain foodborne illness and food incidents

Continuously improve the welfare of animals

Ensure communities expectations around animal welfare are being met

KEY DELIVERABLES

An increasingly data rich and digitally automated food regulatory compliance system.



Well informed industry, consumers and compliance partners.

Cooperative working relationships among governments for coordinated policy positions, collective and consistent interventions.

Risk analysis, research and surveillance are directed towards sectors or settings where hazards present the greatest risk to human health.



Food safety compliance and technical programs to be risk assessed, focused on outcomes and enable prioritised operational activities.

Improved coordination and management of incidents across NSW and nationally, utilising an electronic incident management platform (MAX) incorporating digital sample collection.

Pilot an end-to-end traceability system across horticultural commodities as a proof of concept to accelerate the adoption of technology-based traceability systems in food supply chains.



Pilot the use of artificial intelligence to scan for emerging issues to improve the timeliness of responses and avoidance of incidents, partnering with improved data sharing between industry and government through the AusTrakka whole genome sequencing platform.

Use digital tools and platforms to assist with data sharing across jurisdictions during a response and pursue in NSW the development of a food safety system that offers 24/7 support and alerts in the retail food service sector. Such data will drive early warnings and trend analysis across multiple agencies.

Undertake post response reviews and analyse data and lessons learnt to improve food safety emergency response and apply to management practices.

Implement targeted intervention programs to respond quickly to emerging stock animal welfare issues.

Work with industry, other agencies and isolated communities to prepare for and respond to extreme events and incidents to ensure animal welfare needs are being met.



Develop a training, resource and engagement program to ensure stakeholders understand the tools and practices they can implement to improve animal welfare outcomes.

Work with industry to increase access to new tools, technology, and practices for priority animal welfare issues.

Develop objective animal welfare measures for a range of species to support continual improvement (including production, companion animals, research, conservation, education and exhibition).

New contemporary animal welfare legislation that drives improvements in animal welfare and meets community expectations.

Develop and implement a full digital suite of online service delivery for licensees including regulatory notices, invoicing, licence renewals and applications.



Improve compliance of accreditation and licence holders through a targeted communication and engagement strategy.

Conduct audits, inspections and investigations and develop improved compliance models that incentivise industry stakeholders to adopt risk-based standards, surveillance and compliance approaches.

Deliver a consistent, transparent, well-resourced and high performing animal ethics and welfare management framework.

Undertake social/behavioural research to gain an in depth understanding of community expectations around animal welfare, what drives those expectations, and how expectations compare to and drive human behaviours.

Provide timely and accurate animal welfare advice to ensure that evidence-based advice underpins state and national animal welfare policy setting.



Response Capacity

The impact of adverse events is minimised and rapid recovery is supported, with increasing resilience over time

STRATEGIC OUTCOME NARRATIVE

Primary industries sectors are vulnerable to adverse events, such as natural disasters, drought and biosecurity outbreaks. When appropriate response and recovery actions are undertaken, they can minimise the extent of the impact of these adverse events. We need to ensure that we have the capacity to provide an impactful strategic response. A modern strategic response capacity should minimise losses and impacts and facilitate a rapid recovery. This approach involves us anticipating and preparing with stakeholders so that our industry and communities are stronger when an event occurs.

STRATEGIC PRIORITIES

Anticipate and prepare for adverse events

Timely and proportionate responses

Minimise impact of events

Deliver rapid assistance and support sustained recovery

STRATEGIC INTENT

Use innovative technology, data and processes to anticipate events and potential impacts early and deploy mitigation actions where possible. Build and maintain purposeful partnerships with industry and government.

Implement a modern strategic response and recovery framework that optimises the use of technology, data and available resources. Ensure this is scalable to be proportionate to the risk and event.

Support industry and communities to prepare for, and swiftly respond to, adverse events. Informed decisions and well-targeted programs support investment in infrastructure and practice change for long-term resilience.

Connect systems, services and people to optimise customer experience, ensuring primary producers and other customers only tell government once and can access support and what they need quickly and easily. Contribute to the delivery of impactful recovery plans tailored to local, environmental and industry needs.

MEASURES

Primary producers report increased resilience to changing environmental conditions by 2030.

70% of RAA stakeholders rate their experiences as very good or better.

Timely DPI responses to natural disasters and emergencies within 24 hours.

Maintain or increase the proportion of ocean water users in NSW who express confidence in the shark protection measures in the waters they use by 2030.



