Biodiversity 2037 Implementation Framework Progress Report



October 2018



© The State of Victoria Department of Environment, Land, Water and Planning 2018



This work is licensed under a Creative Commons Attribution 4.0 International licence. You are free to re-use the work under that licence, on the condition that you credit the State of Victoria as author. The licence does not apply to any images, photographs or branding, including the Victorian Coat of Arms, the Victorian Government logo and the Department of Environment, Land, Water and Planning (DELWP) logo. To view a copy of this licence, visit creativecommons.org/licenses/by/4.0/

ISBN 978-1-76077-305-2 (pdf/online)

Disclaimer

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

Accessibility

If you would like to receive this publication in an alternative format, please telephone the DELWP Customer Service Centre on 136 186, or email customer. service@delwp.vic.gov.au, or via the National Relay Service on 133 677, www.relayservice.com.au. This document is also available on the internet at www.delwp.vic.gov.au

Contents

Vic	Environments Forum joint foreword statement	2
Abo	original acknowledgement	4
1	Overview	6
1.1	Context	6
1.2	Purpose of this report	6
1.3	Alignment to national and international commitments	6
2	Delivering Biodiversity 2037	8
2.1	Working towards our vision	8
2.2	Progress towards <i>Biodiversity 2037</i> targets	9
3	Showcasing our flagship themes	15
3.1	Nature is good medicine	18
3.2	Steps into nature	19
3.3	Climate-ready ecosystems	22
3.4	Mobilising our ecosystem engineers	23
3.5	Caring for biodiversity on Country	24
3.6	Nature-tech	26
3.7	Protecting biodiversity together	28
3.8	VicEnvironments Forum	30
4	Progressing our priorities	31
4.1	Key programs and achievements	31
5	Delivering the Implementation Framework	33
5.1	Progress against the Implementation Framework	34
Ime	ago Crodits	5 /

VicEnvironments Forum joint foreword statement

In 2017, the Victorian Government set a strong 20 year vision for Victoria's biodiversity to be healthy, valued and actively cared for through the delivery of *Protecting Victoria's Environment – Biodiversity 2037.* To ensure this ambitious but achievable vision is realised, *Biodiversity 2037* outlined 20 key priorities and a blueprint for how we can all work together to stop the decline of our native plants and animals.

Acknowledging the enormous effort required to deliver this vision for all Victorians, the Victorian Government environment portfolio agencies and Traditional Owner partners established a new coalition called the VicEnvironments Forum. The purpose of this forum is to galvanise efforts across the sector to protect Victoria's environment and the thousands of species that call it home.

The native plants and animals of Victoria face significant threats. With considerable shifts in climate, land use and population growth, solving nature's greatest challenges cannot be undertaken by government alone and requires effort from all Victorians. VicEnvironments recognises the substantial efforts of the Victorian community, businesses, universities and not-for-profits in contributing to better outcomes for our natural environment. By working strategically, collaboratively and with a clear vision in mind - that Victoria's biodiversity is healthy, valued and actively cared for - the road map towards a better future has been drawn.

VicEnvironments is a powerful collective that can continue to drive and facilitate change. We already have significant reach and influence that supports and protects Victoria's biodiversity. From the management of our iconic parks and reserves, protection of habitat on private land, and seed banking the rich floral history of our state, to the delivery of community-based conservation campaigns, provision of engaging coastal experiences and catchment-based planning and action - our collective efforts are considerable. VicEnvironments agencies are also collectively embracing the knowledge and practices of our Traditional Owners on Country and working to establish greater connections to Country for all Victorians.

This *Biodiversity 2037* Implementation Framework Progress Report details the achievements of VicEnvironments and partners over 2017/18 and showcases some of the highlights and outputs delivered during that period. We have made a

demonstrable collective effort towards the provision of opportunities for our community to connect with and act for our natural environment. Collectively, we have;

- Engaged over 339,800 students in our nature programs
- Welcomed 113 million people through our gardens, parks, reserves, zoos, jetties and piers, allowing them to experience the beauty of wildlife and wild places.
- Amassed over 371,000 volunteer hours, where citizens have devoted their own time to support our causes and contribute to the goals of Biodiversity 2037.

Our targets that support a healthy natural environment are ambitious and mapped out over a 20 year period, towards 2037. Since the release of *Biodiversity 2037*, 1,449 ha of private land has been registered for permanent protection (200,000 ha target by 2037). In addition, the following has been achieved across priority areas:

- 1.57 million ha of herbivore control (compared to 4 million ha target),
- 705,590 ha of predator control (1.5 million ha target),
- 1.9 million ha of weed control (1.5 million ha target), and
- 359 ha of revegetation (200,000 ha target).

However, we note that delivery has only just begun, with more to be done.

To achieve the greatest overall benefit for our biodiversity, we need to work with each other, with our partners and the community to ensure our future efforts are well targeted and better aligned. As such, we will work towards a program aligned with the priorities of *Biodiversity 2037*. To do this, we need to capture the hearts and minds of all Victorians - to embed a stronger understanding of the value of the natural world both for its own sake and how it provides for our way of life. We look forward to working collectively to establish a nature festival, broaden community participation in nature events and encourage all Victorians to take personal actions that support a healthy environment.



VicEnvironments understands that the challenge ahead of all of us is great and Victoria's native plants, animals and ecosystems that need our help await our response. Together, we are working towards a brighter future. Together, we will continue to use the best available science to implement policies, strategies, programs and initiatives that maximise the biodiversity outcomes from our collective efforts. Together, the VicEnvironments Forum will harness the power of our fellow citizens.

We are committed to our vision that Victoria's biodiversity is healthy, valued and actively cared for, and look forward to working with all Victorians to achieve this.

Together in biodiversity, The VicEnvironments Forum

John Bradley

Secretary Chairperson

Matthew Jackson Chief Executive Officer Parks Victoria

Cathy Wilkinson Chief Executive Officer **Environment Protection Authority** Victoria

Adam Bester Chief Executive Officer Glenelg Hopkins Catchment Management Authority



Jenny Gray Chief Executive Officer Zoos Victoria

Rodney Carter Chief Executive Officer Dja Dja Wurrung Clan

Aboriginal Corporation

Catherine Basterfield Chief Executive Officer Phillip Island Nature Parks

David Brennen Chief Executive Officer Wimmera Catchment Management Authority

Tim Entwistle Chief Executive Officer Royal Botanic Gardens Victoria



Victoria Marles Chief Executive Officer Trust for Nature

Stan Krpan Chief Executive Officer Sustainability Victoria

Aboriginal acknowledgement

The Victorian Government proudly acknowledges Victoria's Aboriginal community and their rich culture and pays respect to their Elders past, present and future.

We acknowledge Aboriginal people as Australia's first peoples, and as the Traditional Owners and custodians of the land on which we work and live.

We recognise the strength of Aboriginal people despite the negative inter-generational impacts of past practices and policies, some of which continue to be experienced today.

We recognise and value the ongoing contribution of Aboriginal people and communities to Victorian life, and how this enriches us all.

We recognise that Aboriginal cultures and communities are diverse, and the value we gain in celebrating these cultures and communities. We acknowledge that the land is of spiritual, cultural and economic importance to Aboriginal people.

We also recognise the intrinsic connection of Traditional Owners to Country and acknowledge their contribution in the management of land, water, the natural landscape and our built environments.

We embrace the spirit of reconciliation, working towards the equality of outcomes and ensuring an equal voice.

We have distinct legislative obligations to Traditional Land Owner groups that are paramount in our responsibilities in managing Victoria's resources.





1 Overview

1.1 Context

Victoria's natural environment is diverse, unique and precious. It has a spectacular array of natural assets - from forests and coastlines, grasslands, mallee shrublands and alpine environments, to green spaces in cities and towns – that support our native plants and animals. As rich and diverse as it is, Victoria's natural environment is not as healthy as it once was. The plant and animal life that makes up our terrestrial, freshwater and marine environments has been under sustained pressure for nearly two centuries, resulting in the degradation and loss of numerous native species and habitats. Victoria is the most intensively settled and cleared state in Australia, with over 50 per cent of the state's native vegetation cleared since European settlement. More recently, climate change has brought new and challenging threats to biodiversity. Our native plants and animals need the best opportunity not only to adapt and survive, but to thrive - particularly in a changing climate.

In April 2017, the Victorian Government launched *Protecting Victoria's Environment - Biodiversity 2037*, (henceforth known as *Biodiversity 2037*) setting a strong vision for Victoria's biodiversity to be healthy, valued and actively cared for. This long-term strategic plan provides the overarching goals for biodiversity and sets out targets and priority actions to stop the decline of Victoria's biodiversity and put it on a path to recovery, while encouraging a greater role for people in valuing and taking action to support our environment. The delivery of *Biodiversity 2037* will ensure that all Victorians can enjoy the benefits of a healthy natural environment now and into the future.

1.2 Purpose of this report

The Biodiversity 2037 Implementation Framework (Implementation Framework) was released in April 2018 and highlights 89 enabling actions that demonstrate how the Victorian Government and key partners will progress the 20 priorities of Biodiversity 2037 over the first four years.

The Implementation Framework stated that annual monitoring and reporting will be undertaken and will include updates to the status of actions and their implementation arrangements. New actions that deliver on Biodiversity 2037 priorities may be added as part of the annual update, as approved by the Minister for Energy, Environment and Climate Change or other relevant ministers.

The purpose of this report is to deliver on this requirement and showcase the efforts and achievements that contribute towards our vision. These achievements are captured under flagship themes (described in Table 1) that contextualise the depth and breadth of the work delivered across the Victorian Government and in collaboration with portfolio partners.

1.3 Alignment to national and international commitments

The Earth Summit in Rio de Janeiro in 1992 was a defining moment for the protection of global biodiversity, whereby the United Nation's Convention on Biological Diversity (CBD) was established - a multilateral treaty for the conservation and sustainable use of biological diversity to address the loss of biodiversity at a global scale. Subsequent meetings of the Conference of the Parties for the CBD instituted a global strategic framework to safeguard life on earth, encompassing 20 Aichi Biodiversity Targets.

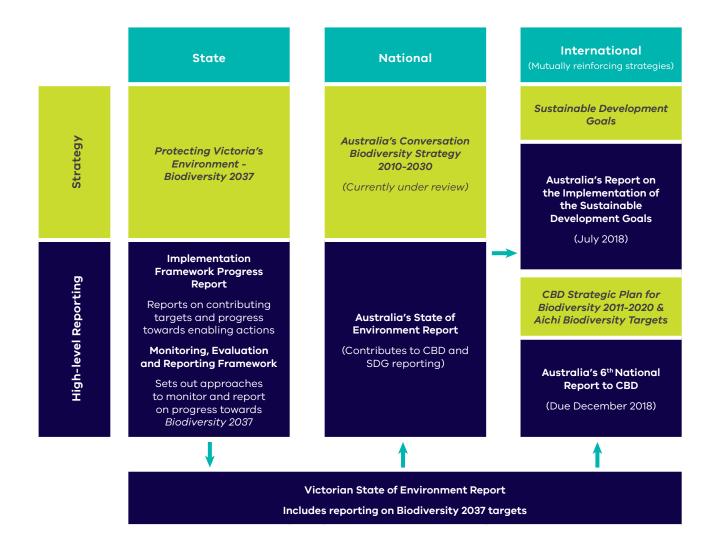
As a signatory of the CBD and associated protocols and targets, Australia's Biodiversity Conservation Strategy 2010-2030 was developed as Australia's principal instrument for the implementation of the convention at a national level. In 2016, Australian State and Territory Environment Ministers agreed to revise this national strategy based on a review of the first five years of operation. Consequently, Australia's strategy for nature 2018-2030: Australia's Biodiversity Conservation Strategy and Action Inventory, was drafted and released for public comment in December 2017.



The vision and goals of *Biodiversity 2037* are consistent with those of the CBD and of the draft Australian Strategy. The priorities for action and clear targets established by *Biodiversity 2037* enable the Victorian Government to contribute to the broader national and international commitments.

