

NSW Wild Dog Management Strategy 2017–2021



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CONTENTS

MINISTER'S FOREWORD: 1

1. ABOUT THIS STRATEGY: 3

2. SITUATIONAL OVERVIEW: 5

3. ROLES AND RESPONSIBILITIES FOR WILD DOG
MANAGEMENT IN NSW: 10

4. GOALS OF THE NSW WILD DOG
MANAGEMENT STRATEGY: 15

5. GOVERNANCE AND REVIEW OF THE NSW WILD DOG
MANAGEMENT STRATEGY: 20

APPENDIX 1:
KEY LEGISLATION INFLUENCING WILD DOG MANAGEMENT
IN NSW: 21

ACRONYMS AND ABBREVIATIONS: 23

DEFINITIONS: 24

MINISTER'S FOREWORD

No one can dispute that wild dog attacks on livestock can have major financial and emotional impacts on graziers in NSW and can even affect the choice of land use in some areas.

NSW has good processes in place for forming Wild Dog Control Groups and their development of Wild Dog Management Plans – and we believe this type of coordinated action is key to reducing wild dog impacts.

We also have a strong pest animal management research and training capability in NSW to develop improved control techniques and promote their adoption.

This updated **NSW Wild Dog Management Strategy 2017–2021** identifies specific actions to ensure we maintain and build on existing wild dog management, policy, research and training approaches in NSW.

Importantly, the strategy supports the goals of *NSW Biosecurity Strategy 2013–2021*, *Biosecurity Act 2015* (NSW) and the NSW Invasive Species Plan.

This strategy has had input from key land management agencies, including Local Land Services and National Parks and Wildlife Service, the NSW Department of Primary Industries, as well as from NSW Farmers' Association and individual landholders in wild dog problem areas.

I commend this revised NSW Wild Dog Management Strategy to you, and look forward to seeing these actions implemented to reduce the impacts wild dogs have on our grazing industries and broader communities.



The Hon. Niall Blair, MLC
Minister for Primary Industries
Minister for Regional Water
Minister for Trade and Industry

1. ABOUT THIS STRATEGY

The overarching aim of the **NSW Wild Dog Management Strategy 2017–2021** is to reduce the negative impacts of wild dogs within our state. This strategy updates the inaugural *Wild Dog Management Strategy 2012–2015*.

This strategy has been developed with input from a working group comprising representatives from NSW Department of Primary Industries, Local Land Services, NSW Farmers' Association and the NSW National Parks and Wildlife Service. The National Wild Dog Facilitator was also involved to provide important links to the National Wild Dog Action Plan and the former Invasive Animals Cooperative Research Centre (now Centre for Invasive Species Solutions).

A public consultation phase provided opportunity for input from individual landholders and other stakeholders. The strategy has been endorsed by the NSW Pest Animal Council, which was the peak body overseeing pest animal policy and programs in NSW (since replaced by the State Pest Animal Committee).

The strategy guides specific actions to more effectively reduce the negative impacts of wild dogs. It also clearly defines the roles and responsibilities of government agencies, public and private land managers, and other community members in managing wild dogs in NSW.

Wild Dog Management Plans (WDMPs) assist land managers, regional groups, industry and government to effectively manage wild dogs, improve their efficiency, profitability and sustainability, and fulfil their biosecurity duties. WDMPs are considered an essential part of best practice wild dog management, and should be developed for all areas of NSW affected by wild dogs.

Each WDMP should cover all land tenures within a defined management area. WDMPs should consider the economic, environmental and social impacts of wild dogs and incorporate measurable strategies to address these impacts. WDMPs will be guided by Regional Pest Animal Management Plans and this strategy will be one of the key references for developing those regional plans (see Section 2 and Figure 2).

A review of the **NSW Wild Dog Management Strategy 2012–2015** produced the following key findings that have guided the development of this updated strategy:

- » Some objectives and actions of the original strategy were identified as ongoing issues that require continued attention. These have been carried over to the updated strategy.
- » Many actions of the original strategy were not easily measurable. In the updated strategy, emphasis has been placed on identifying measurable key deliverables and realistic timeframes for achievement.

- » The publication of a new policy, *Guidelines for the preparation and implementation of Wild Dog Management Plans in NSW (2016)*, was a key achievement of the original strategy. This policy will need to be updated to account for new arrangements under the *Biosecurity Act 2015* (NSW). While the policy provides overarching guidance, there is ongoing work involved in standardising processes for planning and reporting wild dog management in NSW and nationally.
- » There are large areas of NSW being impacted by wild dogs that are not covered by current WDMPs. Additionally, mapping of wild dog management and compilation of state-wide spatial data needs to be formalised.
- » The revised strategy needs to take into account the *NSW Biosecurity Strategy 2013-2021*, *Biosecurity Act 2015* (NSW) and the NSW Invasive Species Plan.

2. SITUATIONAL OVERVIEW

Wild dog definition and distribution

In NSW, the term 'wild dog' refers to all wild-living dogs: dingoes, feral domestic dogs and the hybrid descendants of these (all of which are currently considered to be *Canis familiaris*). Prior to the arrival of Europeans, dingoes occurred across all habitats of mainland Australia. The overall distribution of wild dogs was reduced by a long history of control and use of exclusion fencing, particularly in sheep grazing areas. However, recent anecdotal and monitoring evidence suggests that the distribution and impacts of wild dogs are increasing in some parts of NSW. Figure 1 shows the distribution of wild dogs in NSW in 2016.

