

# Wild dogs/dingo *Canis familiaris/Canis familiaris (dingo)*



## Foreword

The Queensland Wild Dog Strategy represents the first integrated management strategy to the control wild dogs and conservation of the dingo as a native species. Wild dogs (*Canis familiaris*, *Canis familiaris dingo* and hybrids) are one of the major economic, environmental and social pests in Queensland and Australia. Wild dogs cause significant losses to the grazing industries, particularly the sheep industry, and are increasingly causing problems in and around the urban fringe.

This strategy comes after extensive consultation with the Rural Land Protection Board, the Environmental Protection Agency, Queensland Wildlife Protection Society, RSPCA, local government and industry stakeholders – producing a strategy that reflects the needs and interests of communities around Queensland.

The control of wild dogs has taken many forms over the last two hundred years. Many of the control techniques used during that time still have relevance, while others are no longer considered acceptable. The real challenge is to ensure that existing techniques are used safely and effectively and that new techniques are found to fill gaps in the control of wild dogs and address community concerns.

It is important to encourage all stakeholders to participate cooperatively in wild dog management; many small individual actions and commitments add up to a large overall benefit to the community.

The dingo (*Canis familiaris dingo*) has been in Australia for thousands of years, but the introduction of domestic dogs and domestic livestock, and the consequent disruption of the pre-European ecological balance, has led to conflicts between wild dogs and grazing pursuits.

Dingoes are both a pest animal and a native species worthy of conservation and the approach used for their management must balance these sometimes conflicting needs. These needs will have to be placed within the context of managing domestic dogs, which have become wild, and hybrids — neither of which require conservation.

This State-wide strategy provides clear guidance to assist landholders, government agencies, and community groups form an effective partnership in the management of wild dogs. Only with a shared vision and coordinated action, can all parties involved in dog management achieve acceptable results.



Hon Stephen Robertson MP  
Minister for Natural Resources and Mines



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## **Abbreviations**

<b>AFRS</b>	Alan Fletcher Research Station
<b>BRS</b>	Bureau of Rural Sciences
<b>NR&amp;M</b>	Queensland Department of Natural Resources and Mines
<b>EPA</b>	Environmental Protection Agency
<b>ESD</b>	ecological sustainable development
<b>ICM</b>	integrated catchment management
<b>LPO</b>	Land Protection Officer (NR&M)
<b>NHT</b>	National Heritage Trust
<b>NRM</b>	National Resource Management
<b>QPWS</b>	Queensland Parks and Wildlife Service (EPA)
<b>RWPARC</b>	Robert Wicks Pest Animal Research Centre
<b>VPC</b>	Vertebrate Pests Committee
<b>WDBF</b>	Wild Dog Barrier Fence
<b>WPSQ</b>	Wildlife Preservation Society of Queensland
<b>1080</b>	Sodium fluoroacetate

## Summary

There are a myriad of impacts associated with wild dogs, including attacks on sheep and calves, predation on native species, the spreading of disease, dilution of 'dingo' genetics, human safety and general enjoyment of 'lifestyle' blocks. This variety of impacts makes a single, 'one size fits all' regional, State or national approach to wild dog management very complex, if not impossible. Added to this is the fact that all stakeholders often make erroneous assumptions about wild dog management, including:

- *We know what the problem is and how to fix it*—This is one of the most basic assumptions we make and, without addressing it, we will not solve the problem. In fact, we do not have an accurate knowledge of the exact environmental, economic and social impacts of wild dogs nor of the level of effectiveness that will be achieved by implementing management programs.
- *Killing dogs equals 'success'*—There are often many land and property management issues that can lessen wild dog problems. These need to be addressed as well because there needs to be attention to reducing the impacts, and not necessarily just the number of the dogs—although the two are often linked.
- *It is a government problem*—While government does have a significant role, everyone affected by, or contributing to, the problem also needs to help with finding a solution.
- *Money will fix it*—Allocating large sums of money to problems does not necessarily solve them. There needs to be community commitment, cooperation and acceptance of control before funding can make any difference. Often, it is a matter of using existing money smartly.
- *There are 'dingoes' out there*—When it comes to conserving the 'dingo' as a species, there is uncertainty about whether there are actually purebred dingoes in the environment; and whether, in practical terms, they can be protected. As this may not be the case, it needs to be investigated.

We need to investigate the above assumptions in an agreed way, and to take that knowledge and address the real problems. Without an agreed set of roles and responsibilities—and a clear direction—all parties will continue to take their own approach. Consequently, they may not necessarily end up where any of them want to be.

## Vision

*Wild dogs do not adversely impact on the activities of rural and urban communities, and the dingo is conserved as a higher order predator.*

The strategy is aimed at achieving four desired outcomes:

- **Effective control of all wild dogs inside the Wild Dog Barrier Fence**
  - To gain government and other stakeholder support for the effective and humane control of all wild dogs, except dingoes, in 'protected areas' inside the Wild Dog Barrier Fence.
  - To achieve effective and humane control of wild dogs to a level agreed to by stakeholders by 2005. If results are not achieved, the resourcing of the Wild Dog Barrier Fence will be reviewed.
  - To implement a communication and extension program to ensure landholders are aware of their responsibility to effectively control feral dogs and hybrids.
  - To investigate and instigate research into a possible antidote for 1080 within two years.

- To ensure conservation of dingoes in protected areas, while protecting the viability of surrounding rural enterprises.
- **Reduction of the detrimental impacts of wild dogs outside the Wild Dog Barrier Fence**
  - To implement a communication and extension program to ensure land managers are aware of their responsibilities and the need to control wild dogs.
  - To effectively control wild dogs on sheep lands.
  - To increase coordinated participation in wild dog control in cattle country.
  - To prevent areas with low populations from being recolonised, and to prevent shifts in populations.
  - To ensure conservation of dingoes, while protecting the viability of rural enterprises.
- **Reduction of wild dog impacts in the coastal, semi-urban and rural residential management zone**
  - To develop and implement a communication and extension program to ensure all stakeholders are aware of their responsibility and the need to control wild dogs.
  - To prevent the increasing spread of the wild dog problem in coastal, semi-urban and rural residential areas.
  - To minimise the wild dog problem in coastal, semi-urban, and rural residential and urban areas.
  - To identify and attract funding and other resources.
- **Conservation of dingo populations in Queensland**
  - To identify dingo populations of conservation significance based on advances in genetic identification techniques.
  - To manage populations of dingoes of conservation significance.
  - To balance the conservation of the dingo with other management objectives, including the protection of rural enterprises and human safety.

# 1. Introduction

## 1.1 Background

### 1.1.1 Definitions

The terms ‘wild dog’, ‘feral dog’, ‘dingo’ and ‘dingo hybrid’ mean different things to different people. To avoid confusion, the following meanings will be used in this strategy:

- **Dingoes**—native dogs of Asia, selectively bred by humans from wolves. Present in Australia before domestic dogs, pure dingoes are populations or individuals that have not hybridised with domestic dogs or hybrids.
- **Domestic dogs**—dog breeds selectively bred by humans, initially from wolves, and usually living in association with humans.
- **Hybrids**—dogs resulting from crossbreeding of a dingo and a domestic dog, and the descendants of crossbred progeny.
- **Wild dogs**—all wild-living dogs (including dingoes, feral dogs and hybrids).
- **Feral dogs**—wild-living domestic dogs.
- **Free-roaming dogs**—dogs that are owned by humans but not restrained and so are free to travel away from their owner’s property.
- **Commensal dogs**—wild dogs (including dingoes and free-roaming domestic dogs) living in close association with, but independently of, humans.

