



World Animal Protection Submission

Productivity Commission Inquiry into Natural Disaster Funding

June 2014

1 Introduction

World Animal Protection (previously known as World Society for the Protection of Animals) is the world's leading global animal protection organisation and is active in more than 50 countries. Our organisation has consultative status at the Council of Europe and we collaborate with national governments, the United Nations' Food and Agriculture Organization and the World Organisation for Animal Health (OIE).

World Animal Protection has been working to assist animals and communities in disasters for the past 50 years. Over this time, we have developed significant expertise across the disaster cycle from preparedness to mitigation to response to recovery.

In the Asia Pacific region, we are a member of the OIE ad hoc working group on animals in disasters and support the decision to work towards guidelines and standards for managing animals in disasters for the benefits of animals and communities.

We also work closely through the OIE Regional Animal Welfare Strategy Animal Welfare Working Group on handling and management of animals in disasters in line with the Livestock Emergency Guidelines and Standards approach.

In Australia, our organisation is working with a wide range of stakeholders to integrate animals into disaster policy and planning in order to improve animal welfare and build community resilience by safeguarding human welfare and safety. Our focus is on complementing existing best practice arrangements to build disaster resilience to the benefit of everyone.

We welcome the opportunity to make this submission in relation to natural disaster funding in the Australian context. The submission has been circulated to members of the National Advisory Committee for Animals in Emergencies for their substantive feedback.

In World Animal Protection's submission:

- We argue that animals are part of our lives and in addition to minimising their suffering in disasters, there are compelling reasons to fully integrate animals into disaster planning. We provide a brief introduction to World Animal Protection's work with the National Advisory Committee for Animals in Emergencies and progress towards endorsement of the National Planning Principles for Animals in Disasters by government authorities with responsibility for emergency management and animal welfare.
- We outline the evidence base that supports the business case for managing animals in disasters. This includes an outline of both financial and non-financial costs relevant for the purposes of the inquiry into the efficacy of natural disaster funding arrangements, especially with respect to the priority of effective natural disaster mitigation and the reduction of impact of disasters on communities.
- We provide some comments on additional themes identified in the Productivity Commission issues paper including emergency management capability, governance arrangements between the jurisdictions, and the balance between mitigation, resilience and recovery. Our specific comments are in relation to institutional arrangements and policy to ensure community/individual decision making processes support appropriate risk management practices. We comment on progress to date in promoting behavioural change and building emergency management capability with respect to some emerging research findings on these topics.

2 The case for integrating animals in disaster planning

2.1 Financial and non-financial costs and benefits

There is a growing evidence base that demonstrates both financial and non-financial benefits for integrating animals into disaster planning as well as significant risks to individuals, communities and authorities from omitting animals.

a) Animals contribute to human health and wellbeing

The link between human wellbeing and interaction with animals is well documented. A survey of New Zealand residents found that almost two-thirds believe their relationship with their pet is vital to their psychosocial wellbeing¹. More than half of the Australian public own pets².

Following Cyclone Tracey, animals were flown out of Darwin while the infrastructure was repaired. Residents reported that the return of their animals was critical to their recovery following the disaster³.

b) Animals have economic value

Whilst there is no comprehensive database of the livestock losses incurred in disasters, available data suggests that the direct costs of livestock losses are considerable. For example, the 1983 Ash Wednesday fires resulted in an estimated total gross output loss of more than \$65 million⁴. A decrease in production in the agriculture sector also results in downstream production losses for agriculture-dependent industries. These downstream impacts have been estimated to result in a total economic loss some 2.4 times greater than that experienced by the agricultural industry alone⁵.

¹ Glassey, S, *Recommendations to Enhance Companion Animal Emergency Management in New Zealand*, Mercalli Disaster Management Consulting, 2010.

² Headey, B, *National People and Pets Survey / Socially Responsible Pet Ownership in Australia: A Decade of Progress*, University of Melbourne, 2006.

³ Department of Environment, Water and Natural Resources South Australia, *South Australian Management Plan for Companion Animals and Wildlife in Emergency Evacuations*, July 2012.

⁴ Coll, E, *The Case for Preparedness: Quantification of Production Losses due to Livestock Deaths from Disasters in Australia*, Prepared for the World Society for the Protection of Animals, 2013.