Furthermore, the holistic approach to *Biodiversity* 2037 is aligned with the recently established 2030 Agenda for Sustainable Development. Integrating the CBD and Aichi Biodiversity Targets, the Sustainable Development Goals set a new global agenda that aligns the health and prosperity of society with the protection of our planet through resilient, inclusive economies.

Figure 1: Demonstrates alignment and reporting pathways to national and international commitments to biodiversity targets.



2 Delivering *Biodiversity 2037*

2.1 Working towards our vision

Protecting Victoria's Environment – Biodiversity 2037 represents a turning point for Victoria, setting a clear vision that Victoria's biodiversity is healthy, valued and actively cared for.

To achieve this ambitious 20-year vision, *Biodiversity* 2037 has two goals – Victorians value nature, emphasising the importance of nature to society (and vice versa), and Victoria's natural biodiversity is healthy, emphasising an ecosystem focus for actions and early investment.

Launched at the World Public Health Congress in Melbourne in 2017, *Biodiversity 2037* highlights the

connection between the health and wellbeing of our people and the species and habitats entrusted in our care. *Biodiversity 2037* sets priorities to deliver on both social and biological goals to support the conservation, protection and careful management of our natural environment. Our success will be measured and evaluated against statewide targets that align with our vision that Victoria's biodiversity is healthy valued and actively cared for.

An *Implementation Framework* was developed that outlines 89 enabling actions to support the delivery of the priorities and goals of *Biodiversity 2037*. Section 5 of this report summarises progress towards the enabling actions.

Figure 2: Framework for Protecting Victoria's Environment - Biodiversity 2037

Vision: Victoria's biodiversity is healthy, valued and actively cared for Goal: Victorians value nature Statewide Targets Priorities: Twenty priorities were identified to deliver on the goals, and the Implementation Framework aligned enabling actions to the priorities (see Figure 4).



2.2 Progress towards *Biodiversity 2037* targets

Biodiversity 2037 developed statewide targets for the two goals of the plan, as outlined in the table below, along with contributing targets.*

As stated in *Biodiversity 2037*, the Commissioner for Environmental Sustainability's five-yearly *State of the Environment report* will include reporting on progress towards these targets. To complement this process, this section of the report outlines progress towards the enabling actions (Victorians value nature) and contributing targets (Victoria's natural environment is healthy).

Table 1: Statewide targets aligned to goals (by 2037)

Victorians value nature

- All Victorians connecting with nature
- Five million Victorians acting to protect the natural environment
- All Victorian Government organisations that manage environmental assets contribute to environmental-economic accounting

Victoria's natural environment is healthy

A net improvement in the outlook across all species, as measured by Change in Suitable Habitat, with the expected outcomes being:

- That no vulnerable* or near-threatened species will have become endangered.
- That all critically endangered* and endangered species will have at least one option available for being conserved ex situ or re-established in the wild (where feasible under climate change) should they need it.
- A net gain of the overall extent and condition of habitats across terrestrial, waterway and marine environments.
- * Based on assessments carried out under the IUCN Red List categories and criteria.

^{*} The Victorians value nature goal committed to enabling actions that will guide the establishment of contributing targets within the first five years after the release of *Biodiversity 2037*.

Victorians value nature

The following enabling actions recognise the importance of conducting research and collecting data to determine where, how and why Victorians connect to and act for the natural environment.

Moreover, research conducted will help us better understand which Victorians are not engaged in this way. Collection of this information will help ensure that quantifiable contributing targets for this goal can be set for the subsequent five-year periods, and that these are both relevant and achievable.

Enabling actions

In the first five years:

Initiate pilot programs

to connect and engage people with nature

Establish reliable baselines

about Victorians' awareness of biodiversity, connection with nature, and current activities to protect the natural environment

Develop a campaign

to raise awareness about Victoria's biodiversity, and to increase opportunities to connect with nature and act to protect the natural environment

So that by 2022:

Additional contributing targets

are established, informed by baseline data

More people are undertaking effective action

for the environment, including through citizen science

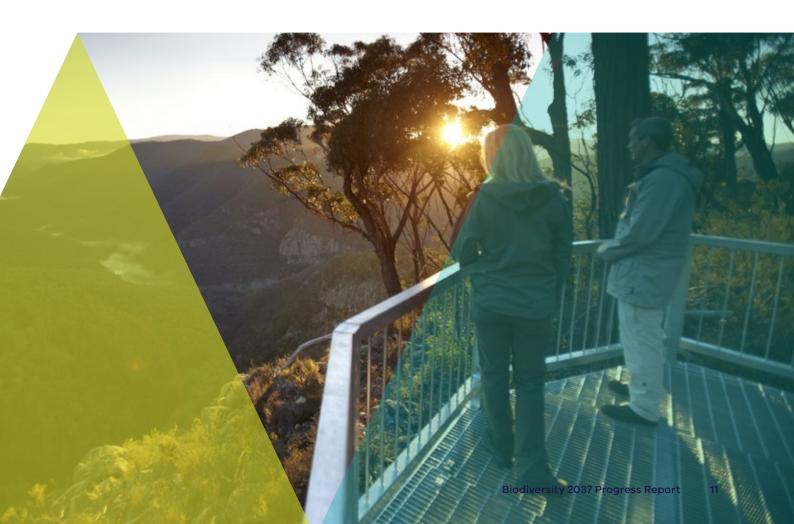
Environmentaleconomic accounting

is adopted by all environment portfolio agencies and more businesses are engaged in the benefits To meet these targets, a foundation survey is being undertaken in collaboration with BehaviourWorks Australia, Monash University. It has been designed to gain an understanding of the following:

- Victorian public's level of connection to nature
- level of pro-environmental behaviours
- the barriers to connecting with nature and acting to protect the natural environment, and
- the importance placed on (or understanding of) a healthy natural environment.

Data will inform where government invests time and money and the types of behaviour change interventions and programs we choose to run and promote. A conceptual framework has also been developed that describes the relationship between people connecting with nature, valuing nature and acting to protect or enhance biodiversity. This will be further refined using the data from the foundation survey. In parallel, measures and key performance indicators are being developed that will help to describe the contribution of existing and future projects and programs to support the Victorians valuing nature targets.

Work to date has also focussed on understanding what programs already exist and how they contribute to the targets, along with implementing the Victorian Memorandum on Health and Nature.





Victoria's natural environment is healthy

Biodiversity 2037 outlines a statewide target of "a net improvement in the outlook across all species by 2037, as measured by Change in Suitable Habitat". Change in Suitable Habitat (CSH) is the Victorian Government's new key performance indicator that allows comparisons to be made between many combinations of species, places and actions. CSH is the increase in the likelihood that a species will persist at a location at a future time (e.g. 50 years) in response to sustained management of relevant threats. It is expressed as the proportional increase (percentage) in hectares of suitable habitat a species has received under a sustained management regime, compared with no management.

The CSH is supported by contributing targets (outlined on page 13) that highlight the actions that need to be established and maintained in order for the CSH target to be achieved. The contributing targets identify the appropriate type and amount of management in priority locations that needs to be achieved, as soon as possible, and maintained over

the 20-year life of the plan. These are set through new tools developed to identify strategic areas to undertake management action. If effort slows or stops, in some cases even for a short time, the gains made over the preceding years of effort could be lost. The better aligned actions are to the priority locations, and the sooner the actions to deliver the contributing targets are implemented and sustained, the more likely it is that the statewide targets will be achieved. The contributing targets will be reviewed every five years to ensure they reflect the right actions to help us achieve success.

Table 2 outlines indicative progress towards the contributing targets based on collation and analysis of the DELWP standard output data. It shows that there is already significant alignment of some key management actions with priority locations.

Further progress towards the statewide targets and these contributing targets could be made by increased alignment of actions in priority locations (including combination of actions), total threat control and increased extent and duration of management.

Contributing targets:

4 million hectares

of pest herbivore control in priority locations by 2037

1.5 million hectares

of pest predator control in priority areas by 2037

1.5 million hectares

of weed control in priority locations by 2037

200,000 hectares

of revegetation in priority areas for connectivity between habitats by 2037

200,000 hectares

of new protected areas on private land by 2037

Table 2: Progress towards contributing targets

		Contribution <i>Biodiversity</i>	Actions across the State		
Action		Hectares of action in priority locations	Target ha of actions in priority locations by 2037	Total hectares of action in priority and other locations across the State	
III.	Herbivore control	1,572,725 ha	4,000,000 ha	6,979,935 ha	
	Pest predator control	705,590 ha	1,500,000 ha	2,475,713 ha	
Weed control		1,916,350 ha	1,500,000 ha	4,223,328 ha	
Revegetation for habitat connectivity		359 ha	200,000 ha	65,217 ha	

Since the release of *Biodiversity 2037*, 1,449 ha of private land has been registered for permanent protection, against the target of 200,000 ha by 2037.

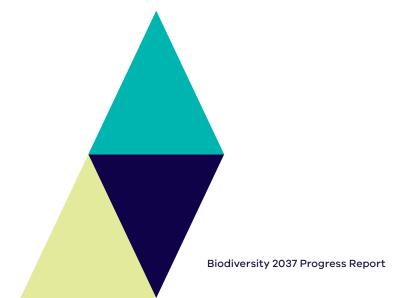






Table 3: Mapping the 89 enabling actions from the *Implementation Framework* against flagship themes and priorities identified in *Biodiversity 2037*.

	Al	ignment of Priori	ties against the flagship themes	1	2	3	4	5	
	6	Nature is good medicine	Helping Victorians take advantage of the many health benefits of connecting with and protecting nature				4.4, 4.5, 4.6, 4.7, 4.8		
	8	Steps into nature	Helping Victorians take steps into nature and explore the wonders of Victoria's biodiversity				4.2, 4.3, 4.9	5.4, 5.6	
	Ö	Climate-ready ecosystems	Trialling and implementing innovative approaches that will help Victoria's plants and animals adapt to climate change	1.5, 1.6					
Ω	ر چې د کوي	Mobilising our ecosystem engineers	Helping our native wildlife apply their ecosystem roles to restore and maintain healthy, functioning environments	1.3					
Flagship		Caring for biodiversity on Country	Help Victoria's Traditional Owners participate in biodiversity management in a holistic manner that recognises their aspirations to heal Country				4.1		
	9	Nature-tech	Providing access to a kit of applications that can help map plants and animals, determine management interventions and record on-ground actions	1.1, 1.2, 1.4	2.1, 2.2, 2.3, 2.5				
	9	Protecting biodiversity together	Collaboratively protecting biodiversity using cutting edge science to support on-ground action	1.7	2.4			5.1, 5.2, 5.5	
	9	VicEnvironments	The Victorian Government's environment portfolio agencies and Traditional Owner partners working as one to protect Victoria's environment and its biodiversity			3.1, 3.2, 3.3	4.10	5.3	
		Total		7	5	3	10	6	

See Section 5.1 for progress against these enabling actions.