### 1.1.2 Legislative status

All wild dogs are declared under the *Rural Lands Protection Act 1985* (Qld), which is in the process of being replaced by the *Land Protection (Pest and Stock Route Management) Act 2002* and associated regulations.

The dingo is defined as both ‘wildlife’ and ‘native wildlife’ under the *Nature Conservation Act 1992*, and is a natural resource within protected areas such as national parks. Under the Act, protected areas have prescribed management principles, which refer to protecting and conserving the natural resource and the natural condition. The Environmental Protection Agency and the Queensland Parks and Wildlife Service manage dingoes within protected areas according to this rationale. Outside protected areas, a dingo is not protected wildlife. The Nature Conservation (Wildlife) Regulation 1994 (Schedule 5) specifically excludes dingoes from the common mammal (indigenous to Australia) category; therefore, dingoes are only protected *inside* protected areas. The keeping of dingoes as pets is not permitted in Queensland.

With respect to other QPWS lands, dingoes (being indigenous animal life) come within the definition of ‘forest products’ under the *Forestry Act 1959*. Provisions apply for the unlawful interference with forest products on State forests.

### 1.1.3 Distribution

Wild dogs are present in all areas of the State. In the remote and far western areas they appear to be mostly dingoes; whereas, there is a greater proportion of feral and free-roaming dogs and hybrids in closely settled areas.

### 1.1.4 Impacts

The production impacts, and some social impacts, of wild dogs on rural industries in Queensland have been estimated as costing between \$40 and \$50 million annually (Merrell, undated). There has been no cost–benefit analysis of the environmental impacts. Some of the environmental, production and social impacts are outlined in table 1. It is worth noting that not all the impacts are negative,

and that the dingo does make positive contributions to the environment, pastoral industry, and social and cultural activities of the community.

### 1.1.5 Responsibilities for control

The managers of all land in Queensland—be they private individuals, companies, local, State or government agencies—have a legal responsibility to reduce wild dog numbers on their land.

**Table 1: Environmental, production and social impacts of wild dogs**

<b>Environmental impacts</b>
<p><b>Negative</b></p> <ul style="list-style-type: none"> <li>• Feral dogs and hybrids are in direct competition with dingoes for food and living spaces, particularly refuge areas.</li> <li>• Hybridisation between dingoes and other wild dogs is weakening the dingo gene pool.</li> <li>• Direct control costs.</li> <li>• Predation on native species when in excessive numbers.</li> </ul> <p><b>Positive</b></p> <ul style="list-style-type: none"> <li>• Dingoes are the largest native mammalian carnivore remaining in Australia. In addition to moderating the population growth of native species, dingoes are thought to be an important limiting factor on feral animal populations—such as rabbits, goats, pigs, cats and foxes, which in turn may aid the survival of native species.</li> </ul>
<b>Production impacts</b>
<p><b>Negative</b></p> <ul style="list-style-type: none"> <li>• Direct control costs.</li> <li>• Stock losses.</li> <li>• Increased stock losses, particularly during drought or dry seasons.</li> <li>• Lower prices for bitten stock.</li> <li>• Disease spread, (e.g. hydatidosis).</li> <li>• Exotic disease risk (e.g. if rabies was introduced).</li> </ul> <p><b>Positive</b></p> <ul style="list-style-type: none"> <li>• Macropod and feral animal (e.g. rabbit) populations may be kept in check near cropping areas.</li> </ul>
<b>Social impacts</b>
<p><b>Negative</b></p> <ul style="list-style-type: none"> <li>• Indirect control costs (maintenance of Wild Dog Barrier Fence, rates, taxes).</li> <li>• Reduced incomes to rural households and communities.</li> <li>• Diseases that affect humans, such as hydatids and rabies.</li> <li>• Risk to, and fear of attack on, children and others in urban areas.</li> <li>• Nuisance to householders and tourists.</li> <li>• Predation upon pets.</li> </ul> <p><b>Positive</b></p> <ul style="list-style-type: none"> <li>• Tourism</li> <li>• Dingoes have a significant role in the spiritual and cultural practices of some Australians (both Indigenous and non-Indigenous).</li> </ul>

### 1.5.6 Control operations

The Department of Natural Resources and Mines (NR&M) coordinates wild dog control through local governments and key landholders. An objective of NR&M is to *minimise* the impacts of wild dogs across the State because eradication is not considered feasible. Local government is also involved in control operations. Ultimately, it is the responsibility of each land manager to determine and implement control practices for their individual land holding, but to be mindful of the possible impacts of their action or inaction on landholders in their vicinity. This strategy does not aim to dictate the control methods to be used in every case, but to provide overall guidance on how the management efforts of many can be drawn together in order to achieve agreed outcomes.



A range of techniques is available for wild dog control in Queensland (table 2). The choice of technique is based on an understanding of dog behaviour, social structure, habitats and food preferences, with effective control involving a combination of techniques. The choice is also influenced by concerns for animal welfare and non-target impacts, public safety, and occupational health and safety issues, and by the restrictions (legislative and practical) on the application of some techniques. Effective control requires an assessment of each individual situation and the circumstances surrounding each problem. As with most pest problems, there is no one quick and easy method that will solve all problems.

**Table 2: Techniques for controlling wild dogs in Queensland**

Control option	Features
Trapping	<ul style="list-style-type: none"> <li>• Time-consuming and labour intensive; suited to control of small populations or problem individuals.</li> <li>• Soft-Catch® traps are more humane than steel-jawed traps.</li> <li>• May be used in conjunction with strychnine to ensure a quick death.</li> <li>• Bounties paid in some areas.</li> </ul>
Shooting	<ul style="list-style-type: none"> <li>• Opportunistic; suited to control of small populations or problem individuals.</li> <li>• Time-consuming and labour intensive.</li> <li>• Bounties paid in some areas.</li> </ul>
Fencing	<ul style="list-style-type: none"> <li>• Prevents wild dog movement back into areas where they have been controlled.</li> <li>• Expensive to build; constant maintenance required.</li> <li>• Mopping-up measures required inside the fence.</li> </ul>
Baiting	<ul style="list-style-type: none"> <li>• Strychnine—permits available from Department of Health, subject to conditions.</li> <li>• 1080—most economic, efficient and humane method available, particularly for large populations and/or areas.</li> <li>• Cooperation of adjoining landholders required and/or more frequent baiting.</li> <li>• Baits—ground or aeriaily laid.</li> <li>• Baits—buried or tied to reduce non-target impacts.</li> </ul>
Aversion	<ul style="list-style-type: none"> <li>• Use of guard dogs, llamas and donkeys.</li> <li>• Use of other aversion techniques.</li> </ul>

## 1.2 Purpose of the strategy

Currently, the only strategic plan for wild dog management in Queensland is specific to the operation of the Wild Dog Barrier Fence (WDBF), and wild dog control inside it. Effective and efficient wild dog control requires a comprehensive strategy that identifies what funds and resources are considered necessary to address the problem, and facilitates accurate communication of these requirements. This strategy is intended to set a framework for coordinating the actions of all stakeholders that will maximise the effective use of physical and economic resources expended on wild dog management in Queensland.

This strategy has been developed from the results of a workshop held on wild dog management at Blackall, 14–15 September 1999, and further consultation with stakeholders. It has also been expanded through additional input from the Natural Resources and Mines' research, extension and operational staff, and the Queensland Parks and Wildlife Service.

### 1.3 Scope

This strategy has been established to address all wild dog impacts within Queensland. It is linked to other planning frameworks as shown in the strategy matrix (Table 3), is consistent with the State Pest Animal Strategy and draws on activities at the property level.