⁵ Statistics New Zealand in Coll, E, *The Case for Preparedness: Quantification of Production Losses due to Livestock Deaths from Disasters in Australia*, Prepared for the World Society for the Protection of Animals, 2013.

c) Failure to account for animals puts human life at risk

The Royal Commission into the Black Saturday fires found that individuals perished as a result of failing to evacuate with their animals and prematurely returning to the fire ground in order to save their animals.

d) Animals have intrinsic value

In addition to the above points, it is important to emphasise that animals have intrinsic value and as sentient beings, animals suffer in disasters from injury, pain, hunger, thirst, fear and distress. The World Organisation for Animal Health defines animal welfare in the following way:

“Animal welfare means how an animal is coping with the conditions in which it lives. An animal is in a good state of welfare if (as indicated by scientific evidence) it is healthy, comfortable, well nourished, safe, able to express innate behaviour, and if it is not suffering from unpleasant states such as pain, fear and distress”.

On the basis of animal welfare principles alone, efforts should be made to protect animals from disasters.

2.2 Increasing support for the integration of animals into disaster planning

An increasing number of emergency authorities and government departments in Australia are including references to animals in their community engagement strategies and materials in recognition of the way in which concern for animals can shape human behaviour in disasters.

Community engagement material involving reference to animals can be found on websites run by emergency services, government departments with responsibility for emergency management, government departments with responsibility for animal welfare, animal welfare organisations, humanitarian organisations, and Emergency Management Australia.

In addition, the Bushfire and Natural Hazards Cooperative Research Centre is currently engaging in a three year project to identify best practices approaches to the management of animals in disasters. They are hoping the project will result in recommendations to improve outcomes for public safety and the longer-term mental and physical health of responders in disasters⁶.

The Australasian Fire and Emergency Service Authorities Council has also recently sponsored a workshop to review the draft document, *A synthesis of Bushfire Cooperative Research Centre Community Safety Research 2003-2013*. The draft document includes reference to tailoring community safety information to households with responsibility for animals in recognition that such responsibility influences decision-making in disasters.

Following the second annual workshop on the topic co-hosted by World Animal Protection and the Department of Agriculture / Australian Animal Welfare Strategy in 2012, delegates from a wide range of backgrounds acknowledged that the Australian public increasingly expects that emergency management arrangements will include animals and that failure to integrate animals into planning results in unacceptable economic and social costs, including loss of human life.

⁶ Bushfire and Natural Hazards Cooperative Research Centre, *Managing Animals in Disasters: Improving preparedness, response, and resilience through individual and organisational collaboration*.

Delegates supported the establishment of the National Advisory Committee for Animals in Emergencies. The committee was established in February 2013 and includes members from the emergency services; industry; humanitarian and animal welfare organisations; federal, state and local governments; and the veterinary community.

Following a process of assessing the status of animals in emergency management planning across Australian jurisdictions, numerous examples of best practice were identified and used to develop a non-prescriptive tool to help jurisdictions customise plans to meet their particular circumstances.

The tool, named the National Planning Principles for Animals in Disasters, reflect the minimum expectations of the community for animal welfare outcomes in disasters. The National Planning Principles were endorsed by delegates at the 2013 annual workshop and the National Advisory Committee for Animals in Emergencies was tasked with pursuing endorsement from government at the highest levels⁷. Subsequently, the National Planning Principles were endorsed by the animal welfare authorities of the Commonwealth and the jurisdictions through the Animal Welfare Committee in June 2013. Endorsement is currently being sought from the Australia-New Zealand Emergency Management Committee (emergency management senior officials' committee).

3 *The business case for managing animals in disasters*

The momentum towards recognition that responsibility or concern for animals influences decision making in disasters has partly been shaped by recent experience. The Royal Commission into the 2009 Black Saturday bushfires in Victoria found that people returned to the fire zone to attempt rescue of their animals. The Queensland Flood Commission of Inquiry found that pet owners were reluctant to evacuate without their animals during the 2011 flood event. Following these natural disasters, many jurisdictions are progressing towards full integration of animals into disaster planning arrangements in order to ensure human safety.