Priorities List:

- Deliver cost-effective results utilising decision-support tools in biodiversity planning processes to help achieve and measure against the targets
- Increase the collection of targeted data for evidencebased decision making and make all the data more accessible
- 3. Raise the awareness of all Victorians about the importance of the state's natural environment
- 4. Increase opportunities for all Victorians to have daily connections with nature
- 5. Increase opportunities for all Victorians to act to protect biodiversity
- 6. Embed consideration of natural capital into decision making across the whole of government, and support industries to do the same
- 7. Help to create more liveable and climate-adapted communities
- Better care for and showcase Victoria's environmental assets as world class natural and cultural tourism attractions
- 9. Establish sustained funding for biodiversity
- Publish an Investment Prospectus to communicate to prospective investment partners the funded, unfunded and partially-funded projects that are needed to meet the targets

6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	7.1	8.6, 8.7, 8.8												20.3
	7.2, 7.3										17.6			
		8.3, 8.4									17:1, 17:4, 17:9		19.5	
							13.2	14.1, 14.2, 14.4	15.1, 15.2	16.1				
						12.2, 12.4					17.2, 17.7			
		8.1, 8.2	9.1	10.1, 10.2	11.1, 11.2, 11.3	12.1, 12.3	13.1				17.3, 17.5, 17.8, 17.10	18.1, 18.2	19.3, 19.6	20.1, 20.2
6.1, 6.2, 6.3	7.4, 7.5, 7.6	8.5						14.3					19.1, 19.2, 19.4	20.4
3	6	8	1	2	3	4	2	4	2	1	10	2	6	4

- 11. Increase incentives and explore market opportunities for private landholders to conserve biodiversity
- 12. Adopt a collaborative biodiversity response planning approach to drive accountability and measure improvement
- 13. Support and enable community groups, Traditional Owners, non-government organisations and sections of government to participate in biodiversity response planning
- Engage with Traditional Owners to include Aboriginal values and traditional ecological knowledge in biodiversity planning and management
- 15. Support Aboriginal access to biodiversity for economic development
- 16. Build capacity of Aboriginal participation in biodiversity management
- 17. Deliver excellence in management of all public land and waters
- 18. Maintain and enhance a world-class system of protected areas
- 19. Adopt a whole-of-government approach to implementing this plan
- Establish a transparent evaluation process to report on progress towards delivering this plan

3.1 Nature is good medicine



Nature is good medicine

Helping Victorians take advantage of the many health benefits of connecting with and protecting nature

The need for all Victorians to connect with nature has never been greater. The message is clear – connecting with nature enriches our lives, improves our health and wellbeing, and drives positive environmental attitudes and values that can promote a lifelong positive relationship with nature.

Evidence shows that connecting with nature is linked to positive long-term health outcomes including physiological benefits from improved fitness and psychological benefits from improved attentional capacity and stress reduction. Spending time playing and learning outdoors provides children with developmental benefits including improved mental health, resilience and social connection. Playing in nature, particularly unstructured play, is increasingly recognised as an essential component of child development.

Of course, there is nothing new about Victorians connecting with nature. For thousands of years, Victoria's Traditional Owner communities have defined their identity and spirituality by their connection to Country.



Case study: Nature is good medicine

In August 2018, Parks Victoria convened a Nature is Good Medicine Summit, bringing together over 100 senior decision makers across the health and environment sector, state government, NGOs and industry to discuss nature-based health solutions to address key health challenges.

"There is an ever-increasing demand for nature-based health and wellbeing programs and services, and having Health Rangers within parks makes great sense."

Simon Talbot, Chief Operating Officer, Parks Victoria

3.2 Steps into nature



Steps into nature

Helping Victorians take steps into nature and explore the wonders of Victoria's biodiversity

Biodiversity 2037 encourages all Victorians to connect with nature to receive the health and wellbeing benefits it provides (see section 3.1), but also as a way of building or increasing their appreciation of the natural environment so that they are more likely to value it and act to protect it. Across

Victoria, there are individuals, communities and organisations committed to providing opportunities for Victorians to connect to nature through exploration and discovery. As outlined in the joint foreword, the Victorian Government environment agencies have provided an array of opportunities for our community to connect with and act for our natural environment. Over 339,800 students have engaged in our nature programs, over 113 million people walked through our gardens, parks, reserves, zoos, jetties and piers, allowing them to experience the beauty of wildlife and wild places. Collectively we have amassed over 371,000 volunteer hours, where citizens have devoted their own time to support and contribute to the priorities and vision of *Biodiversity* 2037. Below are some highlights from 2017/18 of how our Victorian Government agencies are contributing towards this flagship.

ROYAL BOTANIC GARDENS VICTORIA

4,000 families

engaged in *Botanica* across eight days at at the Royal Botanic Gardens in Melbourne and Cranbourne, building cubbies from plant materials.





ZOOS VICTORIA

Nature Connect experiences delivered across Victoria that engaged communities in beach clean-ups which included over

800 participants

and

7,400+ collective hours



WIMMERA CATCHMENT MANAGEMENT AUTHORITY

96,956 citizens

participating in locally run events.

SUSTAINABILITY VICTORIA

38,642 plants

in the ground under the Resource Smart Schools program.



PARKS VICTORIA

Parks Victoria has completed it's Volunteering in Parks Strategic Plan, increasing volunteer participation to more than

280,000 hours



PHILLIP ISLAND NATURE PARKS

739,000 people

witnessed the special nightly event of the Penguin Parade. Creating new opportunities for people to connect with the story of the Little Penguin in conjunction with improving its habitat has allowed the penguin population to thrive.

TRUST FOR NATURE

Monthly open days

scheduled on private conservation properties over Spring, showcasing the value of conservation covenants and the efforts of private land holders.



3.3 Climate-ready ecosystems



Climate-ready ecosystems

Trialling and implementing innovative approaches that will help Victoria's plants and animals adapt to climate change

We live in a changing environment that is increasingly affected by climate change. The impacts of climate change are predicted to continue to alter natural processes and regimes in sometimes unpredictable ways, which may mean that current

management methods to conserve species and habitats become less effective over time. While we can be certain that climate change will cause significant and widespread changes to biodiversity and natural ecosystems over time, the exact nature and scale of changes and the degree to which individual species, populations and ecological processes can adapt is still uncertain.

To ensure the success of *Biodiversity 2037*, there needs to be a key focus on trialling and implementing innovative approaches that will help Victoria's plants and animals adapt to climate change. This includes utilising the best available climate science to help us better understand the likely impacts of climate change on key species and ecosystems, and trial management actions that will maximise their adaptive capacity.



Case study: From grey to green: nature-based solutions for coastal protection

Involving a partnership between The City of Greater Geelong, The National Centre for Coast and Climate at the University of Melbourne and the Port Phillip Eco Centre, this project is pioneering an innovative approach to marine engineering.

Coastal land and associated communities are increasingly threatened by erosion and inundation hazards, due to the impacts of climate change. Point Richards, just outside of Portarlington on the Bellarine Peninsula, has been the site of significant coastal erosion in recent years. Local residents were becoming increasingly concerned about the safety of their homes with 20-30 metres of foreshore having been washed away despite a range of interventions having been attempted by the local council

The situation inspired the senior environmental engineer at the City of Greater Geelong to consider the possibility of using a cutting edge,

environmentally sustainable approach to the development of marine structures.

In collaboration with Professor Stephen Swearer at The National Centre for Coast and Climate at the University of Melbourne, Ralph used seed funding from the Victorian Government's Port Phillip Bay Fund to develop a concept for a submerged breakwater or artificial reef that would not only protect the foreshore from strong winds and high wave energy but also encourage marine habitat creation and restoration. This is an innovative departure from the more common solution of creating a structure like a stone groynes that may impact negatively on the coastal aesthetic as well as the marine ecosystem.

The monitoring process is still in the very early stages, however, there are convincing signs that the artificial reef is working to protect and restore the shoreline, providing habitat for marine life.

3.4 Mobilising our ecosystem engineers



Mobilising our ecosystem engineers

Helping our native wildlife apply their ecosystem roles to restore and maintain healthy, functioning environments Ecosystem engineers are species whose presence and behaviour change the habitat and, in turn, can influence both species richness and system function across a landscape. The historic introduction of pests including the Red Fox and feral cats has resulted in the loss of native species such as small ground dwelling mammals that perform important functions such as soil turnover and consumption of vast numbers of invertebrates.

Restoring natural ecosystems isn't easy, but with innovative thinking, strong collaboration and a better understanding of the role of key native species that act as engineers, we can reshape the landscape to create and maintain healthy functioning ecosystems.



Case study: Eastern Barred Bandicoots bouncing back across the landscape

Small digging animals such as Eastern Barred Bandicoots are known to turn-over significant amounts of soil through foraging. This provides an important ecosystem function in reducing soil compaction and increasing moisture infiltration, which can influence vegetation dynamics across the landscape.

The Eastern Barred Bandicoot Recovery Team is a collaborative partnership with a common goal

to bring the bandicoot back from the brink of extinction. The team is involved in a range of innovative approaches to secure a future for this species, including gene-pool mixing of Victorian and Tasmanian sub-species, the use of guardian dogs to mitigate the impact of feral predators, and introductions onto island sanctuaries in Western Port Bay. As bandicoot populations are restored, so too is their function in supporting Victoria's native grasslands to thrive.

3.5 Caring for biodiversity on Country



Caring for biodiversity on Country

Help Victoria's Traditional Owners participate in biodiversity management in a holistic manner that recognises their aspirations to heal Country

Caring for biodiversity on Country

Biodiversity 2037 recognises the intrinsic connection of Traditional Owners to Country, and its fundamental value in supporting their health and wellbeing. It aims to increase Aboriginal Australians' access to biodiversity and participation in biodiversity management, and in so doing, create opportunities for economic advancement.

The DELWP Traditional Owner and Aboriginal Victorian groups grants program launched in mid 2018 is providing 21 small-scale project grants up to \$30,000 to undertake projects that improve the role of Aboriginal people in biodiversity management.

Case Study: Dja Dja Wurrung in Landscape

The Dja Dja Wurrung in Landscape project, was launched in 2017 with funding from the DELWP Biodiversity On-Ground Actions - Hubs program. Involving collaboration between the Dja Dja Wurrung Clans Aboriginal Corporation, Parks Victoria and DELWP Forest, Fire and Regions, this project encapsulates *Biodiversity 2037's* commitment to ensure Traditional Owners and Aboriginal Victorians are equal partners in biodiversity planning and management.

This project represents the first step in a major, long-term process to address declines in biodiversity throughout the Dja Dja Wurrung Recognition and Settlement Agreement area as a result of agriculture, mining, grazing and invasive species.

The project also presents an important opportunity for Dja Dja Wurrung people (Djaara) to learn about and engage in biodiversity management practices. Through delivering Country management using cultural practice, the level of engagement with Djaara and the wider community has dramatically increased.

An example of how cultural practice has been able to empower and mobilise Djarra has been through the delivery of Djandak Wii (Country fire) on private land. This year a number of Wii have been conducted over multiple days. With a number of these, after the first day, word got out that traditional Aboriginal fire management

practices were being utilised in the right way and participation from volunteers increased on the second day of burning with one volunteer driving over 300km to participate.

Project Lead Nathan Wong, Program Manager Natural Resource and Cultural Heritage Management at Dja Dja Wurrung Enterprises Pty Ltd believes that the conservation and restoration of both cultural practice and biodiversity are inextricably entwined. In his words, "whilst investing in biodiversity conservation alone doesn't necessarily assist with the restoration of cultural practice, investing in cultural practice most certainly increases and enriches Victoria's biodiversity conservation capacity and capability."

"...investing in the cultural heritage of Traditional Owners most certainly increases Victoria's biodiversity conservation capacity and capability."

- Nathan Wong, Project Lead, at Dja Dja Wurrung Enterprises Pty Ltd



3.6 Nature-tech



Nature-tech

Providing access to a kit of applications that help map plants and animals, determine management interventions and record on-ground activities

Biodiversity 2037 sets the ambitious vision that Victoria's biodiversity is healthy, valued and actively cared for. To achieve this vision we must be doing the right actions in the right places to maximise the benefits from our efforts.

Nature-tech provides access to a kit of applications that enable us to share tools, knowledge and information that can help to:

- build a better understanding of where native plants and animals occur across the state;
- navigate the benefits of different actions and inform how and where to focus efforts so that we deliver cost-effective results; and
- account for the influences of climate change and enable consideration of various scenarios, thereby helping with adaptive management.

Nature-tech will enable the identification of strategic management actions that focus on multiple species and can prevent many vulnerable and common species from entering the endangered category, and provide co-benefits to endangered and near threatened species.

It will also enable access to new technology that helps people connect with nature, such as the *More to Explore* application, and find opportunities to act to protect our nature environment.



Case study: The Victorian Biodiversity Atlas is now mobile: Introducing Vba Go.

Citizen science can be a powerful way for people to connect with nature and support its protection through knowledge acquisition and sharing. It offers the opportunity to become involved in, and contribute to, meaningful scientific projects.

A mobile version of the Victorian Biodiveristy Atlas, Vba Go, was launched in February 2018, enabling all Victorians to contribute to and share records of our native species while out and about in nature.