Response capacity

STRATEGIC PRIORITIES

Anticipate and prepare for adverse events

Timely and proportionate response

Minimise impact of events

Deliver rapid assistance and support sustained recovery

KEY DELIVERABLES

Develop a masterplan for emergency management-wide systems to optimise responses so that needs are prioritised during a response.

Invest in the quality of our data and assets to ensure response operations are safe and optimise outcomes.



Upgrade the Enhanced Drought Information System (EDIS) to provide farmers with world-leading weather and climate data so they can make better business decisions.

Build and maintain emergency management arrangements.

Implement world leading shark management and monitoring strategies to promote greater community awareness and understanding of shark behaviours to enhance beach safety.



Enhance the resource capability of DPI to respond to emergencies and adverse events.

Build the workforce capability of DPI teams to ensure that timely and proportionate responses can be met.

Further develop the Lessons Management Framework (LMF) to allow for the collection of all observations, and the creation of risk-assessed and prioritised action plans to address recommendations.



Deliver scalable and proportionate responses to emergencies and adverse events.

Develop and pilot drought preparedness decision-support tools and farm business planning approaches with the sector, informed by robust research outputs. Undertake behavioural research to support an improved suite of drought programs that provide essential support during drought.



Provide access to information and decision support tools that support early decision making, planning and consideration of responses to natural disaster and biosecurity events.

Partner with industry to develop a crisis supply chain plan to ensure food supply and security and protect animal welfare outcomes.

Expand the Farm Innovation Fund to provide proactive primary producer investment in risk mitigation infrastructure and technology

Develop natural asset critical care plans with community organisations and industry and support preparedness investments through a grants program.

Develop a communication and engagement program that is co-designed with stakeholders, to drive the adoption of tools and practices that improve risk management.

Develop cooperative working relationships across state and federal Government to plan for and support adverse events.

Lead NSW in the development of nationally consistent and harmonised definitions and eligibility criteria for primary producer assistance programs which also provide market-based incentives to 'build back better'.

Transform RAA service delivery so it is easier for producers to report damage and access assistance quickly through a streamlined, digitally enabled application process.



Maintain close industry working groups that can be rapidly established to support and inform recovery actions.

Be response ready to deliver Rural Recovery Support Services and rapid stand up of financial assistance programs under the Natural Disaster Relief and Recovery Arrangements (NDRA) to optimise recovery in partnership with Resilience NSW.





Sustainable Resources and Productive Landscapes

Natural resources are managed to improve the environmental value and productive performance, for present and future generations

STRATEGIC OUTCOME NARRATIVE

- For primary industries to be strong in the long term we need to ensure the natural resources they access and rely upon are effectively managed. The fisheries sector needs plentiful, self sustaining stocks and healthy habitats, the agriculture sector needs productive soils and efficient use of water, and the forestry sector needs healthy forests and a long-term secure timber supply. Current and future generations rely on the successful management of these natural resources to ensure social, cultural and economic benefits.

STRATEGIC PRIORITIES

Assess and monitor natural resource health for sustainability

Govern natural resource use through modern policy and frameworks

Regulate natural resource access now and for the future

Improve the quality of the natural resource base

STRATEGIC INTENT

Undertake scientific evidence-based monitoring and assessment to optimise productive use of natural resources and improve environmental outcomes.

Implement efficient policy and legislative frameworks in partnership with all stakeholders to manage resource sharing and access.

Deliver effective compliance, regulation, enforcement and community awareness programs to protect, restore and enhance natural resources and the environment for current and future generations.

Develop, validate and support adoption of innovative management practices for natural resources to improve environmental outcomes and land use.

MEASURES

Expand the NSW forest plantation estate by 10% by 2030.

Shift all soil health indicators to stable or improving by 2030.

100% of all assessed fish stocks primarily managed by NSW are sustainable by 2030.



STRATEGIC PRIORITIES

Sustainable Resources and Productive Landscapes

Assess and monitor natural resource health for sustainability

Govern natural resource use through modern policy and frameworks

Regulate natural resource access now and for the future

Improve the quality of the natural resource base

KEY DELIVERABLES

Assessment of key fish stocks and habitats to inform management, policy and regulatory decisions.

Monitoring and scientific evaluation of the impacts of key threatening processes and resource harvesting including game animal harvesting, fishing on fish stocks and habitats and forest harvesting on ecosystem recovery.



Undertake natural resource monitoring and assessment to determine habitat and landscape restoration actions, success and improvements.