Improved planning for animals in disasters at individual, community and government level will promote decision-making based on sound principles of risk management. Whilst the financial benefits of integration of animals have not been comprehensively researched, we note that in addition to benefits to animal and human safety and welfare, cost savings are likely to be realised in terms of reduced workload on emergency services personnel conducting late rescues of people with their animals, counselling associated with animal loss in disasters, and other direct and indirect costs.

More data is available in relation to livestock specifically. World Animal Protection-commissioned research into the economic costs of livestock losses in disasters in Australia has found that 1.6 million farm animals died in a selection of 10 natural disasters over recent decades, directly costing \$217 million. Livestock deaths from the devastating 2009 Black Saturday fires alone resulted in \$18 million worth of stock deaths⁸. This figure is considered conservative as it is based on losses notified to government and may exclude some losses notified direct to insurers but not to government. It also excludes livestock losses in droughts or other slow-onset disasters, damage to capital assets or other farm infrastructure, and production losses due to disruptions to business operations. In addition to direct economic losses, the psychosocial wellbeing of individuals and entire farming communities is severely undermined by the loss of animals and livelihoods in disasters.

In comparison with the costs of livestock losses, the research finds that the cost of preparing farms for disasters is likely to be modest. Farmers want the best for their animals, but in some cases there is a lack of awareness of how a plan for their animals in disasters can benefit them.

⁷ WSPA & Department of Agriculture / Australian Animal Welfare Strategy, *Building Capability in Communities: A National Approach to Animals in Disasters: Workshop Proceedings*, September 2013.

⁸ Coll, E, *The Case for Preparedness: Quantification of Production Losses due to Livestock Deaths from Disasters in Australia*, Prepared for the World Society for the Protection of Animals, 2013.

One source cited in the World Animal Protection-commissioned study found that two-thirds of farmers in south east Australia perceived there to be a high to extreme bushfire threat in their local area, yet less than half had prepared a bushfire action plan⁹.

The World Animal Protection-commissioned report also finds that many farmers are underinsured or not insured for their livestock, although they may have insurance for their homes and properties. This is likely to be of relevance for the discussion of natural disaster funding. It should be noted that a cost-benefit analysis of preparation activities was outside the scope of the study, however, the research finds that a cost-benefit analysis would be useful to allow farmers to assess the opportunity costs of their time and money against the potential losses they face from inaction.

4 *Emergency management capability, governance arrangements between the jurisdictions, and the balance between mitigation, resilience and recovery*

A feature of the National Strategy for Disaster Resilience (NSDR) is the recognition that the benefits of improved disaster planning extend beyond protection of human life and property to the broader social environment. The NSDR focuses on the shared responsibility of governments, business and communities in preparing for, and responding to, disasters.

Collectively, we have an obligation to protect the most vulnerable in society. In their communique of July 2013, the-then Standing Council on Police and Emergency Management indicated their forward work plan would focus on improving the resilience of vulnerable sections of society, including Indigenous communities, culturally and linguistically diverse communities, children and youth, the elderly and people with disabilities.

World Animal Protection-commissioned research has found that animals play an important role in the lives of vulnerable Australians, and that attempts to build the disaster resilience of vulnerable people could be strengthened by focusing on the human-animal bond. Given the importance of animals in the lives of the vulnerable people, it is not surprising that many may be reluctant to evacuate without their pets, may decline accommodation in emergency accommodation facilities if their pet is unwelcome, and may struggle more than others to cope with recovery without their pets. As animal lives are so frequently dependent on humans for survival, the benefits of increasing the resilience of vulnerable communities through animal attachment is twofold: human and animal lives can be saved together. There are also likely to be significant indirect cost savings associated with building the resilience of vulnerable communities in such a way as to minimise animal loss in disasters.

The active participation of emergency services leaders in the annual workshops on animals in disasters indicates strong progress is being made in building emergency management capability in this area.

It is important that emergency management capability is supported by information sharing on the issue of animals in disasters planning between jurisdictions, and it is hoped that progressive adoption of the National Planning Principles for Animals in Disasters by all levels of government will further promote better outcomes for animals and communities at all stages of the disaster cycle.

⁹ Eriksen, C & Gill, N, Bushfire and everyday life: Examining the awareness-action gap in changing rural landscapes, *Geoforum*, 41(5) 814-825, 2010.