Vba Go is a new mobile tool that links directly to the Victorian Biodiversity Atlas, providing a simple, quick and easy to use interface for anyone to submit observations on Victoria's native species. Hundreds of new observations and images have been submitted since the launch with partner organisations, such as Melbourne Water, Parks

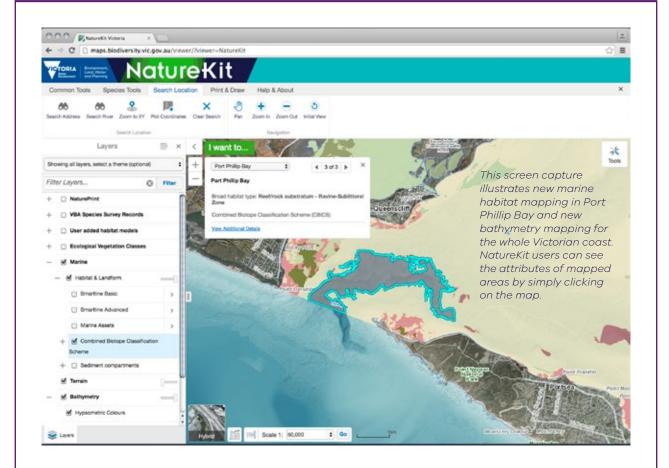
Victoria and several Local Government Authorities, who are now using this tool as their 'go to' for staff out and about in the bush.

Recent records collected include Royal Spoonbils in Marlo, East Gippsland and Yellow-footed Antechinus in Wooragee (pictured).

Get involved by joining today at https://vbago.science



Case study: Launching next-generation toolkits to showcase visualisation and support decision-making for biodiversity across Victoria.



NatureKit is a new statewide web-based information toolkit for biodiversity mapping, decision-support and reporting. It leverages the power of big data so that detailed information about biodiversity can be validated and the outcomes of potential actions can be modelled.

Through NatureKit, all Victorians can view species distribution maps and observations, identify features of the landscape, create printable pdfs, maps and images. Species information accessed through NatureKit provides insights into flora and fauna distribution, native vegetation, disturbance and land administration classification.

Unlike previous mapping systems, NatureKit will enable biodiversity professionals and the public to understand which on-ground management options, at which locations, will benefit what species or ecosystems. NatureKit will evolve to support decisions on where effort and investment can be made for the best biodiversity outcomes.

Moving offshore, DELWP is also developing CoastKit, a web-based information toolkit focused on improving our understanding of Victoria's marine and coastal processes.

CoastKit will collate detailed marine and coastal biological data and information such as marine bathymetry, vulnerability to erosion, sea level rise and marine habitat mapping. Users will be able to collate this information into charts, graphs and survey statistics to discover Victoria's marine biodiversity values, coastal features and hazards, as well as identify coastal assets such as sea walks and jetties.

NatureKit, and soon, Coastcare can be accessed by anyone with training tips and tools available at https://www.environment.vic.gov.au/ biodiversity/naturekit

(best experienced with Chrome or Firefox)

3.7 Protecting biodiversity together



Protecting biodiversity together

Collaboratively protecting biodiversity using cutting edge science to support on-ground action

Everyone has a role to play in protecting biodiversity, and many thousands of Victorians already actively do so. Despite their efforts, Victoria's biodiversity is

still in decline. The success of Biodiversity 2037 relies on a collaborative and cooperative approach from all partners and stakeholders to ensure our investment and actions are not only aligned, but are contributing to the positive change towards achieving our targets.

Across the state, people and organisations are taking part in true collaboration and making the most of collective efforts, they are aligning work and sharing knowledge and information. They are utilising the funding available to biodiversity efficiently and effectively and reducing competition by having shared objectives and priorities.



Case study: **Biodiversity Response Planning**

Biodiversity Response Planning (BRP) establishes a new collaborative, area-based biodiversity planning approach designed to strengthen alignment and participation between government agencies, Traditional Owners, non-government organisations and the community. In true collaborative style, the approach to BRP was co-designed with over 100 stakeholders.

Since February 2018, a diverse array of community groups, Traditional Owners, government and non-government partners from across Victoria have participated in BRP and worked together to recommend a package of projects for funding that directly contribute to the targets of *Biodiversity 2037*. Their decisions about which on-ground actions to do where, was informed by integrated biodiversity data, new information and decision-making tools such as Strategic Management Prospects, local knowledge, community and cultural values. This is a step change in how we invest in protecting our precious biodiversity.

The project recommendations were completed in June 2018, paving the way for \$33.67 million to be committed for on-ground biodiversity actions and \$1.1 million for Marine Environment Target

Actions. These initiatives will be delivered over the coming three years by various government and non-government partners.

Although this first phase of BRP was focused on the goal 'Victoria's natural environment is healthy', this process will be used to make active contributions to the planning and delivery of the 'Victorians value nature' goal - critical to the success of *Biodiversity 2037*.

Next Steps

The evaluation of this initial phase of BRP has commenced, led by an independent evaluation expert. This process will be an opportunity for participants and interested stakeholders to share their perspectives on what worked well and what did not. This will help us to make improvements to the delivery of BRP in 2019 and beyond.

The BRP stakeholder co-design report sets out the general approach for future phases of BRP and this will be used to guide its implementation, in conjunction with the results of the BRP Phase 1 evaluation. A report from the evaluation will be publicly available in 2018.



The Biodiversity Response Planning process has improved collaboration across the biodiversity sector, and will deliver:

- Landscape scale projects that seek to maximise the benefits for the most number of species across our varied landscapes (e.g. woodlands, grasslands, forests, alpine areas, wetlands, riparian areas and coasts), resulting in:
 - 1.02 million ha of herbivore control (e.g. rabbits, goats, pigs),
 - 0.594 million ha of pest predator control (e.g. foxes),
 - 0.349 million ha of weed control,
 - 3,494 ha of revegetation and restoration, and
 - 2,040 ha of permanent protection on private land.

- Actions focussed on protecting our threatened species such as the South-Eastern Red Tailed Black Cockatoo, Mountain Pygmy Possum, Major Mitchells Cockatoo, threatened Galaxiid species, the southern Brush-tailed Rock-wallaby, Spottailed Quoll and the Eastern Bristlebird;
- Innovative approaches to address key threats, where there are not yet practical or feasible landscape scale management options available. Examples include the development of eDNA technology for conservation of threatened invertebrates of the Western Strzeleckis, deer management in the Grampians and Lake Tyers, and feral cat management in the Mallee, Grampians, Wilsons Promontory and the Victorian Alps.



3.8 VicEnvironments Forum



The Victorian Government's environment portfolio agencies and Traditional Owner partners working as one to protect Victoria's environment and its biodiversity

















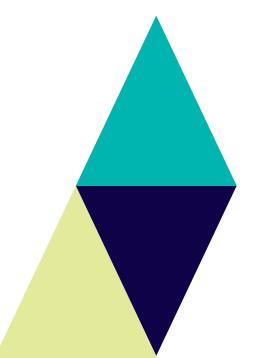






A new coalition of portfolio partners alongside the Victorian Government have convened the VicEnvironments Forum (VEF) to ensure that *Biodiversity 2037* is delivered in a collaborative, collegiate manner. VEF will undertake this task by providing support to the Secretary of the Department of Environment, Land, Water and Planning (DELWP) on the alignment and planning of the actions of the Victorian Government environment portfolio agencies to achieve the goals and targets of *Biodiversity 2037*.

VEF will also assist with decisions on how the strategy is to be implemented and evaluated, and will provide advice and recommendations for new plans established every four years. It will do this by working with a broad range of experts and stakeholders and will rely on the most up-to-date science and data, bringing in other conservation not-for-profits, NGOs and universities to work on critical projects.



4 Progressing our priorities

This section outlines a snapshot of some of the key programs and achievements that highlight the depth and breadth of action that supports progress against the priorities of *Biodiversity 2037*, which in turn, will enable us to realise our vision.

4.1 Key programs and achievements

Feral cat declaration

On 26 July 2018, the Victorian Government declared the feral or wild population of the cat (feral cat) an established pest animal on specified Crown land in Victoria under the Catchment and Land Protection Act 1994.

Feral cats have been declared a pest on Crown land managed by the Department of Environment, Land, Water and Planning, Parks Victoria, Phillip Island Nature Parks and the four Alpine Resort Management Boards to ensure that action can be directed to areas that will best protect our most at risk native species.

Feral cats have a major impact on Victoria's biodiversity and are one of the most significant threats to our native wildlife. The declaration is an important milestone in protecting them.



Brush-tailed Rock Wallaby

They've been captured on camera, trapped and tagged, and numbers are looking better than ever for the critically endangered Southern Brush-tailed Rock wallabies in the Little River Gorge in far East Gippsland. In 2005, this remote colony consisted of no more than 10 wallabies. There are now 41 known animals, 30 of which have been trapped and health-checked over the past year.

There are now more breeding age females in the gorge than at any time in the past 30 years. This is exciting news, showing that the population is stable and surviving.

Work to support the recovery of this elusive wallaby will continue with:

- Twice-yearly monitoring and trapping
- Ongoing baiting and monitoring for predator control with the Southern Ark program and Parks Victoria
- Refurbishment of remote cameras
- 25 new purpose-built traps placed at sites in the north and east of the Snowy River Gorge
- Genetic analysis to help identify priority animals for the captive breeding program.

Thanks to all the individuals, groups and organisations who continue to make a tireless contribution to this program, including the Wildlife Unlimited team, the Southern Ark team, Parks Victoria staff, Tidbinbilla Nature Reserve, Mt Rothwell's Biodiversity Centre and the National Recovery Team.

Victorians Volunteering for Nature – Environmental Volunteering Plan (EVP)

Victorians have long been acting to protect their environment. Over the past four decades, a diverse number of environmental volunteering groups and programs have emerged, with an estimated 100,000 Victorians participating in environmental volunteering.

Victorians Volunteering for Nature – Environmental Volunteering Plan (EVP) was launched by the Victorian Government in October 2018 and takes a fresh look at environmental volunteering to ensure all Victorians can volunteer for nature when, where and how it suits us. It outlines four focus areas to address the challenges and issues currently experienced by the sector and offers ways to overcome barriers to attracting new volunteers. The key focus areas are: i) sustain, ii) expand, iii) value, iv) understand.

This plan was developed by DELWP in consultation with Victorian environmental volunteer groups, portfolio agencies and peak bodies. Over the past year we have researched the sector, talked to stakeholders and received feedback through our environmental volunteering survey to pinpoint the most significant challenges for the sector and how to resolve them.

The Victorian Government will work on the actions and ideas in this plan to move towards a revitalised environmental volunteering sector, with more Victorians valuing and actively caring for our natural environment.

Victorian Junior Landcare and Biodiversity Grants

Victorian Junior Landcare and Biodiversity Grants focus on enabling and engaging younger Victorians in valuing and actively caring for their natural environment. The grants provide funding for projects that:

- Improve biodiversity through the development, improvement or restoration of habitat for Victoria's native plants and animals; and/or
- Increase opportunities to educate, involve and engage the younger generation in valuing and actively caring for Victoria's natural environment.

All of the projects encourage younger Victorians to participate in outdoor, hands-on, on-ground projects and environmental learning activities that provide environmental, educational, health and social outcomes.

Recently, the Victorian Government announced \$413,115 of funding to 109 projects, being delivered in partnership with Landcare Australia. The grants support Victorian primary and secondary schools, kindergartens, preschools, childcare centres, scouts and guides and other youth group, including specialist schools and groups working with culturally and linguistically diverse communities.

A Grassland reserve for the golden sun moth

Under the Melbourne Strategic Assessment, Truganina South Golden Sun Moth Nature Conservation Reserve has been established and active management commenced. To date, 1,264ha of Western Grassland Reserve has been acquired and is now actively managed for conservation, comprising 8.4% of the 15,000ha reserve target.



5 Delivering the Implementation Framework

The purpose of this section of the report is to provide an overview of progress to date for each of the 89 enabling actions listed in the *Implementation Framework*. Each of the enabling actions and contributing organisations are listed with a status update and example of activities that have been delivered up to September 2018.