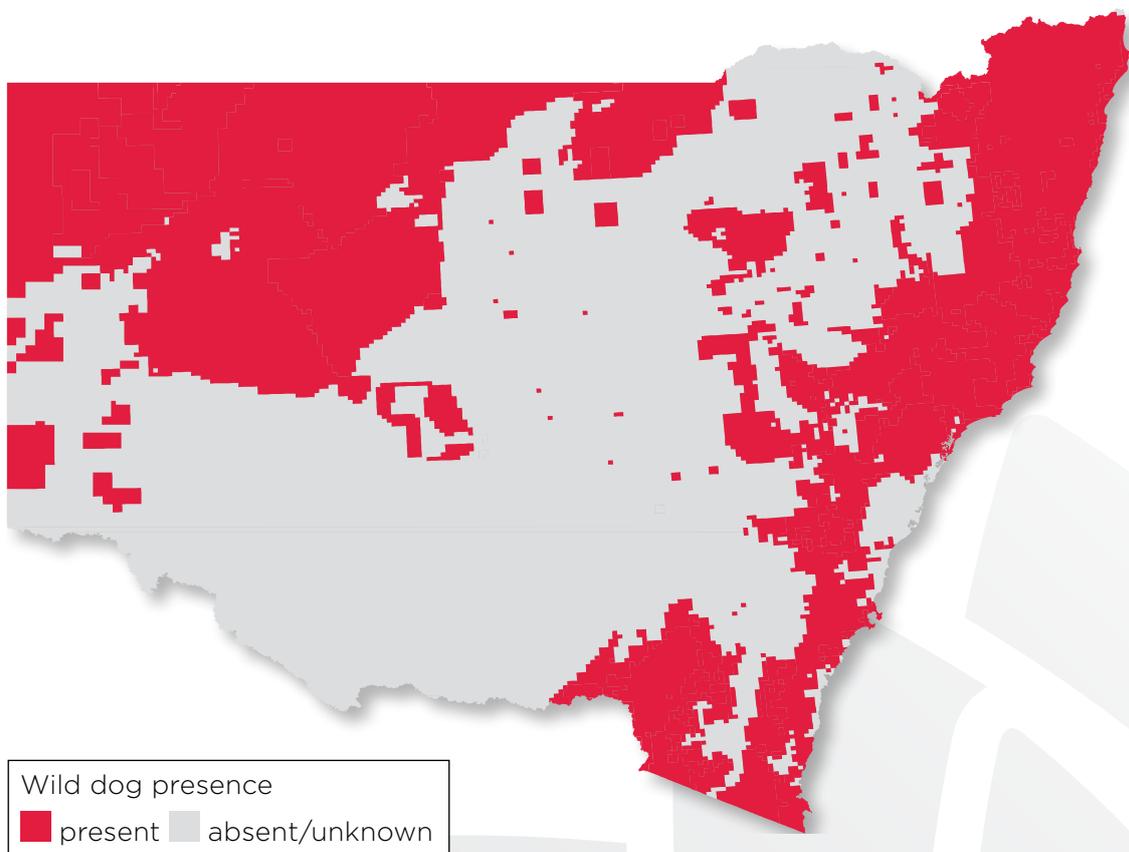


Figure 1: Wild dog distribution in NSW as assessed in 2016 (compiled by DPI based on information provided by LLS, NPWS and Forestry Corporation).

The economic, environmental and social impacts of wild dogs

The negative impact of wild dogs includes predation and harassment of livestock and native fauna, and the spread of diseases. Wild dog presence is generally incompatible with small livestock production (e.g. poultry, sheep, goats, calves) and once predation begins it will usually continue until either the wild dogs or the susceptible stock are removed. Opinions vary on the impact of wild dogs on cattle production. Although there is strong evidence that calf predation by wild dogs can be substantial and costly, some cattle producers believe that this cost is offset by wild dogs reducing the density of competing wild herbivores. These divergent views can cause local conflict and pose a challenge for the development and implementation of WDMPs.

Shifts in land use away from small livestock production can reduce total productive capacity and income. Where this occurs as a broader trend, local economies can be severely affected by wild dog-induced enterprise change.

Wild dogs are known to spread diseases that affect livestock, pets, native animals and humans. Common examples include hydatids (*Echinococcus granulosus*) and *Neospora caninum*. Wild dogs may also pose a direct threat to the safety of pets and humans, particularly in peri-urban areas.

Dingoes have been present in Australia for over 4000 years. During that time, dingoes have developed a range of ecological functions as the top (non-human) predator in most places where they occur across Australia. There is still debate about the extent to which wild dogs can limit kangaroo and feral goat populations and the extent of their influence on feral cats and foxes — further research is required in these areas. Wild dogs may also have negative impacts on threatened native species, particularly when such species are already under stress from other threatening processes such as habitat fragmentation.