5 Recommendations

5.1 Main recommendations

World Animal Protection recommends that the Productivity Commission:

- Recognise the financial and non-financial benefits for integrating animals into disaster planning as well as the significant risks to individuals, communities and authorities from omitting animals.
- Support recommendations on natural disaster funding that promote improved planning for animals in disasters at individual, community and government level in order to promote decision-making based on sound principles of risk management.
- Consider a cost-benefit analysis of disaster preparedness activities for farmers with responsibility for livestock in disasters to allow for assessment of the opportunity costs of preparedness activities against the potential losses they face from inaction.
- Consider research developments and recommendations in this area, including emerging findings from the Bushfire and Natural Hazards Cooperative Research Centre project, *Managing Animals in Disasters: Improving preparedness, response, and resilience through individual and organisational collaboration*.
- Support innovative approaches to improving community resilience in disasters, including leveraging animal attachment to promote disaster preparedness in vulnerable communities.
- Consider funding opportunities for development of emergency services capability on managing animals in disasters.

5.2 Additional recommendations

- All stakeholders are encouraged to recognise that community expectations are increasing in relation to protecting animals in disasters.
- State/territory and local governments are encouraged to make use of the National Planning Principles for Animals in Disasters to guide planning for animals in disasters.
- Local governments are encouraged to cooperate and collaborate when planning for animals in disasters, especially in sharing resources, expertise and training opportunities.
- State/territory and local governments are encouraged to involve first responders in disasters in the planning process for animals in disasters.
- Both policy and operational staff within emergency management are encouraged to consider animals as an integral part of their normal organisational planning and practice.
- Researchers and other organisations are encouraged to continue to build the evidence base for the psychological and social case for managing animals in disasters.
- Animal welfare authorities are encouraged to establish community engagement as an ongoing component of normal organisational practice in order to facilitate communication with animal owners during disasters.
- In developing community engagement strategies, emergency managers are encouraged to recognise that both animal owners and non-animal owners will put themselves at risk for animals in disasters.
- In developing community engagement strategies, animals can be thought of as an asset to aid community engagement in relation to disasters rather than a human safety risk in disasters.
- Expectations of local councils could be clarified with respect to accepting pets at evacuation centres.

- Support agencies would benefit from specific training, e.g. prior to accessing fire grounds.
- Support organisations, including wildlife groups, are encouraged to cost their activities and resource requirements ahead of time to inform bids for grants or donations available during or after disasters.
- State/territory and local governments are encouraged to develop relationships with non-government supporting organisations prior to disasters.



NATIONAL ADVISORY COMMITTEE FOR ANIMALS IN EMERGENCIES

NATIONAL PLANNING PRINCIPLES FOR ANIMALS IN DISASTERS

FOREWORD

In Australia, natural disasters are inevitable, often unpredictable, and will remain a constant feature of life for communities and animals.

Over a 30-year period our nation has endured around 265 disasters including droughts, floods, storms, tropical cyclones and fires¹⁰.

In 2011, the Council of Australian Governments endorsed the National Strategy for Disaster Resilience. The Strategy is the first step in a long term, evolving process to deliver sustained behavioural change and enduring partnerships. Importantly, the Strategy focuses on the shared responsibility of governments, business and communities in preparing for, and responding to disasters.

A feature of the National Strategy for Disaster Resilience is the recognition that the benefits of improved disaster planning extend beyond protection of human life and property to the broader social environment.

Animals are part of our lives and in addition to minimising their suffering, there are compelling reasons to fully integrate animals into disaster management:

- More than half of the Australian public own pets¹¹. Previous disasters have shown that animals must be accounted for in order to ensure human safety. The Royal Commission into the 2009 Black Saturday bushfires in Victoria found that people returned to the fire zone to attempt rescue of their animals. The Queensland Flood Commission of Inquiry found that pet owners were reluctant to evacuate without their animals.

¹⁰ Gentle, N, Kierce, S & Nitz, A, *Economic costs of natural disasters in Australia*, Bureau of Transport Economics, Department of Transport and Regional Services, 2001.

¹¹ Headey, B, *National People and Pets Survey / Socially Responsible Pet Ownership in Australia: A Decade of Progress*, University of Melbourne, 2006.