5.1 Progress against the *Implementation Framework*

Enal	bling action	Status and highlights as at September 2018	Contributing Organisations		
	rity 1: Deliver cost-effective res esses to help achieve and mea	ults utilising decision-support tools in biod sure against the targets.	liversity planning		
1.1	Launch Strategic Management Prospects to guide biodiversity decision-making. The tool will be supported by training materials and continuously improved with the incorporation of new data and user feedback.	Commenced – Strategic Management Prospects was launched and used to inform biodiversity decision-making for Biodiversity Response Planning Phase 1 and for forest management in 2018. New data and user feedback will continue to be incorporated into the tool and new training materials developed as part of the continuous improvement process.	Department of Environment, Land, Water and Planning		
1.2	Assist community groups to upload historic biodiversity survey data into the Victorian databases such as the Victorian Biodiversity Atlas, to help improve decision making tools such as Strategic Management Prospects.	Commenced – VBA Go launched February 2018. The application facilitates data collection for the Atlas. Eight training sessions have been held across Victoria.	Department of Environment, Land, Water and Planning		
1.3	Develop a cost-benefit framework to identify the most realistic conservation options for our most endangered species, in the context of threats such as climate change.	Commenced – A plan has been developed for the three year project. Staff have been appointed.	Department of Environment, Land, Water and Planning		
1.4	Review the availability of existing digital engagement tools that help Victorians connect with or act to protect nature and identify opportunities to enhance or integrate these systems.	Commenced – 'More to Explore' application launched in December 2017. This application aims to provide comprehensive information to help people enjoy Victoria's State forests, visitor sites and recreational trails. Parks Victoria has developed a digital engagement strategy to enhance visitor experiences.	Department of Environment, Land, Water and Planning		
1.5	Establish a multi-agency natural resource management climate adaptation network that links research, planning and action across partner organisations.	Commenced – The Victorian Catchment Management Authority's Natural Resource Management Planning for Climate Change Forum is in operation, supported by the CMA CEO's and the CMA State-wide Climate Change Coordinator. This Forum provides an opportunity to share information, link with researchers, identifies climate adaptation priorities and undertakes state-wide projects.	Catchment Management Authorities		

Enab	oling action	Status and highlights as at September 2018	Contributing Organisations
1.6	Use the best available climate science to better understand the likely impacts of climate change on key species and ecosystems, and trial management actions that will maximise their adaptive capacity.	Commenced – Work has commenced on preliminary assessments to identify threatened species at greatest risk from habitat loss, whilst adaptation action plans are being developed for key ecosystems vulnerable to climate change.	Department of Environment, Land, Water and Planning
1.7	Implement adaptive management and planning for key Victorian environmental assets through: • The final Port Phillip Bay Environmental Management Plan • Conservation Action Plans for the Parks Victoria estate • Conservation Planning for Trust for Nature priority areas • Healthy Country Planning for Traditional Owner Country	Commenced – Conservation Action Plans have been finalised for parks and reserves within Wilsons Promontory, Grampians and Wimmera landscapes. The Port Phillip Bay Environmental Management Plan is being implemented. Parks Victoria has supported Dja Dja Wurrung to adopt a Healthy Country Planning approach in preparing an update of its Country Plan. Work has also begun with the First People of the Millewa-Mallee using Health Country Planning methodology.	Parks Victoria, Trust for Nature, Catchment Management Authorities, Department of Environment, Land, Water and Planning

Enabling action

Status and highlights as at September 2018

Contributing Organisations

Priority 2: Increase the collection of targeted data for evidence-based decision making and make all data more accessible.

2.1 Fill critical biodiversity knowledge gaps by funding and coordinating research and long-term monitoring programs.

Commenced – Successful launch of Hortflora website in 2018. Hortflora is a comprehensive identification and information resource for plants grown in Victorian gardens, including native Australian plants. This product will encourage greater diversity and better selection of plants in home and public gardens.

Landscape surveys of priority forest-dependent threatened species are being undertaken by scientists at the Arthur Rylah Institute to improve our understanding of distribution, abundance and habitat correlates. Work is also commencing to develop spatial-explicit analyses of population viability to support decision making regarding forest management. This work is being led by researchers at Melbourne University in collaboration with scientists at the Arthur Rylah Institute. Both projects have received funding under the Regional Forest Agreement modernisation initiative.

Department of Environment, Land, Water and Planning, Parks Victoria, Zoos Victoria, Royal Botanic Gardens Victoria, Museums Victoria

2.2 Conduct targeted data collection and monitoring of threatened species interventions

Commenced – Monitoring is being undertaken to assess the effectiveness of interventions to recover threatened species including, for example, population monitoring for Mountain Pygmy-possums at Mt Buller following genetic rescue and monitoring of over-wintering Orange-bellied Parrots following assisted migration trials.

Royal Botanic Gardens Victoria has commenced production of four chapters and three case studies for a new edition of the Guidelines of the Translocation of Threatened Plants in Australia. One of 11 *Caladenia pumila* (Dwarf-spider orchid) cultivated in Melbourne Gardens Nursery is likely to flower for the first time in cultivation in spring 2018.

Results of a broad-scale fauna survey in the northern Western Port region mapped the Southern Brown Bandicoot population at Cranbourne Gardens. Parks Victoria's 17 Citizen Science projects include targeted data gathering on a range of threatened species including Phascogale, Squirrel Glider, White-breasted Treecreeper and Swamp Skink. Parks Victoria is also working with private land holders to improve remote camera data curation and image recognition. It has also invested in trials to determine the effectiveness of Forward Looking Infrared (FLIR) imagery for surveys.

Zoos Victoria,
Department of
Environment,
Land, Water and
Planning, Parks
Victoria, Royal
Botanic Gardens
Victoria, Museum
Victoria

Enab	oling action	Status and highlights as at September 2018	Contributing Organisations
2.3	Develop VBA Go, a mobile- enabled Victorian Biodiversity Atlas to allow rapid, real-time entry of species records on a mobile device and provide for more engaged citizen science.	Completed – VBA Go released in February 2018, linking VicFlora and Museums Victoria online services to embed images and habitat information to aid in identification.	Department of Environment, Land, Water and Planning
2.4	Develop a new Marine Biodiversity Policy and establish a Marine and Coastal Knowledge Framework to guide the collection, management and use of marine biodiversity data to maximise the effectiveness of targeted actions to manage marine biodiversity.	Commenced - A new Marine and Coastal Act 2018 has been enacted, allowing Environment Management Plans and marine spatial plans to be developed in all Victorian water bodies.	Department of Environment, Land, Water and Planning, Department of Economic Development, Jobs, Transport and Resources
2.5	Launch a new NatureKit web mapping and reporting tool to make Victorian biodiversity data and information products more accessible to all Victorians.	Commenced – NatureKit launched in November 2017.	Department of Environment, Land, Water and Planning
Prior	rity 3: Raise awareness of all Vi	ctorian's about the importance of the natu	ıral environment.
3.1	Develop and publish a theoretical model that describes the pathway to action, from Victorians connecting with nature, to valuing it and acting to improve biodiversity.	Commenced – A survey of 3000 Victorians will benchmark attitudes about connecting with nature. A draft model is in preparation and will be informed by survey results.	Department of Environment, Land, Water and Planning
3.2	Establish a brand that identifies current and future projects that contribute to <i>Biodiversity 2037</i> to help promote biodiversity objectives.	Commenced – VicEnvironments Forum established, Communications and Engagement Sub-Committee established.	Department of Environment, Land, Water and Planning

Enab	ling action	Status and highlights as at September 2018	Contributing Organisations
3.3	Engage Victorians with key biodiversity objectives and actions, by showcasing Victoria's rich biodiversity through ongoing public, science and education programs.	Commenced – 35,000 Victorian primary, secondary and early years students attended Royal Botanic Gardens of Victoria's (RBGV) Learning and Schools programs in February 2018. The monthly RBGV Science Seminar Program welcomed an average of 150 participants per month to discuss landscape succession strategies, climate change, Victorian biodiversity and contemporary research into rare and threatened plant species. RBGV launched several new public and cultural programs to engage local and interstate visitors with the environment and plant stories, receiving excellent media acclaim and strong evaluation from participants. Parks Victoria in conjunction with the Field Naturalist Club of Victoria has delivered 17 citizen science projects targeting key knowledge gaps.	Parks Victoria, Museums Victoria, Royal Botanic Gardens Victoria, Phillip Island Nature Parks, Zoos Victoria, Trust for Nature, Catchment Management Authorities, Department of Environment, Land, Water and Planning
Prior	ity 4: Increase opportunities fo	or all Victorians to have daily connections v	with nature.
4.1	Establish a framework for researching how Victorians value nature. A first step will be working with peak bodies and community groups to establish this baseline information about how Victorians connect to nature and act to protect it.	Commenced – Data collection from a foundation survey of 3000 Victorian households is underway.	Department of Environment, Land, Water and Planning
4.2	Support Victorians who experience barriers to connecting with nature to take their first steps into nature through skills-based events in parks such as learn to camp programs.	Planned – Barriers will be identified and addressed once framework established.	Parks Victoria, Department of Health and Human Services, Department of Environment, Land Water and Planning
4.3	Support Nature Play, Bush Kinders and Outdoor Learning to enable kids to connect with nature.	Commenced – Successful Nature Play Week events were held around the state in autumn 2018, including full programs at both sites of Royal Botanic Gardens Victoria. Cranbourne Gardens hosted over 1200 young children for bush kinder visits this year. RBGV has developed a Bush Kinder Introduction Program to assist early learning educators in understanding and maximising use of conservation bushland. Parks Victoria's highly successful Junior Ranger Program is encouraging young people to connect with nature in a tangible way.	Department of Health and Human Services, Royal Botanic Gardens Victoria

Enab	ling action	Status and highlights as at September 2018	Contributing Organisations
4.4	Implement the Victorian Memorandum for Health and Nature through projects that enable more Victorians to connect with and be active in the natural environment.	Commenced - Parks Victoria, in partnership with DELWP and the Department of Health and Human Services, hosted the inaugural Nature is Good Medicine Summit on 31 August 2018 to explore opportunities to activate our parks for health and well-being benefits. At the Summit, Parks Victoria announced it was engaging three 'Health Rangers' as part of a pilot program working closely with health service providers to encourage more nature-based health programs in parks.	Parks Victoria, Department of Health and Human Services, Department of Environment, Land Water and Planning
4.5	Activate community health in nature programs, such as Park Prescriptions, Forest Bathing, Bush Therapy and Therapeutic Horticulture.	Commenced – A new Nature and Forest Therapy Alliance based in Victoria, has been established and a number of accredited forest bathing instructors/guides have been trained and are undertaking activities in both Victoria's parks and in local government areas. The Balee Koolin Bubup Bush Playgroup at Cranbourne Gardens continued to support maternal child health for Aboriginal mothers and children in Casey/Cardinia, as well as traditional culture and Boon-Wurrung language. New public programs are in the research and development phase for therapeutic horticulture and forest bathing at both sites.	Parks Victoria, Department of Health and Human Services, Department of Environment, Land Water and Planning
4.6	Grow the range of YouthNatureConnect programs that help teens develop outdoor skills, get fit, connect with their peers, build emotional resilience and enjoy nature.	Commenced - Parks Victoria and Earthwatch are establishing a new Climatewatch citizen science program targeted to schools and communities in regional areas of lower social advantage. The program is seeking to engage youth in citizen science as part of their curriculum.	Parks Victoria
4.7	Develop Spring into Nature events to promote the benefits of getting into nature and protecting it for the health and wellbeing of current and future generations.	Commenced – A VicEnvironments Forum working group has been established to develop a state-wide 'Spring into Nature' festival.	Trust for Nature
4.8	Improve monitoring and reporting of Victoria's environment, health and liveability outcomes to ensure Victorians are well informed about the state of their environment.	Commenced – The Environment Protection Authority has appointed a Chief Environmental Scientist to ensure Victorians are provided robust, science-based advice and information about their environment. This information will contribute to Victoria's State of the Environment Report. Parks Victoria monitors and reports on its State of the Parks, providing valuable detailed information on the health of Victoria's Parks.	Environment Protection Authority Victoria, Department of Environment, Land, Water and Planning