Social impacts of wild dogs occur at four levels: individual landholders directly affected by wild dog predation; agency staff who deal with affected landholders day-to-day; flow-on effects to the local community of the affected producers; and effects felt by the wider community. Social impacts include acute and chronic distress, depression, anxiety, insomnia and conflict, and social disruption. Conflict can occur between family members; public and private land owners and managers; operators of different enterprises among private land owners (e.g. sheep producers, cattle producers, absentee land owners and agroforestry); and affected rural/peri-urban communities and unaffected urban communities.

Wild dog policy and planning in NSW

At the time of publishing wild dogs were declared pest animals throughout NSW under the Local Land Services (Wild Dogs) Pest Control Order 2015. The order imposes a general destruction obligation requiring the occupier of controlled land to control wild dogs by any lawful method.

The statewide declaration of pest animals under pest control orders is transitioning to a regional prioritisation process that will allow for greater community input and provide more specific guidance on priority areas for pest animal management. The priorities for wild dog management will be broadly guided by Regional Pest Animal Management Plans, with more specific guidance provided by the underlying WDMPs. The *Biosecurity Act 2015* commenced on 1 July 2017 and introduced the general biosecurity duty, which reinforces the concept of pest animal management as a shared responsibility for all community members. The general biosecurity duty provides that any person who deals with biosecurity matter (such as wild dogs) and who knows (or ought to know) of the biosecurity risk posed (or likely to be posed), has a biosecurity duty to ensure that the risk is prevented, eliminated or minimised — as far as is reasonably practicable. For wild dogs, this means that both private and public landowners will be required to control wild dogs to the extent necessary to minimise the risk of any negative impacts on their lands or that of their neighbours.

Effective wild dog management requires a strategic and proactive approach where private and public land managers use a cross-tenure planning process. This typically involves mapping wild dog-affected areas and recording the locations of attacks on livestock, routes used by wild dogs, dog-proof fences and locations of past and proposed management actions.

WDMPs are then developed specifying what control and monitoring work will be done and where, who is responsible for conducting and/or paying for that work, and timelines for achieving the work. WDMPs assist with management of wild dogs through:

- » improving community awareness and cooperation to support cross-tenure wild dog management
- » prioritising wild dog management in the context of other natural resource management work
- » focusing effort at the appropriate time and scale
- » increasing adoption of best practice wild dog management approaches that account for the latest control techniques and research
- » formalising monitoring and reporting on WDMP performance.

An important principle of any WDMP is that resources need to be targeted to those areas and those times where the likelihood of reducing impacts is the greatest. The previous *Wild Dog Management Strategy 2012-2015* identified the need to improve the quality and consistency of planning, monitoring and reporting processes for wild dog control in NSW. Although there have been some improvements since the first strategy was developed, there is more work to do, as identified in Section 4.

Advances in research, development and technology

The draft Australian Pest Animal Strategy 2017-2027 identifies key principles of effective pest animal management. In particular, three of these principles highlight the need to continually improve monitoring, reporting and control tools for more effective wild dog management:

- » Pest animal management should be based on actual rather than perceived impacts and should be supported by monitoring to measure whether impact reduction targets are being achieved.
- » Best practice pest animal management balances efficacy, target specificity, safety, humaneness, community perceptions, efficiency, logistics and emergency needs.
- » Best practice pest animal management integrates a range of control techniques (including commercial use where appropriate), considers interactions between species (eg. rabbits and foxes) and accounts for seasonal conditions (eg. to take advantage of pest animal congregations during drought).

NSW has a strong record of research collaboration within the state, nationally and internationally. Productive links have been developed with industry, the Commonwealth Government, other jurisdictions and universities. Being an active participant of the Invasive Animals Cooperative Research Centre (IACRC) and its successor, the Centre for Invasive Species Solutions (CISS), helps NSW achieve maximum leverage from limited research and extension resources. There is a focus on applied research that involves land managers and other stakeholders identifying research needs and implementing research projects. This capacity needs to be maintained as identified in the 'Goals and Strategies' tables in this document.

A key principle of pest animal management is that the focus of management should be on reducing impacts, rather than removing pest animals per se. This objective is supported by pest animal management research to identify a range of practical management tools that, when used at the appropriate intensity and in the appropriate combination, can achieve and sustain required levels of impact reduction. Lines of research enquiry should always consider non-lethal management options. Where lethal approaches are considered a necessary component of integrated management, humaneness should be a major focus of research and policy.

Research to identify improved pest animal management approaches needs to be supported by training and extension to expedite adoption. NSW is fortunate to have formal pest animal management training available through Tocal Agriculture College, as well as through training within individual government agencies. Local Land Services provides a regional network of extension and training opportunities for landholders. In the case of wild dog management, facilitators supported by the Centre for Invasive Species Solutions and industry groups provide a valuable supplement to NSW Government extension and coordination activities.

National Wild Dog Action Plan

The National Wild Dog Action Plan (NWDAP) was published in 2014 to *'guide the implementation of a nationally-agreed framework for a strategic and risk-based approach to wild dog management, emphasising humane, safe and effective management techniques and appropriate scales for mitigating the impacts of wild dogs'*. The NWDAP provides opportunities to raise awareness about the wild dog problem and for national collaboration to develop improved policy, monitoring and management approaches. NSW is involved in the NWDAP through its Stakeholder Consultative Group.