- The community has a strong interest in the fate of wildlife in disasters. After being rescued from the fire ground following the Victorian fires, more than 1.3 million people watched the video of Sam the Koala being cared for. The Victorian Association of Forest Industries estimates that millions of native animals and birds were killed during the 2009 Victorian fires, either in the event itself or from starvation or predation following the event¹². Integration of wildlife into disaster management planning (including threatened species) would enhance community and environmental recovery post-disaster.
- The direct cost of livestock losses in the Black Saturday fires is conservatively estimated at more than \$18 million¹³. In addition to direct economic losses, the psychosocial wellbeing of individuals and entire farming communities is severely undermined by the loss of animals and livelihoods.

Recent disasters have propelled many jurisdictions to progress towards full integration of animals into disaster planning arrangements. The Victorian Emergency Animal Welfare Plan is a prime example of how this can be achieved.

The National Advisory Committee for Animals in Emergencies is an interim committee established following the *2012 Building Resilience: Animals and Communities Coping in Emergencies* workshop. The committee is taking a collaborative and proactive approach to the integration of animals into disaster management planning across all jurisdictions and communities. The National Planning Principles for Animals in Disasters build on best practice and are designed to be a non-prescriptive tool to support jurisdictions as they seek to improve disaster management planning by ensuring that animals are considered.

We commend the National Planning Principles for Animals in Disasters to all jurisdictions and all stakeholders, and trust that they will be a useful tool to enhance Australia's resilience to disasters.

Mr Phillip Glyde

Chair, Animal Welfare Committee

Dr Gardner Murray AO, PSM

Chair, Australian Animal Welfare Advisory Committee

BACKGROUND

¹² 2009 Victorian Bushfires Royal Commission *Final Report* Volume II para 8.12.3, 2010

¹³ Coll, E, *The Case for Preparedness: Quantification of Production Losses due to Livestock Deaths from Disasters in Australia*, Prepared for the World Society for the Protection of Animals, 2013.

In October 2012, World Animal Protection (formerly known as World Society for the Protection of Animals) and the Department of Agriculture, Fisheries and Forestry Australian Animal Welfare Strategy co-hosted a workshop entitled, *Building Resilience: Animals and Communities Coping in Emergencies*.

The workshop drew together over 50 stakeholders from a wide range of backgrounds including emergency managers; humanitarian organisations; Australian local, state and federal government departments; New Zealand government departments; veterinarians; researchers and animal organisations.

It was acknowledged that the Australian public increasingly expects that emergency management arrangements will include animals and that failure to integrate animals into planning results in unacceptable economic and social costs, including loss of human life.

Workshop delegates resolved to improve outcomes for animals in disasters by seeking integration of animals into emergency management at each stage of the disaster cycle¹⁴.

Delegates also agreed that one of the primary ways to achieve this objective would be the establishment of a national advisory committee for animals in emergencies¹⁵ to provide leadership, insight and advice to organisations attempting to integrate animals into emergency management systems.

The National Advisory Committee for Animals in Emergencies was established as an interim committee following the workshop and met for the first time in February 2013. At this meeting, members acknowledged the progress being made towards integration of animals into emergency management planning and agreed that the development of overarching principles would help jurisdictions to create emergency plans customised to their particular circumstances.

THE NATIONAL ADVISORY COMMITTEE FOR ANIMALS IN EMERGENCIES

The National Advisory Committee for Animals in Emergencies includes members from industry; humanitarian and animal welfare organisations; federal, state and local governments with responsibility for animal welfare; the Commonwealth Attorney-General's Department; and the veterinary community.

As the committee promotes an 'all-hazards' humane approach to all species in emergencies, the committee membership was selected to ensure the inclusion of expertise in livestock, companion animals and wildlife.

The interim committee was established in 2013 with the vision that: "animal welfare is accepted as core to emergency management and there are improved outcomes for animals in emergencies".

The mission of the committee is: "to work collaboratively to incorporate animals into emergency management planning at all levels of government, and to encourage those responsible for animals in emergencies to accept their responsibilities".

¹⁴ The disaster cycle includes preparedness, response, recovery and mitigation.

¹⁵ World Society for the Protection of Animals and Department of Agriculture, Fisheries and Forestry Australian Animal Welfare Strategy, *Building Resilience: Animals and Communities Coping in Emergencies Workshop Report*, October 2012.

A list of committee members is included in Appendix A.