Use soil testing data to monitor and assess the health of agricultural soils in NSW key production regions, baselined against long term research sites.

Deliver scientifically defensible information on the current status and trends related to economic and social values (including stakeholder behavioural responses) to inform sustainable and adaptive management, policy and regulatory decisions of NSW forests, fisheries and soil.

Develop and implement an integrated transparent natural capital accounting framework for Primary Industries to meet the needs of government, industry, community, consumers and markets.



Develop and implement harvest strategies, resource sharing and co-management arrangements for key fish species.

Support/lead reviews into the NSW Regional Forest Agreements, Western IFOAs, and other key forest management frameworks to ensure they are fit for the future and meet our intergovernmental obligations.

Pursue changes to policy, legislation and regulations to recognise important agricultural lands and soil resources as part of long term strategic landuse planning.

Partner with Aboriginal communities and industry to develop policy frameworks, to support NSW business cases that support creation of, and investment in, commercial fishing, the forestry sector, and commercial native food production.

Develop and implement a new Marine Park Network Management Plan for all mainland NSW marine parks.

Drive and influence policy and legislation for the Marine Estate and freshwater environments as well as the Water Sharing Plan frameworks to recognise the importance of protection, enhancement and sustainable use of fish and their habitats.

Pursue and influence changes to policy and legislation to incentivise growth and investment in the NSW plantation estate.

Developing policy frameworks to inform investment in data collection, management, storage and use.

Develop 'One DPI' best practice regulatory model and policies to ensure effective and efficient regulation of natural resource access legislation.



Lead changes to regulatory arrangements to cater for industry and community needs including plantations, apiary and grazing permits in public forests, and a wide range of fisheries controls.

Develop and implement an electronic monitoring and digitisation strategy for NSW fisheries.

Influence and drive outcomes in partner regulatory frameworks for water, air, soil, hunting and forestry.

Develop and implement remote sensing techniques to support soil and forest health and productivity assessments, compliance activities in fisheries and forestry, and bushfire management.



Implement the NSW Fish Passage Strategy to boost regional economies, primary production and native fish biodiversity, by delivering a suite of fish passage, fish screen and cold-water pollution mitigation projects at priority sites across NSW.

Implement aquatic habitat restoration, including the MEMS, coastal wetland rehabilitation, and other fish habitat improvement programs.

Continue research into nanotechnologies and soil management to improve soil and plant productivity.

Support forestry bushfire recovery through replanting plantations, rebuilding infrastructure, and supporting the recovery and regrowth of native forests.

Identify critical constraints to the health and productivity of our natural resources, and implement innovative responses to overcome these.

Encourage and promote the refinement and adoption of new/novel technologies and behaviours to improve the natural resource base.

Assist the expansion of commercial and environmental plantation estate by 10% to reduce the spread of dryland salinity, and increase carbon storage and biodiversity in landscapes.

Partnerships and Engagement

Partnerships

Having strong collaborations, networks and engagement with our partners is critical to delivering DPI's Strategic Plan.

We seek to engage regularly with our key delivery and investment partners at a strategic level to ensure we identify areas for greater collaboration and incorporate industry expertise and insights into the planning and delivery process. We also seek to develop new partnerships including with non-profit organisations and the private sector. Partnerships help us ensure we capitalise on our resources, identify areas of opportunity and engage with the best talent to maximise impact and outcomes for the community and industry.

Our partnerships differ depending on the different goals of our various partnerships. We may have one-on-one partnerships or we may establish working groups to harness the collective expertise across industry. We may partner to drive a key issue forward, or partner for the benefit of a localised community in response to an adverse event. At every opportunity from a small event to a major reform we look to strategically build partnerships that leverage mutual benefits for lasting impact.

Engagement

Our vision of stronger primary industries is only achievable if we work with partners.

Our key principles for stakeholder engagement and partnerships:

- We seek to be customer, stakeholder and outcomes focused, informed and expert-based
- We will be inclusive and respectful
- We will be accountable, transparent and clear
- We will share relevant information across DPI and government
- We seek to be relevant, timely and reliable.
- We embrace digital technology, the value of data and the benefits of change
- We communicate the outcomes achieved for primary industries, the community and the environment



Problem solving together

The recent bushfires, floods and global pandemic have demonstrated the value of the Department in bringing together industry groups, associations and government agencies to share timely information to inform government processes and decisions. We now seek to strengthen this model by regularly bringing relevant parties together to discuss and address opportunities and challenges in the sector. This will provide greater opportunities for information sharing across industry to help our stakeholders make more informed choices.