3. ROLES AND RESPONSIBILITIES FOR WILD DOG MANAGEMENT IN NSW

Pest Animal Council/State Pest Animal Committee

The Pest Animal Council (PAC) provided a forum for key government and non-government stakeholders to help guide pest animal policy, programs and research in NSW. In 2017, PAC was replaced by the State Pest Animal Committee which will have an initial focus on advising on the formation of Regional Pest Animal Committees and development of Regional Pest Animal Management Plans.

Regional Pest Animal Committees

Regional Pest Animal Committees will be formed in each of the 11 Local Land Services (LLS) regions in late 2017. They will include public and private land manager representatives and other interest groups. The major role of these committees will be to draft Regional Pest Animal Management Plans for each LLS region. Local Wild Dog Management Plans will be developed or updated to be consistent with the overarching Regional Pest Animal Management Plans (see Figure 2).

Private landholders

Private landholders are responsible for the management of wild dogs on land they own or occupy. Wild dogs are highly mobile animals requiring a coordinated approach across private and public tenure boundaries for effective management. Under the *Biosecurity Act 2015*, Regional Pest Animal Committees will consult with regional communities to identify priority pest animal species to be managed in priority areas. Local Land Services and public land managers will work with private landholders to ensure that general biosecurity duty obligations in relation to wild dogs and other species are discharged on both public and private lands.

Department of Industry

Within the Department of Industry, there are three organisations that have responsibilities for wild dog management: the Department of Primary Industries, Local Land Services and the Department of Industry – Lands and Forestry.

Department of Primary Industries

Department of Primary Industries (DPI) represents the NSW Government at national forums where invasive species management is discussed and coordinated, including the Invasive Plants and Animals Committee. DPI is also represented on the NWDAP Stakeholder Consultative Group.

DPI coordinates accredited pest animal management training at Tocal Agricultural College to promote a strategic approach to pest animal management in NSW and effective community engagement processes.

DPI has a Vertebrate Pest Research Unit (VPRU) that liaises closely with industry, the Commonwealth Government, other jurisdictions and universities. The VPRU has been an active participant in the Invasive Animals Cooperative Research Centre. The VPRU will continue to liaise nationally and internationally directly and through the Centre for Invasive Species Solutions to develop and refine techniques and strategies for wild dog management as well as improving understanding of wild dog biology, ecology and impacts.

Although shooting is not a major component of strategic wild dog management, the DPI Game Licensing Unit administers licensing for recreational hunting of wild dogs (but not dingoes, recognising the difficulty of that distinction) and other species in State forests.

Local Land Services

Local Land Services (LLS) is the lead agency for coordinating the on-ground management of established terrestrial pests such as wild dogs. LLS will play the lead role in coordinating Regional Pest Animal Committee processes under the *Biosecurity Act 2015*. Under this Act, LLS biosecurity officers will be responsible for education and compliance to ensure that all landholders are addressing biosecurity risks, including wild dog predation on livestock.

LLS is the primary authorised distributor for the vertebrate pest poison 1080 (sodium fluoroacetate) and provides 1080 and other pesticide training for landholders. LLS is also involved in inter-agency pesticide research and training to develop and promote additional management techniques and strategies for wild dog management.

LLS assists Landcare, community groups and other stakeholders to seek financial assistance and funding for large-scale coordinated programs.

Department of Industry - Lands and Forestry

The Department of Industry - Lands and Forestry administers and manages Crown land, which makes up approximately half the state. Lands and Forestry develops, funds and implements invasive species management strategies on land under its direct control. It also supports activities undertaken by community groups and other stakeholders that manage land on its behalf, including Community Trusts and Councils.

Lands and Forestry incorporates a risk-based approach to managing invasive species on Crown land, in collaboration with neighbouring landholders and other land management agencies where appropriate. This includes education, extension, project implementation, audit and compliance activities.

Forestry Corporation

Forestry Corporation manages over 2 million hectares of native and plantation forests for sustainable timber production, recreation and biodiversity. Where wild dogs are a threat to neighbouring properties, Forestry Corporation is involved in integrated management programs using baiting, trapping and guard animals. Forestry Corporation also allows for recreational hunting on its lands and has assessed each declared NSW State Forest to decide whether it should be open to hunters, and the licensing and access conditions.

National Parks and Wildlife Service

The National Parks and Wildlife Service (NPWS) manages an estate which covers over 7 million hectares (approximately 9% of NSW). NPWS undertakes strategic pest management to mitigate the impacts of pest species on the natural and heritage values of the national parks estate, as well as mitigating their impacts on neighboring properties. In line with this strategic approach to pest management, NPWS undertakes extensive wild dog control as part of coordinated cross-tenure programs to minimise the impacts of wild dogs on neighbouring livestock producers.

NPWS is an authorised distributor for the vertebrate pest poison 1080 (sodium fluoroacetate), primarily for control programs on NPWS estate. NPWS is also involved in inter-agency research and training to develop and promote additional management techniques and strategies for wild dog management.

Border Fence Management Board

The Border Fence Maintenance Board (previously the Wild Dog Destruction Board) oversees the management, maintenance and upgrade of the wild dog barrier fence in NSW. This fence has been constructed to exclude wild dogs from entering the grazing lands of the NSW Western Division from Queensland and South Australia. Landholder rates and the NSW Government jointly fund the maintenance of the fence.