**Table 3: Context and relationship of the Queensland Wild Dog Strategy to planning initiatives at other levels**

Scope Scale	Natural Resource Management (NRM)	Pest management	Pest species
<b>National</b>	National Strategy for the Conservation of Australia's Biological Diversity; National Rangelands Guidelines; National NRM Statement	Model Code of Practice for the Welfare of Animals—Feral Livestock Animals Destruction or Capture, Handling and Marketing	National Pest Animal Species Threat Abatement plans; Managing the impacts of dingoes and other wild dogs
<b>State</b>	Queensland Biodiversity and NRM Strategy (proposed)	Queensland Pest Animal Strategy; QPWS park plans	<b>Queensland Wild Dog Strategy</b> Wild Dog Barrier Fence Strategic Plan
<b>Regional or Catchment</b>	Lake Eyre Basin Strategy; Condamine Catchment Strategic Plan	Central Highlands Pest Management Plan; Queensland Murray–Darling Pest Management Plan (proposed)	
<b>District or local govt</b>	Local government planning schemes	Local Government Area Pest Management Plans	Cooloolo Shire Cat Management Plan; Fraser Island Dingo Management Strategy
<b>Property</b>	Property Management Plans	Property Pest Management Plans	

### 1.4 Challenges to managing wild dogs

Significant challenges may constrain stakeholders from managing wild dogs, including:

- availability of funding and resources;
- rural downturns, particularly in the sheep and wool industry;
- changing rural enterprises, i.e. changes from industries that are heavily affected by wild dogs to those that are not, and vice versa;
- difficulty distinguishing between dingoes and hybrids;
- defining a 'pure' dingo;
- competing stakeholder priorities and resources;
- lack of commitment or cooperation for coordinated baiting programs;
- management conflicts between the positive and negative impacts, e.g. dingoes can be pests, but also fill an important niche in the ecosystem;
- opposition to the use of 1080 and pesticides in general;
- the availability of cost-effective and efficient alternatives to the use of 1080;
- difficulty enforcing wild dog control;
- concerns over non-target impacts of baiting, particularly aerial baiting;
- animal welfare obligations are acknowledged and accepted, but these may sometimes limit the use of some control methods;

- absentee landholders;
- mobility of wild dogs requires coordinated action and management.

## 1.5 Principles

Development and implementation of this strategy is based on the pest management principles below. It is important to remember, however, that dingoes occupy an important ecological niche and are a valued native species. The management principle for dingoes on protected areas requires a balance between conservation priorities and impact management. This requires effective education, planning and, in some cases, research, to ensure conservation of the species while implementing strategies to minimise localised impacts.

### 1.5.1 Consultation and partnership

Consultation and partnership arrangements between local communities, industry groups, State government agencies and local governments must be established to achieve a collaborative approach to pest management.

### 1.5.2 Commitment

Effective pest management requires a long-term commitment to pest management by the community.

### 1.5.3 Public awareness

Public awareness and knowledge of pests must be raised to increase the capacity and willingness of individuals to control pests.

### 1.5.4 Prevention

Effective pest control is achieved by:

- preventing the spread of pests by human activity
- early detection and intervention to control pests.

### 1.5.5 Best practice

Pest management must be based on ecologically and socially responsible pest management practices that protect the environment and the productive capacity of natural resources.

### 1.5.6 Integration

Pest management is an integral part of managing natural resources and agricultural systems.

### 1.5.7 Planning

Pest management planning must be consistent at local, regional, State and national levels to ensure:

- domestic and international obligations about pest management are met
- pest management resources are used to target priorities identified under the domestic and international obligations.

### 1.5.8 Improvement

Research about pests, and regular monitoring and evaluation of pest control activities, is necessary to improve pest management practices. The primary responsibility for pest animal management rests with the land manager but sometimes the problem is far greater than the capacity of the individual and requires collective action. If necessary, enforcement measures may be used to ensure all land managers fulfil their duty of care in controlling declared animals on their land. Enforcement is the last option, and undertaken only after other avenues have failed.

## 2. Strategic plan

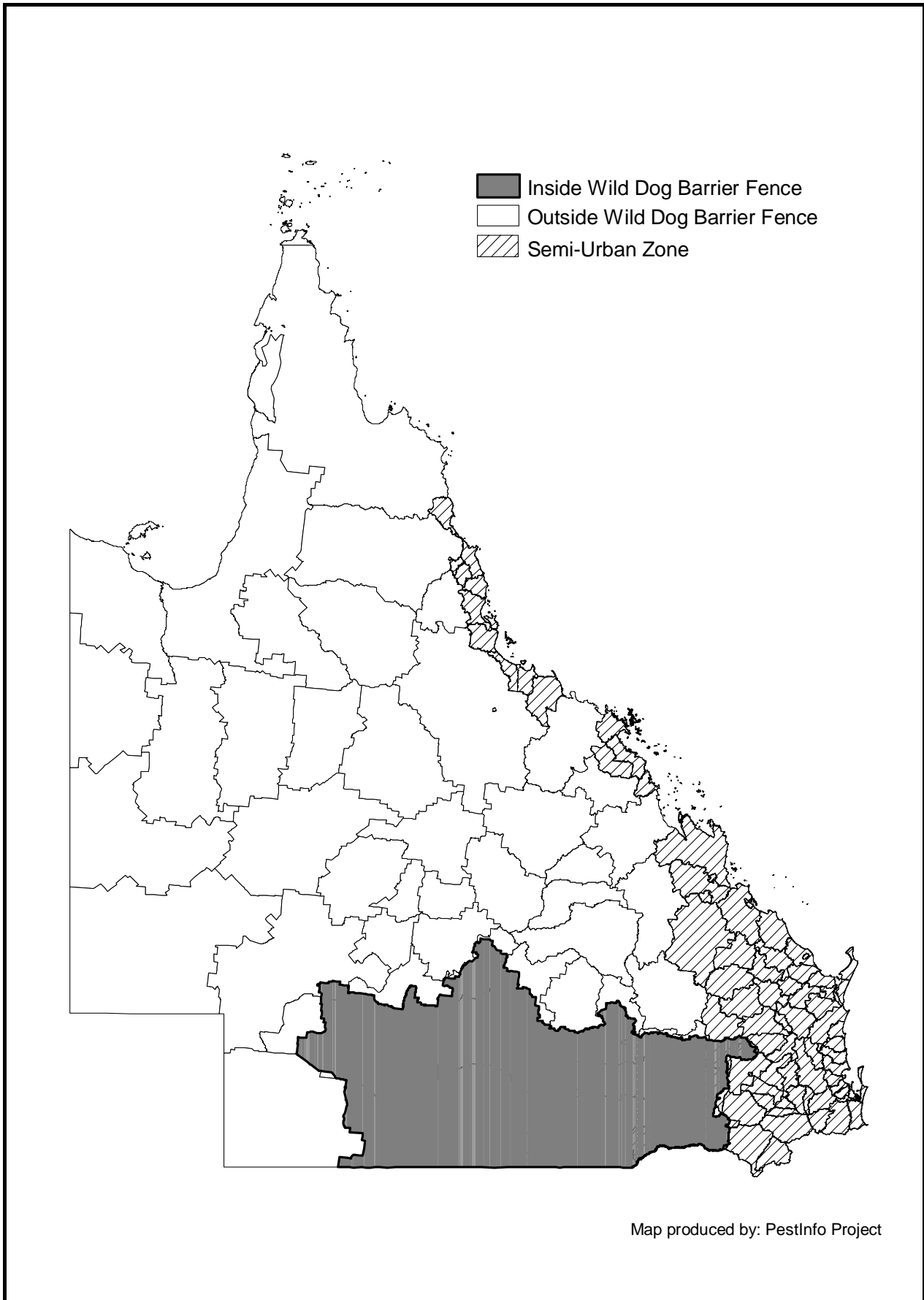
### Vision

*Wild dogs do not adversely affect the activities of rural and urban communities, and the dingo is conserved as a higher order predator.*

The strategies for wild dog management in Queensland have been split into four groups. Three of these are based on management zones (figure 1); the other is common to all zones and deals with the conservation of dingoes.