Enab	ling action	Status and highlights as at September 2018	Contributing Organisations
4.9	Through the Recreational Values Program, provide better information to the community about the opportunities to enjoy and limitations on recreational use of waterways.	Commenced – DELWP has completed market research to identify the information recreational water users need. Governance requirements have been introduced for water sector agencies to ensure user friendly information is provided to recreational water users.	Department of Environment, Land, Water and Planning
		Many water agencies have made improvements to existing information platforms – for example, Goulburn Murray Water's online interactive water level mapping for Lake Eildon and Lake Eppalock.	
4.10	Develop programs, in partnership with Traditional Owner and Aboriginal Groups, to enable children, youth and elders to reconnect to Country for cultural, spiritual, and health and wellbeing benefits.	Parks Victoria has provided logistical and technical support to support Traditional Owner groups with projects aimed at reinvigorating cultural practices. This has including working with Wurundjeri on a canoe tree project; working with Wurundjeri, Boon Wurrung and Bunurong on a possum skin project; working with Dja Dja Wurrung and Barengi Gadjin on cultural burning trials.	Parks Victoria
Prior	ity 5: Increase opportunities fo	r all Victorians to act to protect biodiversi	ty.
5.1	Develop new community conservation campaigns at Phillip Island Nature Parks that encourage Victorians to protect wildlife and their habitat in both marine and terrestrial environments.	Commenced - Phillip Island Nature Parks is continuing its successful community conservation program 'When Balloons Fly' in partnership with Zoos Victoria.	Phillip Island Nature Parks, Local Government and Zoos Victoria
5.2	Raise awareness across the Victorian community about protecting wildlife, by continuing to involve Victorians in successful community conservation campaigns.	Commenced – World record attempt for 'most people blowing bubbles' held in January 2018 at the Melbourne Cricket Ground, raising awareness across the Victorian community about balloon pollution and the 'When Balloons Fly' campaign. Other community conservation campaigns including 'Love your locals' and 'Seal the Loop' are ongoing.	Zoos Victoria

Enab	ling action	Status and highlights as at September 2018	Contributing Organisations
5.3	Support more Victorians to be citizen scientists through programs that engage the community on environmental issues.	Commenced – Parks Victoria lead on multiple citizen science projects including Sea Search, Plains-wanderer monitoring and projects delivered with Field Naturalist Club of Victoria, Birdlife and Latrobe University.	Department of Environment, Land, Water and Planning, Parks Victoria
		A Citizen Science Scoping Paper has been written for DELWP, reviewing current literature and reporting the current status and activity of citizen science both locally and globally.	
		DELWP has delivered presentations on citizen science at the Australian Citizen Science Association national conference and at several regional forums.	
		DELWP has provided technical, scientific support to citizen science programs for threatened orchids at several sites across Victoria.	
5.4	Work with Victorian education providers to strengthen existing programs within the curriculum to increase the availability of nature-based learning and outdoor learning opportunities. This will be supported by initiatives such as Resource Smart Schools.	Commenced – Experiential learning is being used in the biodiversity modules of Resource Smart Schools to empower students, teachers and the community to take biodiversity action in their local area. This approach provides multiple opportunities for students to connect to and demonstrate/ practise their care for their local environment. It also facilitates connections between schools and local community members.	Sustainability Victoria, Department of Education and Training
5.5	Support Victoria's conservation volunteer groups such as Landcare, Coastcare and Friends Groups to continue building environmental and community resilience.	Commenced – successful delivery of Landcare Program, 10 Regional Landcare Coordinators appointed, and the Junior Landcare Grants program delivered. The Victorian Government launched an Environmental Volunteering Plan on 14 October 2018.	Department of Environment, Land, Water and Planning
5.6	Significantly grow and diversify volunteering opportunities in parks through programs such as Friends Groups, Campground Host and Volunteer Track Rangers both in and around Melbourne as well as Regional Victoria.	Commenced – Parks Victoria finalised its Volunteering in Parks Strategic Plan and DELWP's Volunteering Plan is nearly complete. Parks Victoria grew its volunteering programs to 280,000 hours in 2017/18, a significant increase on previous years.	Parks Victoria

Enal	bling action	Status and highlights as at September 2018	Contributing Organisations		
	Priority 6 - Embed consideration of natural capital into decision making across the whole of government, and support industries to do the same.				
6.1	Utilise the United Nations System of Environmental Economic Accounting (UN SEEA) to support statutory reporting in the environment portfolio and develop capabilities to inform policy.	Commenced – Environmental-economic accounting input for the Catchment Condition and Management report and State of the Forests report is complete. This information will contribute to Victoria's State of the Environment Report.	Department of Environment, Land, Water and Planning		
6.2	Work across Australian government, science and business sectors to develop a strategy for a common approach and practical uses for the implementation of the UN SEEA.	Commenced – Victoria has led the way nationally in the development and application of environmental-economic accounts. DELWP provided significant input to the national process, building on the Victorian strategy 'Valuing and accounting for Victoria's environment'.	Commonwealth Government and Department of Environment, Land, Water and Planning		
6.3	Establish a whole-of-Victorian Government working group to prioritise and coordinate state level efforts for the Victorian implementation of UN SEEA.	Planned – This initiative is still in the planning stage.	Department of Environment, Land, Water and Planning		
Prio	rity 7 - Help to create more live	able and climate-adapted communities.			
7.1	Support the establishment of new green infrastructure to maximise the co-benefits to communities and test new approaches for connecting Victorians to nature in an urban context.	Commenced – A green wall pilot project is underway in Melbourne, showcasing endemic plants on a 2m x 3m portable wall that will be moved to various councils across Melbourne. A permanent green roof demonstration site has been selected and will be used to research the benefits of green roofs to both biodiversity and liveability.	Department of Environment, Land, Water and Planning and three local councils		
7.2	As part of the Climate Change Adaptation Plan 2017-2020, undertake a state-wide sectoral and regional economic vulnerability assessment that will include an overview of the vulnerability of biodiversity to climate change impacts, including riverine flood and fire.	Commenced – Data analyses for two economic vulnerability assessments have been completed.	Department of Environment, Land, Water and Planning		
7.3	As part of the Climate Change Adaptation Plan 2017-2020, commission new climate projections for Victoria that will provide downscaled information about the impacts of climate change on Victoria. Guidance products will be produced to make this localised climate change data accessible to the community.	Commenced – DELWP has commissioned CSIRO to deliver updated, high resolution climate change projections.	Department of Environment, Land, Water and Planning		

Enab	oling action	Status and highlights as at September 2018	Contributing Organisations
7.4	Through the implementation of Plan Melbourne 2017-2050 support local government to complete and implement green wedge management plans to protect and enhance the agricultural, biodiversity, environmental, natural resource, tourism, landscape and other values of each of Melbourne's green wedges.	Commenced – An audit of the effectiveness of green wedge planning provisions and the performance of green wedge management plans is underway to identify potential reforms. An issues and options paper is being prepared to help inform a broader program of work to better recognise the state significant economic, environmental and socio-cultural values contained within these areas.	Department of Environment, Land, Water and Planning
7.5	Through the implementation of Plan Melbourne 2017-2050, establish the Great Yarra Parklands from the crown land reserves along the metropolitan Yarra River (from Warrandyte to Port Phillip, excluding reserves for the port) as a state urban parkland.	Commenced – The initial Declaration of Yarra River land came into effect in February 2018. The Declaration provides the basis for declaring the Greater Yarra Urban Parklands (any Yarra River land that is used as public open space or as a park and is within the Melbourne metropolitan urban growth boundary).	Department of Environment, Land, Water and Planning
7.6	Prepare a metropolitan open space strategy that enhances recreation, amenity, health and wellbeing, species diversity, sustainable water management and urban cooling across Melbourne.	Commenced – The development of a new metropolitan open space strategy is an action of the Plan Melbourne Implementation Plan (Action 93).	Department of Environment, Land, Water and Planning
	ity 8 - Better care for and show ral and cultural tourism attrac	vcase Victoria's environmental assets as w	orld class
8.1	Fund on-ground actions that help achieve the <i>Biodiversity 2037</i> targets in partnership with communities, land managers, Traditional Owners and natural resource management agencies.	Commenced – Funding for Biodiversity Response Planning projects was announced on 31 August 2018.	Department of Environment, Land, Water and Planning
8.2	Protect the environmental values of Melbourne's coasts, waterways and bays (including the Yarra River, Western Port's sensitive RAMSAR wetlands).	Completed – Port Phillip Bay Environment Management Plan 2017-2027 has been completed. A new Healthy Waterway Strategy for Port Phillip and Western Port is also in the final stages of preparation by Melbourne Water. Parks Victoria's marine parks and marine conservation programs continue to contribute to Victorian's connection with our marine and coastal environments.	Department of Environment, Land, Water and Planning, Melbourne Water, Parks Victoria

Enak	oling action	Status and highlights as at September 2018	Contributing Organisations
8.3	Investigate the feasibility of establishing feral predator-free sanctuaries through projects at Wilsons Promontory National Park that have the potential to enable the restoration of vegetation communities and faunal assemblages.	Commenced – establishing a predator-free sanctuary at Wilsons Promontory has been scoped, including the construction of a fence, expansion of weed and pest control programs, the restoration of habitats, supporting native species at risk, and potentially those that have been lost from the area.	Parks Victoria
8.4	Maintain a fox-free environment on Phillip Island into the future and investigate the potential for Phillip Island to introduce appropriate threatened species of wildlife.	Commenced – A fox monitoring program on Phillip Island using cameras and two fox detection dogs is underway.	Phillip Island Nature Parks
8.5	Identify natural assets that could be enhanced to provide major tourism, cultural and economic benefits for Victoria in the future, and document these in relevant regional strategies.	Commenced – First section of the Grampians Peaks Trail is now open. This provides a three day / two night circuit walk departing from Halls Gap. The remaining sections of the 13 day/ 12 night walk will be complete by the end of 2019. Shipwreck Coast: Phase 1 implementation underway with design work complete. Significant rescoping needed due to major geotechnical constraints. Delivery of the Blowhole visitor facilities to occur alongside planning for park and ride facilities in phase 2. Whole of government planning for Glenample precinct actively underway.	Department of Environment, Land, Water and Planning, Catchment Management Authorities, Parks Victoria
8.6	Develop a Parks Victoria Visitor Engagement Framework to improve visitor experiences.	Commenced – The Tourism and Visitor Experience Directorate has been established within Parks Victoria to enable better visitor engagement, and the new Visitor Engagement Framework is currently being developed to build on previous work and incorporate feedback from workshops.	Parks Victoria
8.7	Develop new programs and site interpretation at Royal Botanic Gardens of Victoria, to help Victorians value and understand biodiversity, and support conservation initiatives.	Commenced – The new Engagement and Impact strategy has been implemented. Significant state and philanthropic investment has been made toward new public programming, projects and interpretive initiatives that highlight the Gardens' preserved and living collections. Visitation to Royal Botanic Gardens Victoria reached a record peak of 2.399 million in 2018. In late 2017, 2,322 people gathered and were encouraged to grow rare plants by members of the nursery industry sharing specialist knowledge. The 'Care for the Rare' project was officially launched on 18 May 2018 by Deputy Premier, the Honourable James Merlino MP. With the generous support of the Maud Gibson Trust, Royal Botanic Gardens Victoria and the Botanic Gardens Australia and New Zealand (BGANZ) Victoria network.	Royal Botanic Gardens Victoria