Other public land managers

All Federal, State and Local Government agencies that manage land have an important role in the management of invasive species in NSW. These areas include land reserved for its biodiversity, historic or scenic value; land that has a commercial resource value; land used for the State's infrastructure or transport corridors; and land that has not been claimed for any specific purpose. The role of public land managers includes the development and implementation of pest management strategies and the education of the community and other takeholders.

Research organisations and funders

NSW DPI's Vertebrate Pest Research Unit, the NPWS Pests and Weeds Team and other NSW government agencies, universities and other research and innovation organisations play a significant role in driving advances in invasive species technology and management. National and international collaboration is a key focus for these teams to maximise the value of NSW investment in research.

State agencies, the Australian Government, and wool and meat industry groups are funders of wild dog research, management and capacity building. They have actively supported the NWDAP, wild dog management groups, and the development and rollout of additional wild dog control tools.

Special interest groups

There is considerable interest in dingo conservation as reflected in public submissions received through *Biosecurity Act 2015* consultation processes. This strategy promotes a balance between managing wild dogs in areas where they have negative impacts and preserving their ecological role elsewhere.

Recreational hunters also provided feedback on wild dog management through the *Biosecurity Act 2015* consultation process. Shooting has a relatively minor role to play in managing wild dogs at the population level but shooting can be a useful control technique to target a particular 'problem' dog that is attacking livestock but avoiding baits and traps.

General public

The general public has a legitimate interest in the humaneness, target specificity and safety of pest animal management. They also have an interest in the role of dingoes and wild dogs in ecosystems and the value of dingoes as an iconic species.

There are documented cases of wild dogs harassing or attacking pets and even people. There is some risk to people of zoonoses that are carried by wild dogs. People that enjoy the amenity of areas that wild dogs occur in want to know what is being done to reduce these threats.