The strategy groupings are:

- Inside the Wild Dog Barrier Fence
- Outside the Wild Dog Barrier Fence
- The Semi-Urban zone
- Conservation of dingoes.



**Figure 1: Wild dog management zones**

## 2.1 Inside the Wild Dog Barrier Fence

### Desired outcome

*Effective control of all wild dogs inside the WDBF*

### Background

Changes in land use and the deterioration of the original WDBF resulted in a plan in 1981 to shorten and repair it. After expenditure of \$2.8 million (figure 2), this work was completed in 1984. In 1998 the WDBF had an asset value of about \$14.5 million and an accumulated depreciation of \$7.3 million. The 2000–01 operational budget for the WDBF was \$1.2 million, shared on a 50:50 basis between the State and local governments.

A full economic assessment of the WDBF (EconSearch, 2000) estimated that the present value of benefits derived from the WDBF in 1997–8 was \$58.6 million, and the present value of costs was \$18.9 million. This indicates that the benefits derived from the fence are in the order of three times its cost. The WDBF also provides significant flow-on contributions to the regional economy through employment, household income, regional output and value adding.



**Figure 2: Wild Dog Barrier Fence**

(Source: PestInfo Project)

Although the WDBF is now well maintained, the effects of wild dogs within the area protected by it are thought to be increasing. The wild dog population has expanded due to the reluctance of some land managers to control wild dogs inside the fence. To a certain extent, this reluctance is understandable. As wild dogs do not adversely affect some land uses, some land managers regard it as economically sensible not to control wild dogs. Others are concerned about accidentally poisoning working dogs, the value of which has been increased by labour costs and decreases in returns from some pastoral enterprises. These factors have, in turn, reduced the net benefits of wild dog control.

The benefits of the WDBF will be seriously eroded unless wild dogs within the fenced area are effectively controlled. EconSearch (2000) found that as the economic benefits of the WDBF were relatively sensitive to changes in the predation rate, significant economic benefits could be gained from reducing the predation rate inside the fence.

The Wild Dog Barrier Fence Panel (a subcommittee of the Rural Lands Protection Board) oversees management of the WDBF. This committee provides advice and recommendations on policy direction and major operational issues; reviews action plans and long term strategies; provides advice on funding requirements and options; and establishes the mechanisms for communication between government, community and industry.

Research is currently underway at the Robert Wicks Pest Animal Research Centre to investigate additional procedures for wild dog control and at HortResearch, Hamilton, New Zealand, to develop an antidote for 1080 poisoning.

*Strategy 2.1.1—To gain government and other stakeholder support for the effective control of all wild dogs, inside the Wild Dog Barrier Fence.*

No.	Action	By whom	By when
2.1.1.1	Liaise with Ministers, RLPB, NR&M, Agforce, LGAQ to provide support for the effective control of all wild dogs except dingoes on 'protected areas' inside the WDBF.	All stakeholders	Ongoing
2.1.1.2	Collect stock-loss information as supporting material for wild dog control and costing of impacts.	NR&M	Begin June 2002
2.1.1.3	Initiate evaluation of the total impacts effects of wild dog control, including the effects of other pest species.	NR&M	June 2005

*Strategy 2.1.2—To achieve effective control of wild dogs to levels agreed to by stakeholders by 2005. (If results are not achieved, then review support for the Wild Dog Barrier Fence.)*

No.	Action	By whom	By when
2.1.2.1	Participate in coordinated control programs.	All land managers	Ongoing
2.1.2.2	Identify resources and investigate appointing a project coordinator to support local government and organised groups: <ul style="list-style-type: none"> <li>• organise a coordinated approach to baiting over the entire zone</li> <li>• contact absentee landholders</li> <li>• negotiate with non-baiting landholders.</li> </ul>	Wild Dog Management Group	Dec. 2002
2.1.2.3	Bait on State lands as part of a larger coordinated program (link with 2.2.3.3)	State land managers, NR&M	April/Sept every year
2.1.2.4	Investigate additional controls to baiting, trapping and fencing.	RWPARC	Current and ongoing

<b>2.1.2.5</b>	Investigate improvements to baiting strategies.	RWPARC	Current and ongoing
<b>2.1.2.6</b>	Provide incentives to individuals and community groups to eradicate feral dogs and hybrids.	Local Govt NR&M	Dec. 2003
<b>2.1.2.7</b>	Prosecute non-compliance with control responsibilities.	NR&M, local government	Ongoing
<b>2.1.2.8</b>	Review Strategy 2.1.2 to determine if effective control has been achieved; if not, review support for the WDBF.	All stakeholders	2005

*Strategy 2.1.3—To implement a communication and extension program to ensure landholders are aware of their responsibility to effectively control feral dogs and hybrids.*

<b>No.</b>	<b>Action</b>	<b>By whom</b>	<b>By when</b>
<b>2.1.3.1</b>	Organise information kits, TV and radio ads, fact sheets and brochures on: <ul style="list-style-type: none"> <li>the need for wild dog management</li> <li>control options/techniques</li> <li>best practice for 1080 use, including working dog safety.</li> </ul>	NR&M Agforce	Dec. 2002
<b>2.1.3.2</b>	Liaison between project coordinators, reference panel and land managers to instigate control programs (appendix 3).	Project coordinators	Ongoing
<b>2.1.3.3</b>	Conduct or prepare media releases, field days and other extension activities.	All stakeholders	Ongoing
<b>2.1.3.4</b>	Respond to negative media and other comments, including via Internet material.	NR&M Agforce	Ongoing

*Strategy 2.1.4—To investigate and instigate research into a possible antidote or treatment for 1080 within two years.*

<b>No.</b>	<b>Action</b>	<b>By whom</b>	<b>By when</b>
<b>2.1.4.1</b>	Investigate research being carried out interstate and overseas.	RWPARC, AFRS	Dec. 2002
<b>2.1.4.2</b>	Prepare research proposal if there are gaps in current research work on an antidote or treatment.	AFRS	Dec. 2002
<b>2.1.4.3</b>	Put funding proposal to the Bureau of Rural Sciences, goat industry, Meat and Livestock Australia, Wool Research and Development, and other funding bodies.	AFRS	Dec. 2002

*Strategy 2.1.5—To ensure conservation of dingoes in protected areas, while protecting the integrity of surrounding rural enterprises (see 2.4.4).*



## 2.2 Outside the Wild Dog Barrier Fence

### Desired outcome

*Reduction in the detrimental impacts of wild dogs outside the WDBF.*

### Background

Approximately one-third of sheep and wool enterprises in Queensland are located outside the area protected by the WDBF. These enterprises are affected by wild dog predation to varying degrees, depending on what control is conducted on and around them. In addition, there are serious effects upon cattle grazing, although usually not as severe as those to the sheep and goat industries.

Lack of commitment to wild dog control in the area outside the WDBF mainly arises from:

- concern over the loss of working dogs from 1080 poisoning
- certain conditions making it uneconomical to bait in cattle areas
- some inexperienced land managers being unaware of the potential impact on their enterprises of wild dogs.

Research (Allen, 1999) has shown that baiting needs to be coordinated and conducted regularly at a regional level, or conducted regularly over smaller areas, if it is to be effective in the long term. An example of how this research information has been put into practice can be seen in the 230-kilometre-long chemical barrier 'fence' established in the Blackall area since May 1998. It runs as a spur off the conventional WDBF and is baited twice a year. It allows baiting to be confined to a narrow band (3–15 kilometres), rather than widely distributed. Based on anecdotal evidence, this approach appears to be successful.