PURPOSE

Australia has a world class emergency management system that covers all parts of the disaster cycle and outlines clear control and coordination arrangements that allow for effective mobilisation of resources across the three levels of government.

The extent to which animals are integrated into these arrangements varies significantly across states, territories and local government areas.

The community has an expectation that emergency management arrangements will allow for a coordinated approach to the management of animal welfare impacts to companion animals, livestock and wildlife.

Following a process of assessing the status of animals in emergency management planning across Australian jurisdictions, numerous examples of best practice have been identified and used to develop these high level national planning principles.

The purpose of the national planning principles for animals in disasters is to provide a non-prescriptive tool to help jurisdictions customise plans to meet their particular circumstances.

While there is no 'one size fits all' approach, there is some merit in state and territory plans for animals in disasters being sufficiently aligned to share common characteristics and approaches, particularly to enable the jurisdictions to work together in emergencies that extend across borders.

These principles reflect the minimum expectations of the community for animal welfare outcomes in disasters.

This document is separate to animal welfare arrangements for animal disease and biosecurity emergencies, such as AUSVETPLAN or plans relating to cetacean entanglements or strandings, and marine pollution.

RATIONALE

1) Disaster resilience

Australia is prone to disasters. Over the period from 1967-1999 Australia endured 265 natural disasters with an average annual cost of \$1.14 billion¹⁶. These disasters included floods, storms, bushfires and tropical cyclones. The Climate Commission¹⁷ and the Australian National Strategy for Disaster Resilience recognise that climate change is likely to increase the frequency and severity of natural disasters.

While natural disasters are the most common form of disaster in Australia, the National Strategy for Disaster Resilience states that disasters can also involve any “serious disruption to community life which threatens or causes death or injury in that community and/or damage to property which is beyond the day-to-day capacity of the prescribed statutory authorities and which requires special mobilisation and organisation of resources other than those normally available to those authorities”¹⁸.

This definition encompasses a number of scenarios with animal welfare implications in addition to natural disasters including, for example, a bankrupt primary producer walking off the farm and leaving livestock without access to food and shelter. There may be instances where these planning principles would equally apply for emergencies that impact on a lower scale than those rated as a ‘disaster’.

The National Strategy for Disaster Resilience states that “a national, coordinated and cooperative effort is required to enhance Australia’s capacity to withstand and recover from emergencies and disasters”. The National Planning Principles for Animals in Disasters document has been prepared recognising that animals are part of our lives and livelihoods. In order to build resilience and enhance disaster recovery processes, animals must be integrated into disaster planning.

Of course, in line with the National Strategy for Disaster Resilience, this document recognises that the safety and welfare of people is the overarching priority at all times.

While the responsibility for the welfare of animals at all times remains with the person in charge of the animal, the National Planning Principles for Animals in Disasters recognise that government can play a supporting role in helping people exercise their responsibility for the animals in their care, improving overall resilience. Thus, incorporating animals into emergency management planning is an important role for government and will bring about enhanced disaster resilience in the community.

2) Why animals matter in disaster planning

e) Animals have intrinsic value

¹⁶ Gentle, N, Kierce, S & Nitz, A, *Economic costs of natural disasters in Australia*, Bureau of Transport Economics, Department of Transport and Regional Services, 2001.

¹⁷ Climate Commission, *The Critical Decade – Extreme Weather*, 2013.

¹⁸ National Emergency Management Committee, *National Strategy for Disaster Resilience / Building our Nation’s Resilience to Disasters*, 2011.

As sentient beings, animals suffer in disasters from injury, pain, hunger, thirst, fear and distress. The World Organisation for Animal Health defines animal welfare in the following way:

“Animal welfare means how an animal is coping with the conditions in which it lives. An animal is in a good state of welfare if (as indicated by scientific evidence) it is healthy, comfortable, well nourished, safe, able to express innate behaviour, and if it is not suffering from unpleasant states such as pain, fear and distress”.

On the basis of animal welfare principles alone, efforts should be made to protect animals from disasters.

f) Animals contribute to human health and wellbeing

The link between human wellbeing and interaction with animals is well documented. A survey of New Zealand residents found that almost two-thirds believe their relationship with their pet is vital to their psychosocial wellbeing¹⁹.