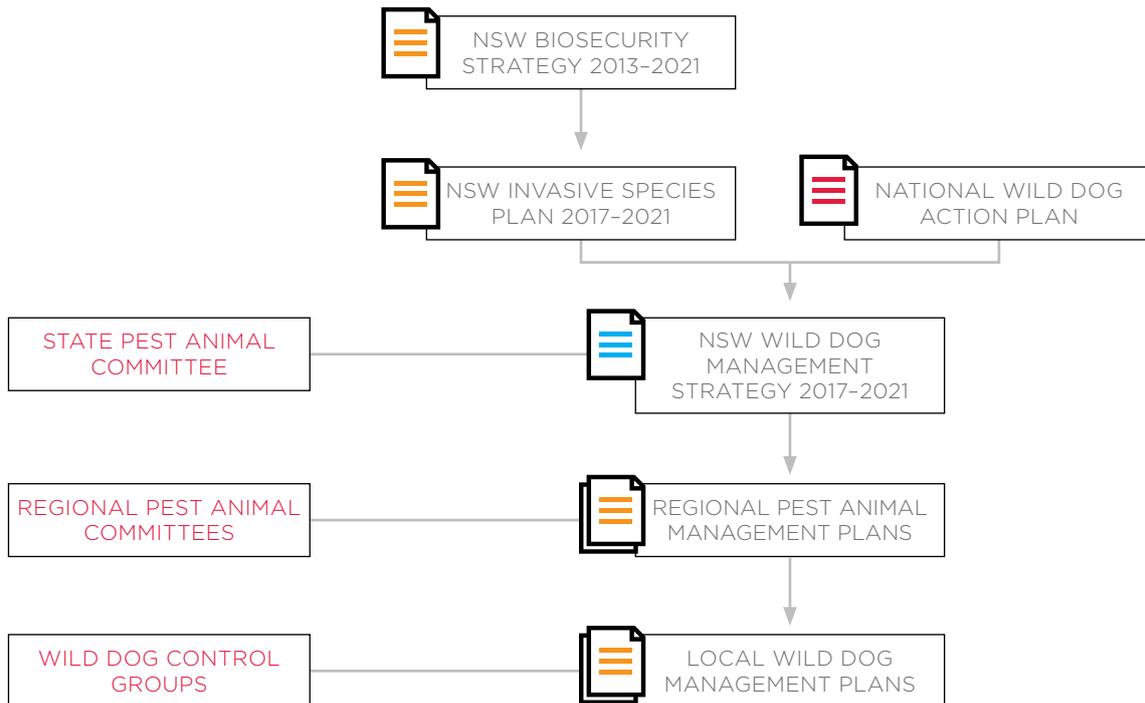


Figure 2: Governance and guiding documents affecting wild dog management in NSW

4. GOALS OF THE NSW WILD DOG MANAGEMENT STRATEGY

Goal 1: Provide leadership and coordination

See page 23 for acronyms used in this section

Key deliverables	Responsibility (lead agency identified in bold text where appropriate)	Timeframe
OUTCOME 1.1 Wild dog management is underpinned by a responsive and consistent policy framework		
STRATEGY 1.1.1 Ensure regulations, policies and procedures are in place and regularly reviewed to support wild dog management, including managing the transition to the <i>Biosecurity Act 2015</i>		
Develop regulations, policies and procedures according to scheduled implementation of <i>Biosecurity Act 2015</i>	DPI , SPAC	By December 2017
Revise existing policy, <i>Guidelines for the Preparation and Implementation of Wild Dog Management Plans in NSW</i> (2016)	DPI , LLS, NPWS	By December 2017
Develop RPAMP template to guide RPACs	LLS , SPAC	By October 2017
OUTCOME 1.2 Proactive development and promotion of environmentally, economically and socially acceptable wild dog management approaches		
STRATEGY 1.2.1 Active discussion of social and political wild dog management issues		
Provision of a regular forum to enable the discussion and resolution of issues and identification of policy, training and research needs	SPAC	Ongoing
STRATEGY 1.2.2 Conservation of dingoes		
RPAMPs and WDMPs focus control on areas where the risk of negative impacts are greatest rather than across entire area of wild dog distribution	RPACs, WDCGs	RPAMPs to be developed by June 2018
STRATEGY 1.2.3 Active promotion of research results to end users		
Regular updates through public and private land manager networks	All NSW land management agencies and industry groups	Ongoing

Key deliverables	Responsibility (lead agency identified in bold text where appropriate)	Timeframe
OUTCOME 1.3 WDMPs are in place for all wild dog impacted areas		
STRATEGY 1.3.1 Regional oversight, coordination and promotion of wild dog management planning, implementation and evaluation		
Provide advice to industry and the general community about meeting wild dog management biosecurity obligations	RPACs	Process commences in 2017 and is ongoing
Coordination of wild dog management planning in impacted areas according to agreed state-wide guidelines and processes	RPACs	Process commences in 2017 and is ongoing
Engage wild dog management facilitators in WDMP planning, implementation and evaluation as appropriate	RPACs	Process commences in 2017 and is ongoing
OUTCOME 1.4 Effective cross-jurisdictional liaison on wild dog policy, training and research		
STRATEGY 1.4.1 Active participation in National Wild Dog Action Plan and Invasive Plants and Animals Committee		
NSW representatives involved in NWDAP and IPAC wild dog discussions	NSW NWDAP and IPAC representatives	Ongoing
STRATEGY 1.4.2 Maintain communication and engagement with wild dog fence maintenance agencies nationally		
Update SPAC on national wild dog fence activities	Border Fence Maintenance Board, National Wild Dog Facilitator as required	Annually
Facilitate cross-jurisdiction wild dog fence meetings to discuss common issues	Border Fence Maintenance Board, National Wild Dog Facilitator as required	As required

Goal 2: Increase awareness, understanding and capacity

Key deliverables	Responsibility (lead agency identified in bold text where appropriate)	Timeframe
OUTCOME 2.1 Improved adoption of best practice wild dog management		
STRATEGY 2.1.1 Communicate best practice management to stakeholders		
Use government and industry communication avenues to promote best practice wild dog management	DPI, LLS, NPWS, RPACs	Ongoing
STRATEGY 2.1.2 Maintain extension materials		
Identify and address gaps in extension materials	DPI, LLS, NPWS, RPACs	Ongoing
Maintain currency of existing materials	DPI, LLS, NPWS, RPACs	Ongoing
STRATEGY 2.1.3 Support development and delivery of nationally recognised qualifications		
Maintain NSW training capacity (e.g. Tocal Vertebrate Pest Management course)	DPI , LLS, NPWS	Ongoing
STRATEGY 2.1.4 Support applied training in monitoring and control techniques		
Updated camera monitoring guide	DPI , LLS, NPWS	By June 2018
Develop a wild dog trapping manual	DPI , LLS, NPWS	By June 2018
STRATEGY 2.1.5 Support sharing of knowledge on new approaches in policy, best practice management and community engagement		
Hold a biennial NSW Vertebrate Pest Management Symposium	DPI, LLS, NPWS	First Symposium was held October 2016
OUTCOME 2.2 Enhanced national effort to maximise the suite of monitoring and control tools and to improve management strategies		
STRATEGY 2.2.1 Maintain and increase NSW research capacity and national and international collaboration		
Improve knowledge of wild dog ecology to refine management strategies	DPI , LLS, NPWS	Ongoing
Refine existing monitoring and control techniques	DPI , LLS, NPWS	Ongoing
Develop additional monitoring and control techniques	DPI , LLS, NPWS	Ongoing

Key deliverables	Responsibility (lead agency identified in bold text where appropriate)	Timeframe
OUTCOME 2.3 Increased stakeholder engagement with, and public acceptance of, wild dog management		
STRATEGY 2.3.1 Support the implementation of the NWDAP communication strategy, particularly the need for wild dog management and the regulation of management activities		
Specific deliverables to be identified over the life of the NWDAP	NSW NWDAP representatives, RPACs	Ongoing

Goal 3: Enhance Monitoring, Evaluation, Reporting and Improvement (MERI)