At the Robert Wicks Pest Animal Research Centre, additional wild dog control techniques are being investigated, while an antidote for 1080 poisoning is being researched at Christian Cook, HortResearch, Hamilton, New Zealand. The aim of such research is to address the concerns of landholders—who do not bait for fear of losing working dogs—so that they might then participate in baiting programs.

*Strategy 2.2.1—To implement a communication and extension program to ensure land managers are aware of their responsibility and the need to control wild dogs. (See 2.1.3.)*

*Strategy 2.2.2—To effectively control wild dogs on sheep lands.*

No.	Action	By whom	By when
2.2.2.1	Participate in coordinated control programs	All landholders	Ongoing
2.2.2.2	Identify resources and investigate appointment of a project coordinator to support local government and organised groups conducting coordinated baiting of areas including on State lands	Wild Dog Management Group	Dec. 2002
2.2.2.3	Develop 1080 antidote or treatment to encourage greater participation in baiting if no other agency is conducting suitable research. (See 2.1.4.)	AFRS	Dec. 2005

<b>2.2.2.4</b>	Continue to collect stock loss information as supporting material for wild dog control and costing of impacts	NR&M, LG, industry	Ongoing
<b>2.2.2.5</b>	Investigate and, if necessary, promote the use of guard dogs and llamas as protection against wild dog predation in sheep grazing enterprises.	NR&M	Dec. 2005

*Strategy 2.2.3—To increase coordinated participation in wild dog control in cattle country.*

<b>No.</b>	<b>Action</b>	<b>By whom</b>	<b>By when</b>
<b>2.2.3.1</b>	Utilise existing community groups, e.g. catchment and landcare groups, as a basis for wild dog management groups.	Project coordinator	Dec. 2003
<b>2.2.3.2</b>	Continue funding and coordination within shires.	Local government	Ongoing
<b>2.2.3.3</b>	Seek greater cooperation from those departments managing public lands (e.g. National Parks, State Forests, Defence)	Neighbours, lessees and NR&M (LPOs)	Current and ongoing
<b>2.2.3.4</b>	Ensure that all aircraft used for aerial baiting are equipped with, and use, GPS navigation to ensure baits are laid where required.	Baiting contractors and landholders (NR&M to monitor)	Dec. 2003
<b>2.2.3.5</b>	Investigate development of antidote to, or treatment for, 1080 poisoning to encourage greater participation in baiting, if no other agency is conducting such research. (See 2.1.4.)	AFRS	2005
<b>2.2.3.6</b>	Collect stock loss information as supporting material for wild dog control and costing of impacts.	NR&M	Begin June 2002

*Strategy 2.2.4—To prevent areas with low wild dog populations from being recolonised and to prevent shifts in wild dog populations.*

<b>No.</b>	<b>Action</b>	<b>By whom</b>	<b>By when</b>
<b>2.2.4.1</b>	Increase the extent of coordinated baiting campaigns in autumn and late winter.	Land managers, local government, NR&M	Current and ongoing
<b>2.2.4.2</b>	Identify sources of possible wild dog reinvasion in order to avoid this occurring in 'clean' areas.	NR&M	Ongoing
<b>2.2.4.3</b>	Continue to maintain and strategically replace the WDBF, and check fences.	NR&M, local government	Ongoing

*2.2.5—To ensure conservation of dingoes, while protecting the viability of rural enterprises. (See 2.4.)*

### **2.3 Semi-urban zone**

#### **Desired outcome**

*Reduction of wild dog impacts in the coastal, semi-urban and rural residential management zone.*

#### **Background**

Increasing human population and levels of rural subdivision in some eastern shires are leading to major wild dog management problems. People moving into subdivisions are often from a non-rural background and have a poor understanding of wild dog management. Increasing numbers of large, free-roaming dogs are affecting livestock production and dingo purity. Conflicts—including potential attacks on humans—arise when both the human and wild dog populations increase and expand, as described above. It is therefore imperative that, along with ‘pest’ solutions, ‘people’ solutions are found.

Inadequate management of domestic dogs is increasingly seen as the source of some wild dog problems in urban and rural residential areas. In addition, these domestic dogs may increase the likelihood of hybridisation with dingoes. It is therefore important that these domestic dogs be managed through registration, responsible ownership, and animal identification (e.g. microchipping, tattooing, collars). The introduction and enforcement of identification for domestic dogs in all areas potentially enables dogs caught destroying stock to be identified. Stock owners could then institute damages claims against the owners of these dogs.

Baiting in or near rural subdivisions is difficult, and sometimes not permitted under the guidelines established by NR&M. There may also be considerable opposition from some residents. It is difficult to coordinate baiting over a large area because of the number of people involved, and it is NR&M policy that baits should not be laid within two kilometres of a dwelling without either the permission of the owner, or approval by the Land Protection Officer. The current alternatives to 1080 baiting are more expensive and labour intensive, and therefore generally not considered as effective or efficient.

*Strategy 2.3.1—To develop and implement a communication and extension program to ensure all stakeholders are aware of their responsibility and the need to control wild dogs. (See 2.1.3.)*

*Strategy 2.3.2—To prevent the spread and increase of the wild dog problem in the coastal, semi-urban and rural residential areas.*

<b>No.</b>	<b>Action</b>	<b>By whom</b>	<b>By when</b>
<b>2.3.2.1</b>	Implement local government control of domestic dogs, including identification of all domestic dogs—in semi-urban and rural areas specifically.	Local government	Dec. 2005
<b>2.3.2.2</b>	Identify all groups that may have input to or an effect on wild dog and domestic dog management.	All stakeholders	Dec. 2002
<b>2.3.2.3</b>	Implement an extension program aimed at these groups to increase the awareness of domestic and wild dog, and wild dog and human interactions, and the need for	NR&M, EPA, local government, conservation	Dec. 2003

	wild dog management—including adopting a community problem-solving approach.	groups	
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*Strategy 2.3.3 To minimise the wild dog problem in coastal, semi-urban, rural residential and urban areas.*

No.	Action	By whom	By when
2.3.3.1	Participate in coordinated control programs.	All landholders	Ongoing
2.3.3.2	Identify the areas of greatest impact from wild dogs in order to manage these areas.	All land managers and community	Ongoing
2.3.3.3	Seek greater cooperation of departments managing public lands (e.g. National Parks, State Forests, Defence Reserves)	Relevant land managers	Dec. 2002
2.3.3.4	Identify specific areas, including State and Federal lands, for coordinated control operations	NR&M, local government, land managers	Dec. 2002
2.3.3.5	Implement local community-based programs for managing wild dog impacts in areas where human and wild dog populations interface.	All stakeholders	Dec. 2005

*Strategy 2.3.4—To identify and attract funding and other resourcing.*

No.	Action	By whom	By when
2.3.4.1	Identify funding sources.	All stakeholders	Dec. 2002
2.3.4.2	Identify resources and investigate establishment of the position of Project Coordinator for wild dog management in coastal, semi-urban and rural residential areas.	Wild Dog Management Committee	Dec. 2002
2.3.4.3	Facilitate networking between all stakeholders to implement the community-based programs (under 2.3.3.5).	Coordinator	Dec. 2003

## 2.4 Conservation of dingoes

### Desired outcome

*Conservation of dingo populations in Queensland*

### Background

To protect the biodiversity of Queensland's natural ecosystems systems, dingo populations need to be maintained—assuming that dingoes are considered part of these systems. No thorough process has been used to establish exactly what the overall community attitude is to the conservation of dingoes as a species; what would be accepted as a 'pure' dingo; and to what extent they should be managed.