Growing the impact of our investment

There is a growing need to deliver greater impact from public investment, especially during periods of significant disruption. Moreover, our investment profile is shifting, with increasing external investment from partnerships and strategic alliances. This requires us to be more agile in the way we deliver programs and services for maximum impact.

We aim to grow the impact of our investment and increase the sector's access to new research and development (R&D) outcomes through:

- New commercial and strategic collaborations that unlock opportunities
- Fast-tracking of research ideas and intellectual property to adoption through DPI's Global AgTech Ecosystem (GATE)
- Improved commercialisation, adoption and access to priority R&D outputs and testing services
- Delivering customer-centred, efficient services and assistance to maximise impact for DPI and its customers
- Optimising customer access to our services, programs and collaboration opportunities through a single digital shopfront
- Through DPI's Digital Strategy, transforming DPI services through digital and data to optimise customer experience and maximise impact.

Deliverables

- Executive-to-executive relationships to foster stronger collaboration with DPI
- Strategic partnerships to achieve shared outcomes
- Industry insights drive our strategic outcomes
- Activating our research stations to partner with community and our stakeholders
- Value add across Government as a key partner to achieve its vision for 2030

Measures

To reach and maintain a stakeholder satisfaction score of 70% and above



Research Stations and Infrastructure Investment

DPI's mandated functions of emergency response, biosecurity and animal welfare are well supported through the work undertaken at research stations. The unique portfolio delivers essential and relevant information to land managers, farmers and fishers (both commercial and recreational) to increase productivity and protect the state from biosecurity risks, drive improved resilience and ensure proper stewardship of the natural environment.

At their core, our research stations and hatcheries deliver unique and invaluable benefits to the State's primary industries, including:

- Local, independent and internationally recognised research;
- Strong community and industry engagement including demonstration of research and development outputs under local conditions;
- World class infrastructure investment enabling long term scientific control and outcomes; and
- Support for long term research trials through well-documented site histories including climate, soil type, topographic and other background factors.

We have long-standing relationships with many universities, industry bodies and other national and international organisations. These have led to our involvement in a number of scientific Centres of Excellence.

To ensure we optimise the public investment in infrastructure, our research stations and hatcheries must meet all, or most of, the following criteria:

- Have a demonstrable purpose for delivering contemporary research, development and extension (RD&E) outcomes that benefits the NSW industry or community;
- Provide multipurpose infrastructure that can be used flexibly for a range of agricultural RD&E and related natural resource management purposes;
- Provide local facilities for RD&E focused on unique NSW agricultural issues that are not being addressed by facilities in other states;
- Fast track the local adoption of research developed outside NSW to benefit local agriculture, forestry or fisheries industries;
- Provide a space for partnerships with industry and other RD&E providers which deliver positive benefits for NSW primary industries beyond the ability of any individual partner;
- Provide local capacity to evaluate new, and sometimes high-risk, enterprises and technologies with potential for establishment at a commercial scale in NSW.

DPI is the largest provider of research services within the NSW Government, and manages the largest collective of agricultural research institutes in Australia. DPI has developed a reputation over the last 130 years as a world-leading research organisation that makes a strong contribution to the sector, local and State economies.

More than 600 staff operate on a combined land holding of 13,000 hectares over 28 sites, including three hatcheries. Our research stations replicate most agri-ecological zones for food and fibre across NSW, and also house our nationally significant and irreplaceable Biosecurity Collections. DPI manages and maintains a range of biological agricultural and fisheries assets that enable the organisation to conduct research, development and extension (RD&E) activities. These assets include beef cattle, dairy cattle, merino and prime lamb breeds of sheep, Australian Stock horses, Murray Cod, Rainbow and Brown trout.



Our Research Stations nurture scientific careers, support scientific breakthroughs and provide the means to test and evolve thinking. DPI is focused on optimising utilisation of research station infrastructure and assets to deliver greater impact for industry and the community now and into the future.