Key deliverables	Responsibility (lead agency identified in bold text where appropriate)	Timeframe
OUTCOME 3.1 More consistent WDMPs		
STRATEGY 3.1.1 Facilitate the development of more formal and consistent WDMPs across NSW		
Develop agreed WDMP template and monitor its adoption	DPI , SPAC, RPACs	Template developed by June 2018 with ongoing monitoring of adoption
STRATEGY 3.1.2 Develop agreed state-wide standard metrics for wild dog management effectiveness		
Develop standard metrics that include agriculture protection and conservation aims and account for NWDAP metrics	DPI , SPAC, RPACs	By June 2018
STRATEGY 3.1.3 Ensure standard metrics are used in WDMPs		
Include standard core metrics in all new/revised WDMPs	LLS , DPI, NPWS, RPACs	Ongoing
OUTCOME 3.2 Improved capacity to audit and benchmark wild dog management activities at regional and state levels		
STRATEGY 3.2.1 Compile NSW WDMPs		
LLS ensures WDMPs are available to DPI, for analysis as required	LLS	February each year
STRATEGY 3.2.2 Maintain spatial database of NSW wild dog planning areas		
LLS submits their wild dog planning area boundaries to DPI	LLS	February each year
WDMP boundaries are made available via BioMap	DPI	Ongoing
STRATEGY 3.2.3 Ensure high quality data is stored centrally and available for analysis		
Wild dog predation, observation and poison data is recorded in an agreed statewide central database	LLS	Ongoing
Oversee quality of wild dog data stored and make accessible to DPI for analysis as required	LLS	Ongoing

Key deliverables	Responsibility (lead agency identified in bold text where appropriate)	Timeframe
OUTCOME 3.3 Greater transparency and consistency in how wild dog management in NSW is planned, implemented and monitored		
STRATEGY 3.3.1 Conduct audit of WDMP contents		
Produce spreadsheet analysis of plan contents and report on inconsistencies	DPI	Annually
STRATEGY 3.3.2 Develop a wild dog management activities reporting system		
Develop centralised reporting system aligned to agreed metrics	DPI, LLS	By December 2018
STRATEGY 3.3.3 Provide ongoing feedback to encourage regular and consistent monitoring and reporting against WDMPs		
Provide audit and benchmark data to regional and local levels as appropriate	DPI , LLS	Ongoing
STRATEGY 3.3.4 Publish annual NSW Wild Dog Management Report		
Compile LLS regional reports on wild dog management	LLS , RPACs	Annually
Draft state-wide wild dog management report	DPI	Annually
Review, endorse and disseminate state-wide report	SPAC	Annually

5. GOVERNANCE AND REVIEW OF THE NSW WILD DOG MANAGEMENT STRATEGY

Progress against the NSW Wild Dog Management Strategy will be overseen by the State Pest Animal Committee. The strategy will be reviewed in the final year of its five-year term to guide the development of an updated strategy.

APPENDIX 1: KEY LEGISLATION INFLUENCING WILD DOG MANAGEMENT IN NSW

BIOSECURITY ACT 2015 (NSW)

Under the *Biosecurity Act 2015* (NSW), the negative impacts of wild dogs will be primarily managed through the general biosecurity duty. The general biosecurity duty requires any person dealing with biosecurity matter (such as wild dogs), and who knows or ought to know of the biosecurity risks posed by that biosecurity matter, to take measures to prevent, minimise or eliminate the risk as far as is reasonably practicable. The occupier of lands (both private and public) is required to take all practical measures to minimise the risk of any negative impacts of wild dogs on their land or neighbouring lands. The occupier could discharge their general biosecurity duty by complying with control actions outlined in a WDMP and the overarching guidance provided by Regional Pest Animal Management Plans.

LOCAL LAND SERVICES ACT 2013 (NSW)

The pest animal provisions of the *Local Land Services Act 2013* set out the conditions under which animals, birds and insects are 'declared' pests and provides for the control of such pest species.

Gazettal of pest species occurs through Pest Control Orders, which allow the Minister for Primary Industries to specify which species are pests, either on a state-wide or local basis, and the conditions or factors that apply to the control of each pest. Wild dogs are declared pest animals throughout NSW.

LOCAL LAND SERVICES (WILD DOGS) PEST CONTROL ORDER 2015 (NSW)

This existing order will continue in parallel with the *Biosecurity Act 2015* until regional planning, management and enforcement of the general biosecurity duty are fully established. The order imposes a general destruction obligation requiring the occupier of controlled land to 'eradicate' (effectively control) wild dogs by any lawful method.

The Wild Dogs Pest Control Order allows for the general destruction obligation for public lands listed in Schedule 2 of the Order to be satisfied through a Wild Dog Management Plan that addresses both control and conservation objectives and has been approved by the LLS.

NATIONAL PARKS AND WILDLIFE ACT 1974 (NSW)

Under the *National Parks and Wildlife Act 1974*, NPWS is responsible for conserving nature and cultural heritage in all areas of the National Parks estate and the broader landscape within the state. The National Parks and Wildlife Act also states that management of land reserved under the Act should consider the social and economic context of the reserve to ensure pest management programs are coordinated across different tenures.

One of the conditions of the Act is that no animals may be harmed on National Parks estate without authorisation and this includes wild dogs. Authorisation to harm wild dogs may be granted under Section 171 of the Act where it is necessary to mitigate their impacts.