Following Cyclone Tracey, animals were flown out of Darwin while the infrastructure was repaired. Residents reported that the return of their animals was critical to their recovery following the disaster²⁰.

g) Animals have economic value

Whilst there is no comprehensive database of the livestock losses incurred in disasters, available data suggests that the direct costs of livestock losses are considerable. For example, the 1983 Ash Wednesday fires resulted in an estimated total gross output loss of more than \$65 million²¹. A decrease in production in the agriculture sector also results in downstream production losses for agriculture-dependent industries. These downstream impacts have been estimated to result in a total economic loss some 2.4 times greater than that experienced by the agricultural industry alone²².

h) Failure to account for animals puts human life at risk

The Royal Commission into the Black Saturday fires found that individuals perished as a result of failing to evacuate with their animals and prematurely returning to the fire ground in order to save their animals.

3) Benefits of integrating animals into disaster planning

¹⁹ Glassey, S, *Recommendations to Enhance Companion Animal Emergency Management in New Zealand*, Mercalli Disaster Management Consulting, 2010.

²⁰ Department of Environment, Water and Natural Resources South Australia, *South Australian Management Plan for Companion Animals and Wildlife in Emergency Evacuations*, July 2012.

²¹ Coll, E, *The Case for Preparedness: Quantification of Production Losses due to Livestock Deaths from Disasters in Australia*, Prepared for the World Society for the Protection of Animals, 2013.

²² Statistics New Zealand in Coll, E, *The Case for Preparedness: Quantification of Production Losses due to Livestock Deaths from Disasters in Australia*, Prepared for the World Society for the Protection of Animals, 2013.

Livestock losses in a selection of ten disasters in Australia between 1967 and 2011 are conservatively estimated at approximately 1.6 million animals²³. Improving disaster preparedness is likely to significantly reduce animal casualties resulting in improved animal welfare outcomes.

In addition to the avoidance of economic losses associated with livestock losses in disasters, interviews with survivors of a South Australian fire found that the loss of livestock represented a “severing of a link between the family and its farming history”²⁴. This underlies the risks to community resilience from failure to integrate animals into planning.

The loss of pets in Hurricane Katrina in the United States of America was found to be a greater contributing factor in human psychopathology than the loss of homes²⁵. This suggests that failing to recognise the interdependency relationship between humans and animals can result in significant human welfare impacts.

Of the witness testimonies provided to the Royal Commission into the Black Saturday Victorian bushfires, over one-third included reference to animals. Testimony included references to residents who died when they attempted evacuation with animals. Following the Royal Commission’s recommendation that animals be integrated into emergency management planning in order to promote human safety, the Victorian Emergency Animal Welfare Plan was developed.

²³ Coll, E, *The Case for Preparedness: Quantification of Production Losses due to Livestock Deaths from Disasters in Australia*, Prepared for the World Society for the Protection of Animals, 2013.

²⁴ Background briefings on emerging issues for fire managers from AFAC and Bushfire CRC, *Fire Note / Exploring the Bushfire Experience from a Domestic Perspective*, Issue 40, October 2009.

²⁵ Hunt, M, Bogue, K & Rohrbaugh, N, Pet Ownership and Evacuation Prior to Hurricane Irene, *Animals* 2012, 2, 529-539.

NATIONAL PLANNING PRINCIPLES FOR ANIMALS IN DISASTERS

The National Planning Principles for Animals in Disasters offer guidance on what should be incorporated into the planning process for animals in disasters and local disaster management plans.

The planning process itself is an opportunity to build support for the integration of animals into wider emergency response plans; to increase understanding of how plans might work in practice; and to develop the networks that will allow for effective implementation of plans.

The second section of the National Planning Principles for Animals in Disasters provides an easy to use tool for jurisdictions when writing or reviewing plans.

These principles are sufficiently high-level to allow for jurisdictional adoption and customisation. They are not intended to be prescriptive.