Enal	oling action	Status and highlights as at September 2018	Contributing Organisations
8.8	Implement initiatives that increase awareness and activate values and care for priority local species.	Commenced – Scoping for a world class amphibian centre at Melbourne Zoo has commenced. Zoos Victoria undertakes six initiatives annually focused on priority local species.	Zoos Victoria
Prio	rity 9 - Establish sustained fund	ding for biodiversity.	
9.1	Examine, and where appropriate adopt, a variety of approaches to secure sustained funding for biodiversity using established and emerging mechanisms such as matched crowd funding and revolving funds.	Commenced – Trust for Nature led development of Conservation Finance Scoping Paper (funded by the Australian Government); DELWP is co-funding a 2-day Conservation Finance Intensive workshop in November 2018.	Trust for Nature, Department of Environment, Land, Water and Planning
	ners the funded, unfunded and	Prospectus to communicate to prospective partially-funded projects that are needed	
10.1	Publish a web-based Biodiversity Investment Prospectus that allows investors to browse prospective projects and partnership opportunities that will further support on-ground investment towards Biodiversity 2037 targets. The prospectus will offer a variety of innovative funding mechanisms that link investors to community and Traditional Owner actions for biodiversity.	Commenced – DELWP is investigating a web-based investment prospectus and other actions that would effectively leverage private investment in biodiversity.	Department of Environment, Land, Water and Planning
10.2	Launch an inaugural biodiversity investment round table with key stakeholders including government, business, philanthropy and volunteer representatives to discuss principles and opportunities for goodpractice private environmental investment.	Commenced – An initial round table was hosted by the Commissioner for Environmental Sustainability to identify opportunities to leverage non-government investment in biodiversity in Victoria, and to clarify role of government in maximising government investment in biodiversity.	Department of Environment, Land, Water and Planning
	rity 11 - Increase incentives and serve biodiversity.	explore market opportunities for private l	andholders to
11.1	Examine the suite of Victorian private land conservation mechanisms and programs to assess their complementarity and investigate the pathways with the highest potential to increase landholder participation in biodiversity protection.	Commenced – A literature review regarding the effectiveness of a range of private land conservation mechanisms, in relation to participation and on ground outcomes is underway.	Trust for Nature, Department of Environment, Land, Water and Planning, Catchment Management Authorities

Enab	oling action	Status and highlights as at September 2018	Contributing Organisations
11.2	Undertake a co-design process with key stakeholders to review and update voluntary biodiversity management standards.	Commenced – A review of the DELWP Output Delivery Standards is underway and will be completed by June 2019. Traditional Owners will be involved in the review of these standards.	Department of Environment, Land, Water and Planning
11.3	Initiate new biodiversity conservation auctions as a mechanism to protect biodiversity, particularly native vegetation on private land.	Commenced – Wimmera Catchment Management Authority has successfully conducted a conservation auction in 2018.	Department of Environment, Land, Water and Planning
	ity 12 - Adopt a collaborative b untability and measurable imp	iodiversity response planning approach to provement.	drive
12.1	Co-design and implement the Biodiversity Response Planning process with stakeholders and partners across Victoria.	Commenced – Phase 1 of Biodiversity Response Planning announced and implemented. Evaluation of Phase 1 currently underway.	Department of Environment, Land, Water and Planning
12.2	Launch ActivityKit - a new user-friendly tool for stakeholders and partners to input standard output data for reporting of progress towards state-wide biodiversity targets.	Commenced – ActivityKit is being piloted as part of Biodiversity On-Ground Actions grants program.	Department of Environment, Land, Water and Planning
12.3	Support partners and stakeholders to report onground actions to measure the collective impact towards the <i>Biodiversity 2037</i> targets.	Commenced – Training modules and education material in preparation.	Department of Environment, Land, Water and Planning
12.4	Update the conservation status of Victorian species using the IUCN Red List criteria as proposed under the Common Assessment Method (CAM).	Commenced – Species assessments are underway. First draft completed.	Department of Environment, Land, Water and Planning
		mmunity groups, Traditional Owners, non- rnment to participate in biodiversity respo	
13.1	Work with community groups and other organisations needing training, information or other assistance to engage in the biodiversity response planning process.	Commenced – DELWP worked with community groups that required training and assistance for Biodiversity Response Planning during phase 1.	Department of Environment, Land, Water and Planning
13.2	When invited, partner with Traditional Owners to undertake Healthy Country Planning and assist with the acquisition & protection of freehold land.	Commenced – Trust for Nature is working with Traditional Owners on a variety of projects including covenanting.	Trust for Nature

Enabling action

Status and highlights as at September 2018

Contributing Organisations

Priority 14 - Engage with Traditional Owners to include Aboriginal values and traditional ecological knowledge in biodiversity planning and management.

14.1 Empower and enable interested Victorian Traditional Owners to deliver *Biodiversity* 2037 in equal partnership across all levels of natural resource management delivery.

Commenced – Traditional Owner groups were funded to support strong participation in the Biodiversity Response Planning process across the state and engagement continues as projects are being rolled out.

Department of Environment, Land, Water and Planning, Dja Dja Wurrung Clans Aboriginal Corporation, the Federation of Victorian Traditional Owners and other interested Victorian Traditional Owner Groups

Through the implementation of Plan Melbourne 2017-2050 create opportunities for Aboriginal people to be actively involved in the identification, protection, rehabilitation and ongoing management of cultural heritage places across Melbourne, working with Traditional Owners, Aboriginal community organisations,

Governments and others.

Commenced – The regulations to the Aboriginal Heritage Act 2006 were updated in May 2018 to reflect recent amendments providing additional enforcement powers to Aboriginal people. Aboriginal Heritage Officers, based in Registered Aboriginal Parties, have been trained and appointed across Victoria. The development of the Yarra River Action Plan and subsequent protective work on the Yarra river (Birrarung) provides an effective partnership model of indigenous engagement that can be applied to other projects. Legislative changes relating to distinctive areas and landscapes create additional opportunities for Traditional Owner and Aboriginal community involvement

Department of Premier and Cabinet

Through the implementation of Plan Melbourne 2017-2050 prepare waterway corridor master plans for priority waterways to ensure that Traditional Owner and community values of waterways, such as access, amenity and connection to nature, are protected and improved.

Commenced – DELWP has funded the appointment of a Manager, Water Unit, to be based at the Wurundjeri Council to help facilitate Traditional Owner involvement in implementation of the Yarra River Action Plan. Further to this, a pilot cultural mapping project in Bulleen and Heidelberg has commenced with Traditional Owners, the Wurundjeri Council. DELWP has provided funding to the Wurundjeri Council to manage and deliver the cultural mapping project. This will sponsor the employment of a full-time cultural mapping officer/ anthropologist for a period of 18 months. The outcomes of project, will support further cultural mapping of the Yarra (Birrarung) subject to future funding.

Department of Environment, Land, Water and Planning

	Status and highlights as at September Contributing				
Enab	ling action	2018	Organisations		
14.4	In partnership with Victoria's Traditional Owners, understand how Traditional Owner ecological knowledge and contemporary biodiversity management can be integrated into joint management planning.	Commenced – DELWP has participated in technical working groups to contribute expertise and advice to aid the development of the Gunaikurnai and Dja Dja Wurrung Joint Management Plans. These are Victoria's first joint management plans and are scheduled to be finalised by late 2018. DELWP will support implementation of both plans that each have actions and strategies for use of Traditional Owner ecological knowledge for management of Country.	Department of Environment, Land, Water and Planning		
Prior	ity 15 - Support Aboriginal acc	ess to biodiversity for economic developm	ent.		
15.1	Prioritise opportunities for Traditional Owners and Aboriginal Victorian employment and capability building as part of biodiversity investment processes and other operational natural resource management activities.	Commenced – Water and Catchments Group recently established new Water Officer positions for Traditional Owners.	Department of Environment, Land, Water and Planning		
15.2	Work with Aboriginal natural resource management crews and cultural heritage officers to manage or assess privately protected areas, including Trust for Nature reserves and covenants.	Commenced – Various projects across the State involving Aboriginal natural resources management crews working on protected land.	Trust for Nature		
Prior	ity 16 - Build capacity to incred	ase Aboriginal participation in biodiversity	management.		
16.1	Provide training and resources for Victorian Traditional Owner Groups to contribute to data collection, extract and use data and utilise biodiversity management decision-support tools.	Commenced – Grants to Traditional Owner and Aboriginal Victorian groups launched in mid 2018 have dedicated \$613,000 to support and improve the role of Aboriginal people in biodiversity management.	Department of Environment, Land, Water and Planning		

Enal	oling action	Status and highlights as at September 2018	Contributing Organisations		
Prio	Priority 17 - Deliver excellence in management of all public land and waters.				
17:1	Reduce the impact of key invasive species such as feral cats, deer, and wild dogs and new or emerging environmental weeds according to the principles set out in the Invasive Plants and Animals Policy Framework using Strategic Management Prospects as guidance. A first step will be to develop a deer management strategy that sets a strategic direction to maintain sustainable hunting opportunities while reducing the impact of deer on biodiversity on all land tenures of the state.	Commenced – A draft Deer Management Strategy released for public consultation in October 2018. Parks Victoria conducts regular feral pest plant and animal control through the Arks and Eden programs.	Department of Environment, Land, Water and Planning, Department of Economic Development, Jobs, Transport and Resources and Parks Victoria		
17.2	Develop a weed knowledge centre and work with partners to identify and progressively fill key knowledge gaps about new and emerging weed threats to Victoria's biodiversity.	Commenced – Preliminary Weed Knowledge Centre hosted on Spatial, Temporal, Activity Recorder (STAR) database.	Department of Environment, Land, Water and Planning, Department of Economic Development, Jobs, Transport and Resources		
17.3	Protect biodiversity with enhanced environmental compliance in relation to the Flora and Fauna Guarantee Act, and wildlife, native vegetation, non-indigenous heritage, public land, timber harvesting, tour operators and bushfire prevention.	Commenced – Regional Compliance Plans developed. Implementation and refinement underway.	Department of Environment, Land, Water and Planning		
17.4	Maintain existing native apex predators in natural ecosystems and, investigate the potential functional role of reintroduced native apex predators in north-west Victoria.	Planned – Workshop to be scheduled for 2019.	Department of Environment, Land, Water and Planning		
17.5	Work with partners including Victorian Traditional Owner Groups and other stakeholders to review management standards (including for revegetation), to increase incorporation of traditional ecological knowledge and ensure effectiveness under future climate scenarios.	Commenced – A review of the DELWP Output Delivery Standards is underway and will be completed by June 2019. Traditional Owners will be involved in the review of these standards.	Department of Environment, Land, Water and Planning		

Enabling action		Status and highlights as at September 2018	Contributing Organisations
17.6	Implement relevant actions from Regional Waterway Strategies and protect the drought refugia areas, identified in the Regional Natural Resource Management Climate Change Adaptation Plans.	Commenced – Agreements with landholders are occurring across each Catchment Management Authority annually.	Catchment Management Authorities
17.7	Provide access to Decision Support Tools to inform better fertiliser and nitrogen application to reduce nutrient losses to waterways.	Commenced – The Sustainable Irrigation Program aims to reduce adverse impacts of irrigation (in targeted regions across the State) on the environment and third parties, whilst improving water use efficiency and best practice land management for environmental and productive outcomes. The program also manages salinity to protect the rivers, catchments and environment of the Murray-Darling Basin. The Victorian Government is investing \$59.5 million between 2016-17 and 2019-20 in the program to implement a range of activities including: whole farm planning incentives, Plan2Farm decision support tool, specialist farm extension advice to irrigators, grants for improved farm irrigation infrastructure, best practice guidelines for new irrigation developments, construction of irrigation drainage infrastructure, ongoing salinity management and monitoring and strategic reviews.	Department of Economic Development, Jobs, Transport and Resources
17.8	Develop a Biodiversity Emergency Response Framework that enables rapid decision making for biodiversity after major events such as bushfires or floods.	Commenced – A literature review is underway to improve our understanding of existing practices and resources associated with our emergency response to support threatened species after a major bushfire or flood event. Two workshops have been held to investigate barriers to undertaking consistent, effective action and a new approach has been proposed to enhance electronic information and mapping systems for future emergency events.	Department of Environment, Land, Water and Planning
17.9	Implement the Living with Wildlife Action Plan which sets out four key action areas which will deliver improvements in policy, regulation and management of wildlife for the future.	Commenced – Seven of the nine actions within the plan are underway. The remaining two will be activated in the long term. DELWP has commenced development of a Koala Management Strategy, with a draft expected by July 2019.	Department of Environment, Land, Water and Planning
17.10	Design a net gain approximation approach which includes terrestrial, marine and freshwater environments and commence work on a new Net Gain Approximation Report.	Commenced – Scoping design of how Net Gain can be reported across the three environments in progress.	Department of Environment, Land, Water and Planning