THREATENED SPECIES CONSERVATION ACT 1995 (NSW)

The main objective of the *Threatened Species Conservation Act 1995* is to conserve biological diversity. The Act provides for the listing of threatened species, populations and ecological communities. In some cases, wild dog management may be necessary for the protection of threatened species populations, if these populations are already under stress from other threatening processes such as habitat fragmentation. Management actions for the protection of species listed under the *Threatened Species Conservation Act 1995* are identified through the 'Saving our Species' program.

WILD DOG DESTRUCTION ACT 1921 (NSW)

The *Biosecurity Act 2015* (NSW) has repealed parts of the *Wild Dog Destruction Act 1921* relating to destruction of wild dogs and has renamed that Act to the *Border Fence Maintenance Act 1921* to more accurately describe its major purpose. Now the *Biosecurity Act 2015* (NSW) has come into force, it manages wild dogs by way of the Wild Dog Pest Control Order 2015 (until this is replaced by Regional Pest Animal Management Plans) and the general biosecurity duty.

PREVENTION OF CRUELTY TO ANIMALS ACT 1979 (NSW)

The Act requires people to treat animals in a humane manner and establishes offences of cruelty upon an animal and requires notification of injuries.

COMPANION ANIMALS ACT 1998 (NSW)

The *Companion Animals Act 1998* is designed to identify and register companion animals, including domestic dogs, and to describe the duties and responsibilities of their owners. In NSW, no permit is required to keep dingoes or dingo-hybrids. If dogs are not owned, they are assumed to be wild dogs and managed as outlined in the Wild Dog Pest Control Order and the General Biosecurity Duty of the Biosecurity Act.

AGRICULTURAL AND VETERINARY CHEMICALS CODE ACT 1994 (AUSTRALIAN GOVERNMENT)

The Act provides for the evaluation, registration and control of agricultural and veterinary chemicals.

PESTICIDES ACT 1999 (NSW)

The focus of the *Pesticides Act 1999* is to protect health, the environment, property and trade while ensuring responsible pesticide use.

ACRONYMS AND ABBREVIATIONS

1080: Sodium monofluoroacetate

AWI: Australian Wool Innovation Limited

BAC: NSW Biosecurity Advisory Committee

CISS: Centre for Invasive Species Solutions

DPI: Department of Primary Industries (NSW)

FCNSW: Forestry Corporation NSW

EPA: Environment Protection Authority (NSW)

IACRC: Invasive Animals Cooperative Research Centre

IPAC: Invasive Plants and Animals Committee

LLS: Local Land Services

MLA: Meat and Livestock Australia

NPWS: National Parks and Wildlife Service (NSW)

NWDAP: National Wild Dog Action Plan

OEH: Office of Environment and Heritage (NSW)

PAC: Pest Animal Council

RPAC: Regional Pest Animal Committee

RPAMP: Regional Pest Animal Management Plan

RSPCA: Royal Society for the Prevention of Cruelty to Animals (NSW)

SPAC: State Pest Animal Committee

WDCG: Wild Dog Control Group

WDMP: Wild Dog Management Plan

DEFINITIONS

Cross-tenure planning process – A process where wild dog (or other invasive species) control is planned and applied across all land tenures by all stakeholders at a ‘landscape’ rather than ‘property’ scale in a cooperative and coordinated manner. This process is also known as nil-tenure planning.

Dingoes – *Canis familiaris*. A sub-species of dog originating from south-east Asia. Dingoes were transported to Australia about 4000 years ago.

Domestic dogs – *Canis familiaris*. A dog kept in compliance with the *Companion Animals Act 1998*.

Feral dogs – Domestic dogs (and their descendents) that have escaped from domestication and returned, partly or wholly, to a wild state.

General biosecurity duty – The general biosecurity duty is described in Part 3 of the *Biosecurity Act 2015*. Specifically, section 22 of the Act provides: *Any person who deals with biosecurity matter or a carrier and who knows, or ought reasonably to know, the biosecurity risk posed or likely to be posed by the biosecurity matter, carrier or dealing has a biosecurity duty to ensure that, so far as is reasonably practicable, the biosecurity risk is prevented, eliminated or minimised.* [Wild dogs are considered to be ‘biosecurity matter’ that pose a ‘biosecurity risk’ in some situations]

Hybrid dingo/feral dog – Dogs resulting from the cross-breeding of a dingo and a domestic dog and the descendants of cross-bred progeny.

Peri-urban – Landscapes that combine urban and rural activities. These areas often contain a mixture of land uses including suburban, rural residential and small to medium agricultural holdings.

Wild dogs – All wild-living dogs (*Canis familiaris*), including their sub-species and hybrids but excluding any dog kept in accordance with the *Companion Animals Act 1998*, the *Exhibited Animals Protection Act 1986* and the *Animal Research Act 1985* or any other legislation made in replacement of any of those Acts.

Wild Dog Control Group – A group that may include public and private landholders or land managers within a well-defined area for whom wild dogs pose problems and for which a coordinated management effort is being made by the group.

Wild Dog Management Plan – A documented strategic approach for the management of wild dogs. Wild Dog Management Plans generally aim to reduce the impact of wild dogs in the vicinity of the asset of concern e.g. a livestock enterprise.

Zoonoses – diseases that can be transmitted to humans from animals.