1) The planning process for animals in disasters

The planning process should:

- explicitly recognise that integrating animals into emergency management plans will improve animal welfare outcomes
- explicitly recognise that integration of animals into emergency management plans will help secure improved human welfare and safety during disasters
- aim, for the benefit of emergency managers and animal welfare managers, to clearly identify roles and responsibilities within command and control structures in sufficient detail to allow for effective implementation of animal welfare measures
- recognise the wide range of parties involved in animal welfare at each stage of the disaster cycle and ensure these organisations are consulted during writing or reviewing disaster plans
- respect the role of local government, especially with reference to animal welfare and animal management arrangements within the local area, as 'first responders' in disasters and acknowledge local government expertise in understanding local needs and resource availability
- consider how best to ensure effective integration and implementation of the plan by, for example, extensive consultation during the planning process or inclusion of an animal welfare element in requirements for disaster training exercises
- include effective communication about plan implementation with those parties who may be involved as well as those who may be impacted by disasters

- be communicated in language that is accessible to all stakeholders including the general public.

2) **The disaster plan**

The disaster plan that incorporates animal welfare in disasters should:

- specify that the individual in charge of an animal is ultimately responsible for its welfare in disasters
- make reference to, and situate the plan within, the local area and/or jurisdictional regulatory and legal frameworks
- take an 'all hazards' humane approach to all species and encompass a wide range of possible disaster-type situations that may impact upon the welfare of livestock, companion animals, wildlife and other categories of animals such as laboratory animals
- use a definition of disaster that aligns with the National Strategy for Disaster Resilience
- appropriately plan for animals taking into consideration the types of disasters most likely to be experienced in the particular jurisdiction
- include consideration of animals at all stages of the disaster cycle including preparedness, response, recovery and mitigation
- include a statement of scope that excludes animal disease and biosecurity emergencies from the plan
- emphasise that biosecurity requirements are of utmost importance in disasters and that quarantine and biosecurity protocols must be followed wherever practicable
- provide for a staggered scaling up of response and resources in line with the scale and severity of disasters and their impact on animal and human welfare
- include a vision statement that makes reference to the importance of securing animal welfare outcomes in disasters
- include a brief rationale statement that includes reference to the benefits of the plan for animal welfare, human safety and wellbeing, and for the economy

- outline command and control structures in language that is accessible to the general public
- outline the processes for interagency co-operation at all stages of the disaster cycle
- include a system for formalising arrangements with animal welfare support organisations
- take into consideration logistical challenges that may impact upon implementation of the plan during disasters, for example, in the event that key infrastructure or personnel are not able to be deployed, communication is affected or shelters are destroyed or otherwise unavailable
- include requirements and arrangements for regular testing and review of the animal welfare in disasters plan.

CONCLUSION

It is intended that the National Planning Principles for Animals in Disasters will be a useful tool to support jurisdictions as they seek to improve disaster management planning by ensuring that animals are considered. By integrating animals into disaster planning and arrangements in Australia, communities and governments are working together to enhance disaster resilience.

In order to make the principles widely available to the jurisdictions, the interim National Advisory Committee for Animals in Emergencies has forwarded this document to the Animal Welfare Committee for their endorsement. The Australia-New Zealand Emergency Management Committee's endorsement is also sought. Ultimately, adoption of the principles by the emergency management community will lead to improved outcomes for humans and animals in emergencies.

APPENDIX A – INTERIM NATIONAL ADVISORY COMMITTEE FOR ANIMALS IN EMERGENCIES

(as of June 2014)

Dr Gardner Murray (Independent Chair)	Special advisor to the OIE (World Organisation for Animal Health)
Dr Hugh Wirth	World Animal Protection (formerly known as the World Society for the Protection of Animals)
Mr Kevin Shiell	Livestock Industry
Dr Ben Gardiner	Australian Veterinary Association
Ms Julie Groome	Australian Red Cross
Ms Catherine Bryant	Attorney-General's Department – Emergency Management
Ms Jacqui Mills (Member and Secretariat)	World Animal Protection (formerly known as the World Society for the Protection of Animals)
Dr Deb Kelly	Department of Environment , Water and Natural Resources, South Australia - Wildlife
Ms Cathy Pawsey	Department of Environment and Primary Industries, Victoria – Southern Jurisdictions
Mr Peter Phillips	Department of Local Government and Regions, Northern Territory – Northern Jurisdictions
Mr John Madigan	Gold Coast City Council – Local Government
Mr Greg Eustace	Royal Society for the Prevention of Cruelty to Animals, Queensland
Mr Joe Buffone	Country Fire Association, Victoria – Emergency management