Key deliverables and initiatives include:

Strategic asset management and planning achieved through:

DPI Asset
Management Plan

DPI Infrastructure
and Asset Optimisation
Strategy

Service delivery
and asset management
alignment planning
framework

Best-practice
asset information
management systems
and processes

Best practice operations underpinning DPI programs with a focus on safety, quality, customer service and efficiency

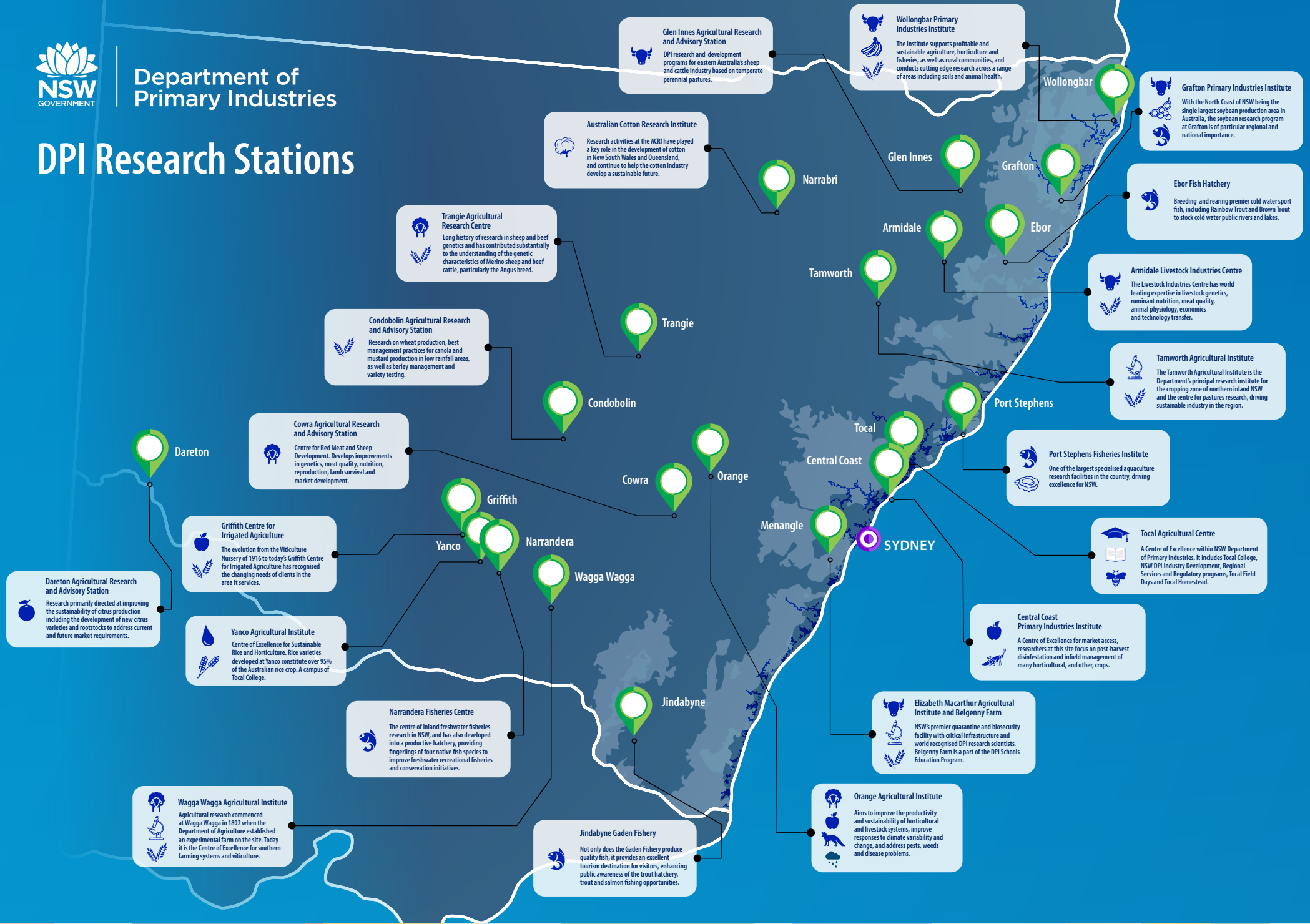
Completion of major infrastructure investment programs to deliver world class research into the future. Food & Fibre 1 (\$50m, 15 projects) to be completed by June 2022, and Food & Fibre 2 (\$50.8m, 9 projects) to be completed by 2023.





Department of
Primary Industries

DPI Research Stations





Department of Primary Industries

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The information contained in this publication is based on knowledge and understanding at the time of writing (June 2022). However, because of advances in knowledge, users are reminded of the need to ensure that the information upon which they rely is up to date and to check the currency of the information with the appropriate officer of the Department of Regional NSW or the user's independent adviser.

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