Their place in the State's natural ecosystems is being threatened through hybridisation with domestic dogs. Throughout Queensland, dingo populations vary markedly according to their level of hybridisation but, unfortunately, the natural range of variation in the appearance of the dingo makes identification of a hybrid impossible. A technique for detection of hybridisation through DNA fingerprinting is currently being developed and may, in the future, provide a tool for managing dingoes based on sampling from wild populations.

*Strategy 2.4.1—To identify dingo populations of conservation significance based on advances in genetic identification techniques.*

No.	Action	By whom	By when
2.4.1.1	Establish a program to identify community attitudes to need and process for conservation of 'pure' dingoes.	EPA	Dec. 2005
2.4.1.2	Liaise with research organisations investigating the identification of 'pure' dingoes.	EPA	Ongoing
2.4.1.3	Establish a program or mechanism to define a 'pure' dingo and to seek national acceptance of this 'purity'.	EPA	June 2006

*Strategy 2.4.2—To manage populations of dingoes of conservation significance.*

No.	Action	By whom	By when
2.4.2.1	Identify areas containing dingo populations targeted for conservation.	EPA	Dec. 2005
2.4.2.2	Review available information on habitat requirements to maintain viable dingo populations.	EPA	Dec. 2005
2.4.2.3	Incorporate dingo conservation programs in management plans for national parks and other lands managed by EPA/ or QPWS. .	EPA	Jan. 2006
2.4.2.4	Investigate possible funding for eradication of other wild dogs to prevent hybridisation of pure dingo populations.	EPA, NR&M	Dec. 2003

*Strategy 2.4.3—To balance the conservation of the dingo with other management objectives, including the protection of rural enterprises and public safety.*

No.	Action	By whom	By when
2.4.3.1	To increase community awareness and knowledge of dingo ecology and wild dog control by: <ul style="list-style-type: none"> <li>• identifying all stakeholder groups</li> <li>• developing strategies to change attitudes</li> <li>• targeting extension and education</li> <li>• promoting roles and responsibilities</li> <li>• conducting public meetings.</li> </ul> (Refer 2.1.3.1.)	NR&M, EPA, local government, conservation groups, project coordinator	Dec. 2003

<b>2.4.3.2</b>	Support local government initiatives to control dogs beyond town boundaries.	All stakeholders	Dec. 2003
<b>2.4.3.3</b>	Develop a State-wide program for control of wild dogs in protected areas and other EPA or QPWS lands, neighbouring rural enterprises and urban areas.	EPA	Dec. 2003
<b>2.4.3.4</b>	In consultation with the community, develop site-specific management programs for areas where dingo conservation conflicts with agricultural production and human safety.	EPA	Ongoing

### 3. Monitoring and Evaluation

#### 3.1 Implementation of the strategy

This will be reviewed through:

- Wild Dog Research and Control Advisory Committee—annually.
- Rural Lands Protection Board—annually.
- Local government (pest management plans)—every 4 years.

#### 3.2 Key performance indicators

Those to be reviewed include:

- **General**
  - Increased level of resources allocated for wild dog management by landholders, local governments and State government.
  - Establishment of three project coordinators, supported by reference panels.
  - Effective control of wild dogs inside the Wild Dog Barrier Fence.
- **Individual rural enterprises**
  - Sheep and goats—reduced level of wild dog impacts and encroachment by wild dogs.
  - Cattle—reduced level of livestock losses and damage.
  - Reduced level of baiting required inside the WDBF.
  - Increased number of landholders participating in coordinated control programs.
- **Rural industry organisations**
  - Reduced number of complaints from graziers.
  - Reduced economic impact on livestock industries.
- **Conservationists**
  - Reduced number of complaints about management of dingoes.
  - Reduced media interest.
  - Size, number and purity of dingo populations identified.
  - Public acceptance of wild dog control programs.
  - Increased awareness of the benefits of 1080.
- **Community/interest groups**
  - Reduced number of pets and domestic animals lost.
  - Safety—reduced number of attacks.
  - Increased ability to distinguish dingoes from other wild dogs.

- Increased awareness of livestock industry viability.
- Increased acceptance of control techniques and commensurate welfare issues.
- Increased number of groups actively involved in local wild dog issues.

## 4. Opportunities and constraints

### 4.1 Implementation of the strategy

This will provide a basis for:

- improved communication mechanisms
- improved general awareness
- wider community support for wild dog control
- coordination of management efforts
- documented action plan
- optimum use of resources
- improved participation in and acceptance of control
- improved data collection and research.

### 4.2 Possible constraints

The following may limit the successful implementation of the strategy:

- Rural downturn—particularly in the sheep and wool industry.
- Competing stakeholder priorities and varying levels of commitment—particularly to baiting inside the WDBF, on cattle properties and in semi-urban areas.
- Difficulty enforcing wild dog control.
- Expectation that the State Government should increase its role as ‘partner’ in wild dog control.
- Diminishing government resources (e.g. trained staff, funding) may prevent implementation of actions (e.g. funding for the WDBF).
- Potential conflict between the pest and conservation status of dingoes.
- Concerns over non-target impacts of baiting—particularly aerial baiting.
- Animal welfare and rights issues are not fully recognised in management programs.
- Inability to establish project coordinator positions.

## 5. Stakeholder responsibilities

All stakeholders will need to assist with the development of site-specific management plans. The general responsibilities of each of the major stakeholders in wild dog management are listed below.

### 5.1 All land managers (private and public, including Commonwealth and State lands)

- Participate in organised groups for coordinated control.
- Conduct population and damage assessments for their lands.
- Assist in the laying of baits and maintain a record of areas baited.
- Conduct control programs using the most appropriate and effective methods available for the particular situation.

- Notify neighbours and erect warning signs around bait areas.
- Monitor effectiveness of control techniques.

## **5.2 Industry groups**

- Promote availability and conditions of use of control agents.
- Promote the need for, and assist with, formation or operation of landholder groups for coordinated control.
- Raise awareness of control issues with the media.

## **5.3 Community and conservation groups**

- Review and participate in education, information, conservation and planning processes.

## **5.4 Local government**

- Incorporate wild dog issues in Local Government Area Pest Management plans.
- Enforce wild dog control.
- Regulate the control of domestic dogs.

## **5.5 Authorised Officer**

- Ensure wild dog control is undertaken.
- Assist with the formation of landholder groups; organise coordinated baiting campaigns; and provide 1080 impregnation of baits in association with NR&M Land Protection Officer.
- Provide advice on various wild dog control techniques.

## **5.6 Department of Natural Resources and Mines (Land Protection) Director**

- Policy development and planning.

### **Project Manager, Pest Animals**

- Manage 1080 administration in Queensland.
- Facilitate the formation of the Wild Dog Research and Control Advisory Group.

### **Regional service directors**

- Ensure appropriate links and communication between internal and external stakeholders within their area of responsibility.
- Identify and address operational issues associated with control operations within their area of responsibility.

### **Land Protection Officer (LPO)**

- Undertake wild dog extension activities, including provision of advice on various possible control techniques.
- Encourage land managers to control wild dogs, and encourage the formation of landholder groups.
- Coordinate and monitor baiting campaigns.
- Organise or provide 1080 impregnation of baits in association with the authorised local government officers.
- Undertake population and damage assessments and collect impact data.
- Investigate complaints.
- Seek greater cooperation from departments managing public lands.



### **Research officers (RWPARC, AFRS)**

- Possibly develop an antidote to 1080.
- Monitor effectiveness of control agent(s).
- Investigate additional control techniques.
- Assess wild dog impacts to assist in cost–benefit analyses.

### **Extension/communication officers**

- Develop and implement a Wild Dog Extension Plan, including media and Internet liaison.
- Prepare advisory publications on wild dog management for grazing enterprises and the general community.

### **Land Protection Chemist**

- Quality control of 1080 powder concentration.
- Investigate complaints about 1080 quality.
- Analyse stomach samples and/or baits for 1080 and other toxins.

## **5.7 Other State Government agencies**

### *5.7.1 Environmental Protection Agency*

- Develop and promote a management plan for the conservation of dingoes.
- Control and exclude all other dogs from protected areas.
- Assess and, where appropriate, provide approval for wild dog control on State forest estate.
- Determine the genetic status of dingoes and hybrids.
- Identify suitable areas and populations for dingo conservation.

### *5.7.2 Department of Health*

- License operators for use of 1080 and strychnine.

### *5.7.3 Zoos and wildlife parks*

- Inform the public of the pest and native status of dingoes.
- Keep only purebred dingoes for breeding.
- Maintain records on genetic purity of animals held.
- Comply with permit conditions.

### *5.7.4 Rural Lands Protection Board*

- Provide policy advice and direction on declared pest animal management.

### *5.7.5 Wild Dog Research and Control Advisory Committee*

- Report to the RLPB.
- Membership and terms of reference to be determined.
- Provide advice and support to the project coordinators.

### *5.7.6 Project coordinator*

- Reporting arrangements to be determined.
- Roles and responsibilities to be determined (appendix 3).

## 6. Management arrangements

The existing terms of reference of the Wild Dog Control Advisory Committee are to be reviewed and expanded by the Rural Lands Protection Board into the Wild Dog Research and Control Advisory Committee. The revised membership will better reflect the issues associated with wild dog management.

The Wild Dog Research and Control Advisory Committee will oversee the implementation of the strategy, review it annually and report progress to the Rural Lands Protection Board.

## 7. Additional reading

- Allen L., 1999 'Dingo Predation and impacts on Beef Cattle Production', in L. Hardwick (ed.) *Proceedings of the Wild Dog Management Workshop*, Blackall, 14–15 Sept. 1999.
- Chippendale J.F., 1991 *The Queensland Dingo Barrier Fence: A preliminary economic analysis*. Proceedings of the Vertebrate Pest Conference, Adelaide, 9, pp.143–7.
- EconSearch Pty Ltd 2000 *Economic Assessment of the Wild Dog Barrier Fence*, Report for Department of Natural Resources, Queensland.
- Fleming P., Corbett L., Harden B. & Thomson P., 2001 *Managing the Impacts of Dingoes and Other Wild Dogs*, Bureau of Rural Sciences, Canberra.
- Hardwick L., 1999 *Proceedings of the Wild Dog Management Workshop*, Blackall 14–15 September 1999.
- Merrell P.W. undated, The impact of predation on livestock production, unpublished paper, Department of Lands, Brisbane.
- NR&M 1998, 'Dingoes in Queensland—distribution and ecology', *NR&M Pest Facts PA9*, Department of Natural Resources.

## Appendix 1

### Summary of the biology and ecology of the dingo (Fleming, et al, 2001)

**Scientific name:** *Canis familiaris dingo*

**Common name:** Dingo

#### **Size:**

- Length Average 1230 millimetres—males longer than females
- Weight Female approximately 12 kg; males approximately 15 kg

#### **Description:**

- Coat colour is predominantly ginger (red to sandy) or black and tan, but it can vary from pure white to black. Most dingoes have pure white feet, chest patch and tail tip. Broken colours, e.g. brindling and patchiness, suggest the presence of domestic genes (hybrids and domestic dogs).
- Dingoes have a more heavily boned skull and larger teeth (especially the canine) than do domestic dogs of similar size.
- It is very difficult to distinguish some hybrids from pure dingoes using external features. Advances in DNA technology are being made (e.g. identification of DNA ‘connectors’ in faeces).

#### **Reproductive characteristics:**

*Breeding season* April to June

*Oestrus cycle* One per year

*Mean litter size* Four to six

*Gestation* Nine weeks

*Weaned at* Four months

*Age at first breeding* Two years (particularly in drier areas)

Other wild dogs have two oestrus cycles per year, but it is unlikely that they are able to successfully breed twice in the one year.

#### **Diet:**

- Dingoes are mostly opportunistic predators. Medium-sized animals—kangaroos, wallabies, rabbits and possums—form the major part of their diet, but they also consume a variety of other available prey.
- Dietary studies have indicated that dingo predation and consumption of domestic stock is low; however, in some areas dingoes kill stock (particularly sheep) surplus to their requirements.

#### **Behaviour:**

- Social, living in a small group (3–12 members) of related individuals, usually within a home range that is strongly defended. Most young disperse on reaching adulthood.
- Groups rarely move as a pack unless hunting larger animals. Members maintain (patrol and mark) their own home range, but may meet and separate during the day. They are more gregarious during the breeding season.

## Appendix 2

### Statutory framework for wild dog control

#### 1. State legislation

##### ***Agricultural Chemical Distribution Control Act 1966 (ACDC Act)***

Licences operators to use 1080 and strychnine poisons.

##### ***Animals Protection Act 1925***

**s. 7(1)**—Except in any case of ill treatment, nothing in this Act shall render unlawful:

- (c) the extermination of rabbits, marsupials (not being protected under any law), dingoes, wild or stray dogs or cats, foxes, wild cattle, wild horses, wild pigs, other domestic animals living in a wild state or reptiles; or
- (d) the extermination or destruction of any animal under the authority of any Act, regulation, or local law in force for the time being; or
- (e) the hunting, snaring, trapping, shooting, or killing otherwise, or capturing of any animal not in a domestic state and not being protected under any law; or
- (f) the destruction of stray dogs or cats in lethal chambers, or by other methods with a minimum of suffering;

**‘Ill treat’**: Includes ill treat, wound, mutilate, overdrive, override, overwork, abuse, worry, torment, torture and cause any animal unnecessary pain and suffering; also overload or drive when overloaded, and overcrowded, and unreasonably beat or kick.

##### ***Forestry Act 1959***

###### **Definition**

**s. 5** —‘**Forest product**’: ... (b) all forms of indigenous animal life...

**s. 33**—**Cardinal principle of management of State forests**

**s. 39**—A person shall not interfere with any forest products on State forest, timber reserve or forest entitlement area except under the authority of a lease or permit.

##### ***Health (Drugs and Poisons) Regulation 1996***

###### **s. 272—Fluoroacetic acid in baits**

Authorised person or Inspector under *Rural Land Protection Act* can only supply baits; baits must not contain more than 0.03% fluoroacetic acid, and must be used in accordance with written conditions.

**Schedule 7 poison**—fluoroacetic acid (1080) and strychnine.

**ss. 241, 242, 282 and 283** regulate the obtaining, possession and use of strychnine and regulate the restrictions placed on it.

##### ***Nature Conservation Act 1992***

###### **Definitions**

**s. 7**—‘**Indigenous to Australia**’: ... wildlife that was not originally introduced to Australia by human intervention (other than wildlife introduced before the year 1600...

**s. 7**—‘**Natural resources**’: in relation to a protected area, or an area identified under a conservation plan as, or including, a critical habitat or an area of major interest—means the natural and physical features of the area, including wildlife, soil, water, minerals and air.

**s. 7**—‘**Protected wildlife**’: native wildlife that is prescribed under this Act as: presumed extinct wildlife; endangered wildlife; vulnerable wildlife; rare wildlife; or common wildlife.

**s. 7** —‘**Take**’: means to hunt, shoot, wound, kill, poison, snare, harm, etc. or to attempt to do so.

**s. 7**—‘**Wildlife**’: means any taxon or species of an animal, plant, protista, procaryote or virus.

- s. 14—‘Protected area’:** National Parks (Scientific); National Parks; National Parks (Aboriginal land); National Parks (Torres Strait Islander land); Conservation Parks; Resources Reserves; Nature Refuges; Coordinated Conservation Areas; Wilderness Areas; World Heritage Management Areas; and International Agreement Areas.
- ss. 16–26—**Management principles of protected areas.
- ss. 22(c) and 23(c)—**Interests of landholders (Refuge areas and Coordinated Conservation areas) to be taken into account.
- s. 62—**A person can not take use or keep or interfere with a natural resource of a protected area other than under a licence, permit, etc.
- s. 137—**Licences, etc. to be consistent with management principles, and management intent or plan.

#### ***Nature Conservation Regulation 1994***

- s. 81—**A person must not bury or leave a noxious, etc., substance or use a pesticide (without the chief executive’s written approval) in a protected area.
- s. 235—**Schedule 7 Poisons (e.g. 1080) are not to be used to take protected wildlife.

#### ***Nature Conservation (Wildlife) Regulation 1994***

##### **Schedule 5**

- s. 4(1)—‘Common mammal’:** A common mammal is a mammal indigenous to Australia other than—a presumed extinct, endangered, vulnerable or rare mammal, or a dingo (i.e. dingoes are not protected under the *Nature Conservation Act* unless they are in a protected area, e.g. in refuge areas).

##### ***Rural Lands Protection Act 1985***

- s. 5(2)—** Where a person does something that is required or permitted under this Act, but would have committed an offence under the *Nature Conservation Act 1992*, then they have not committed that offence.
- s. 64—**Local government has responsibility to ensure declared pest animals are controlled within its area. May do certain things including provide poisons and pay bounties.
- s. 65—**When local government does not fulfil its responsibility, the Minister may direct it to act.
- s. 66—**Where local government still fails to act, Minister can direct by Executive Director and recover costs.
- ss. 73–75—**Government department to control pests on its lands (no penalty, but may be advised by inspector or authorised officer, may enter into agreement with Executive Director).
- ss. 76–77—**Local government to control pests on its lands (no penalty, notice may be served).
- ss. 80–84—**Private landholders to control pests on their lands. Penalties for non-compliance, notices may be issued, costs recovered.
- s. 94—**Prohibition on introduction without permit.
- s. 97—**Prohibition on keeping (without permit) and selling.
- s. 99—**Authorised Person may order or carry out destruction of animal.
- ss. 160–176—**Pest control syndicates.
- ss. 177–209—**Barrier fences.
- s. 217—**Authority to use poisons and set traps by authorised person where landholder is notified.
- s. 236—**Certain persons can destroy straying dogs in certain areas.

## 2. *Federal Legislation*

### ***Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)***

This Act applies when the activity is likely to have a significant impact on a matter of national environmental significance. It aims to promote the conservation of biodiversity and it includes provisions to deal with invasive species.

Land listed on the Commonwealth Register of the National Estate is managed under provisions in the *Australian Heritage Commission Act 1975* (AHC Act). Listing under Criteria A and B of the AHC Act requires that any activities that may impact on the biodiversity of the area have to be formally considered under section 30 of the Act; however, baiting of nuisance and feral animals is not precluded. Baiting can be viewed as a routine maintenance operation aimed at enhancing biodiversity by reducing non-native predator pressure on indigenous wildlife populations.

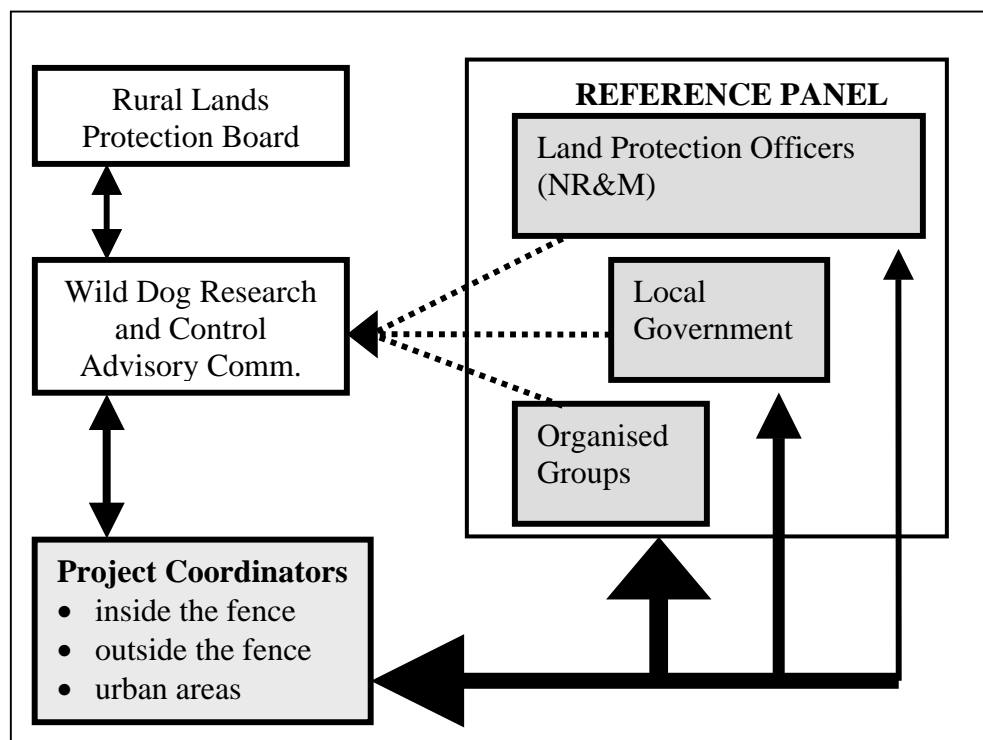
### ***Civil Aviation Regulations 1988***

Govern the aerial application of 1080 baits.

## Appendix 3

### Field support for project coordinators

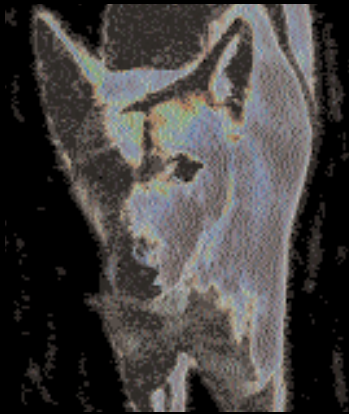
The three project coordinator positions are essential for implementation of major actions in the strategy. Administrative arrangements are dependent on the source of funding; however, a proposed model of the communication protocol is shown in figure 3. While the Wild Dog Research and Control Advisory Committee will provide the primary advisory and management support, the project coordinators will establish a local reference panel to support local control activities. The coordinators will use the reference panel to liaise with the key agencies and groups to establish coordinated control campaigns throughout their areas. A primary link will need to be established with the Local Government Area Pest Management committees and locally organised groups.



**Figure 3: Communication protocol for project coordinating officers**

The following resources will be required to establish and maintain each of the three positions:

- |                    |                                                                                                                                                                                                                                                                             |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Legislation</b> | <ul style="list-style-type: none"><li>• No changes needed to the current legislation.</li></ul>                                                                                                                                                                             |
| <b>Funding</b>     | <ul style="list-style-type: none"><li>• Three-year commitment—\$100 000 per coordinator per year (grants; reallocation of existing funds; industry; local government; and/or NR&amp;M State funds).</li></ul>                                                               |
| <b>Support</b>     | <ul style="list-style-type: none"><li>• Authority of local governments to act in their areas (particularly for ‘hot spots’).</li><li>• Government (State and local), industry, conservation group and community endorsement of the strategy and its consequences.</li></ul> |



## queensland pest animal strategies

Wild dogs

Rabbits

Locusts

Mice