Enab	oling action	Status and highlights as at September 2018	Contributing Organisations		
Prior	Priority 18 - Maintain and enhance a world-class system of protected areas.				
18.1	Investigate opportunities to secure more permanently protected areas on private land.	Commenced – Trust for Nature continues to progress opportunities to secure additional private land, including habitat for the Helmeted Honeyeater.	Trust for Nature		
18.2	Establish land management agreements with private landholders as part of integrated land, water and biodiversity management programs identified as priorities in Regional Catchment Strategies across Victoria to complement the reserve and private land covenanting systems.	Commenced – Agreements with landholders are occurring across each Catchment Management Authority annually.	Catchment Management Authorities		
Prior	ity 19 - Adopt a whole-of-gove	rnment approach to implementing this Pla	ın.		
19.1	Establish the VicEnvironments leadership forum for Victorian Government environment portfolio agencies to coordinate actions that achieve the goals and targets of <i>Biodiversity 2037</i> .	Completed – VicEnvironments Forum was established in early 2018, with the inaugural VEF meeting held on April 30, 2018.	VicEnvironments Forum members		
19.2	Develop policy and accounting mechanisms to ensure that biodiversity losses that occur outside the regulatory system are appropriately counterbalanced at a whole of state level. A first step will be establishing a counterbalance statement for public land. Note, this initiative is linked with Initiative 17.10.	Commenced – Crown land and Road Safety procedures complete and implementation underway.	Department of Environment, Land, Water and Planning		
19.3	Complete the Review the Flora and Fauna Guarantee Act 1988 and identify reforms for consideration by government.	Commenced – The Flora and Fauna Guarantee Amendment Bill 2018 was introduced into Victorian Parliament on 23 May 2018. The Bill was debated in the Legislative Assembly and passed without amendment. It was subsequently introduced into the Legislative Council but was not debated before the final scheduled parliamentary sitting day of the 58th Parliament of Victoria.	Department of Environment, Land, Water and Planning		

Enabling action		Status and highlights as at September 2018	Contributing Organisations
19.4	Ensure delivery of actions to implement the Government response to the Independent Inquiry into the EPA that promote biodiversity outcomes, specifically: • introducing a statutory objective for EPA to protect human health and environment from pollution and waste • create a consolidated and enhanced environmental health capability for Victoria • review Victoria's air and water monitoring networks • examine how to best address complex environment protection and public health issues • establish processes for better coordination of environmental management, monitoring and reporting in Victoria	Commenced – The Environment Protection Amendment Act 2018 has now passed the Victorian Parliament and received royal assent on 28 August 2018. The new legislation transforms environment protection laws to focus on prevention, rather than responding to pollution after it has occurred. The government has indicated its intention that the new laws commence on 1 July 2020. EPA will consult extensively with industry, business and community in preparation for the implementation of the new scheme and the continued implementation of the government response.	Environment Protection Authority Victoria, Department of Environment, Land, Water and Planning
19.5	Develop a Feral Cat Action Plan and review the legislative framework to enable the control of feral cats for the protection of Victoria's biodiversity and threatened wildlife.	Commenced – Feral cat declared as an Established Pest on designated Crown Land under the <i>Catchment and Land Protection Act 1994</i> . Codes of Practice and standards for operationalising the declaration are in preparation.	Department of Environment, Land, Water and Planning
19.6	Develop the next Zoos Victoria Wildlife Conservation Master Plan for 2019-2024.	Commenced – Zoos Victoria's next Wildlife Conservation Master Plan is currently in draft.	Zoos Victoria
	ity 20 - Establish a transparen ering the Plan.	t evaluation process to report on progress	towards
20.1	Release and implement the first iteration of the <i>Biodiversity</i> 2037 Monitoring, Evaluation and Reporting Framework (MERF).	Completed – The first iteration of the <i>Biodiversity 2037</i> Monitoring, Evaluation and Reporting Framework was released in 2018.	Department of Environment, Land, Water and Planning
20.2	Co-design a biodiversity conservation forum for <i>Biodiversity 2037.</i>	Commenced – VicEnvironments Forum has established a working group to develop a nature festival in 2019.	VicEnvironments Forum Members

Enabling action		Status and highlights as at September 2018	Contributing Organisations
20.3	Host the 7th Global Botanic Gardens Congress (7GBGC) in Melbourne to demonstrate the vital role of botanic gardens in connecting people with nature.	Commenced – RBGV was successful in its bid to host 7GBGC in February 2021. Waldron Smith Management has since been secured as Professional Conference Organiser and planning has commenced with the international committee organisers.	Royal Botanic Gardens Victoria
		In addition, an initiative of RBGV, the first international Climate Change Summit will be held at Melbourne Gardens in December 2018. This summit will bring together ten botanic gardens from around the world to plan for the transition of living collections and landscapes in response to climate change. It will be a prelude to broader sessions at the 7GBGC in 2021 and will likely lead to the creation of a Climate Change Alliance among botanic gardens.	
20.4	Establish a baseline for reporting on Victoria's biodiversity to inform the Victorian State of the Environment Report 2018.	Statewide targets from <i>Biodiversity 2037</i> will be reported on in Victoria's State of the Environment Report to be tabled in Parliament in early 2019.	Office of the Commissioner for Environmental Sustainability

Image Credits

Cover Working Together - Landcare Australia Saville Coble / Landcare Australia 3 Orchid Parks Victoria 5 Errinundra National Park Stephen Colquitt 7 Spear-grass and Grey Box, Avoca Plains Vanessa Craigie 9 Friends of Fabbro Fields Shae Allen 11 Couple watching Gelantipy at sunset - Gippsland Gary Moore / Tourism Victoria 12 Red-tailed Black Cockatoos Rick Dawson 14 Canoeing in Lake Carpul Kathryn Parker 18 People gathering at Phillip Island beaches to view passing whales Marcia Riederer 19 Famillies building cubbies from plant materials during Botanica Mark Gambino 19 Beach clean-ups led by Zoos Victoria Drew Ryan 20 Children engaged in nature activities Mallee Catchment Management Authority 20 Winters Flat Primary School participating in Resource Smart Schools ® Sustainability Victoria 2018 21 Volunteer Sherpas Parks Victoria 21 Volunteer Sherpas Parks Victoria 21 The nightly Penguin Parade on Phillip Island Phillip Island N	Page	Description	Photographer / Credit
5 Errinundra National Park Stephen Colquitt 7 Spear-grass and Grey Box, Avoca Plains Vanessa Craigie 9 Friends of Fabbro Fields Shae Allen 11 Couple watching Gelantipy at sunset – Gippsland Gary Moore / Tourism Victoria 12 Red-tailed Black Cockatoos Rick Dawson 14 Canoeing in Lake Carpul Kathryn Parker 18 People gathering at Phillip Island beaches to view passing wholes 19 Families building cubbies from plant materials Mark Gambino 19 Beach clean-ups led by Zoos Victoria Drew Ryan 20 Children engaged in nature activities Mallee Catchment Management Authority 20 Winters Flat Primary School participating in Resource Smart Schools 21 Volunteer Sherpas Parks Victoria 21 The nightly Penguin Parade on Phillip Island Phillip Island Nature Parks 21 Spring into Nature event Matthew Newton 22 Weedy Sea Dragon, Flinders, Marnington Peninsula Stephen Colquitt 23 Eastern Barred Bandicoot Michelle Cooper 25 Djarra women painting the landscape with fire Djandak 26 Yellow-footed Antechinus Ian McCann 30 Rainbow Lorikeets David Paul 31 Feral Cat in Little Penguin territory Helen Achurch	Cover	Working Together - Landcare Australia	Saville Coble / Landcare Australia
7 Spear-grass and Grey Box, Avoca Plains Vanessa Craigie 9 Friends of Fabbro Fields Shae Allen 11 Couple watching Gelantipy at sunset – Gippsland Gary Moore / Tourism Victoria 12 Red-tailed Black Cockatoos Rick Dawson 14 Canoeing in Lake Carpul Kathryn Parker 18 People gathering at Phillip Island beaches to view passing whales Marcia Riederer 19 Families building cubbles from plant materials during Botanica Mark Gambino 19 Beach clean-ups led by Zoos Victoria Drew Ryan 20 Children engaged in nature activities Mallee Catchment Management Authority 20 Winters Flat Primary School participating in Resource Smart Schools © Sustainability Victoria 2018 21 Volunteer Sherpas Parks Victoria 21 Volunteer Sherpas Parks Victoria 21 The nightly Penguin Parade on Phillip Island Phillip Island Nature Parks 21 Spring into Nature event Matthew Newton 22 Weedy Sea Dragon, Flinders, Mornington Peninsula Stephen Colquitt 23 Eastern Barred Bandicoot Michelle Cooper 25 Djarra women p	3	Orchid	Parks Victoria
9 Friends of Fabbro Fields Shae Allen 11 Couple watching Gelantipy at sunset – Gippsland Gary Moore / Tourism Victoria 12 Red-tailed Black Cockatoos Rick Dawson 14 Canoeing in Lake Carpul Kathryn Parker 18 People gathering at Phillip Island beaches to view passing whales 19 Families building cubbles from plant materials during Botanica 19 Beach clean-ups led by Zoos Victoria Drew Ryan 20 Children engaged in nature activities Mallee Catchment Management Authority 20 Winters Flat Primary School participating in Resource Smart Schools 21 Volunteer Sherpas Parks Victoria 22 Parks Victoria 23 The nightly Penguin Parade on Phillip Island Phillip Island Nature Parks 24 Spring into Nature event Matthew Newton 25 Weedy Sea Dragon, Flinders, Mornington Peninsula Stephen Colquitt 26 Yellow-footed Antechinus Ian McCann 27 Garia Weets 28 Parks Colons 29 Djarra women painting the landscape with fire Djandak 20 Yellow-footed Antechinus Ian McCann 30 Rainbow Lorikeets David Paul	5	Errinundra National Park	Stephen Colquitt
Couple watching Gelantipy at sunset – Gippsland Gary Moore / Tourism Victoria Red-tailed Black Cockatoos Rick Dawson Canoeing in Lake Carpul Kathryn Parker People gathering at Phillip Island beaches to view passing whales Families building cubbies from plant materials during Botanica Mark Gambino Children engaged in nature activities Mallee Catchment Management Authority Winters Flat Primary School participating in Resource Smart Schools Volunteer Sherpas Parks Victoria The nightly Penguin Parade on Phillip Island Phillip Island Nature Parks Spring into Nature event Matthew Newton Eastern Barred Bandicoot Michelle Cooper Djarra women painting the landscape with fire Djandak Yellow-footed Antechinus Ian McCann Rainbow Lorikeets David Paul Helen Achurch	7	Spear-grass and Grey Box, Avoca Plains	Vanessa Craigie
12 Red-tailed Black Cockatoos Rick Dawson 14 Canoeing in Lake Carpul Kathryn Parker 18 People gathering at Phillip Island beaches to view passing whales 19 Families building cubbies from plant materials during Botanica 19 Beach clean-ups led by Zoos Victoria Drew Ryan 20 Children engaged in nature activities Mallee Catchment Management Authority 20 Winters Flat Primary School participating in Resource Smart Schools 21 Volunteer Sherpas Parks Victoria 21 The nightly Penguin Parade on Phillip Island Phillip Island Nature Parks 21 Spring into Nature event Matthew Newton 22 Weedy Sea Dragon, Flinders, Mornington Peninsula Stephen Colquitt 23 Eastern Barred Bandicoot Michelle Cooper 25 Djarra women painting the landscape with fire Djandak 26 Yellow-footed Antechinus lan McCann 30 Rainbow Lorikeets David Paul 31 Feral Cat in Little Penguin territory Helen Achurch	9	Friends of Fabbro Fields	Shae Allen
14 Canoeing in Lake Carpul Kathryn Parker 18 People gathering at Phillip Island beaches to view passing whales 19 Families building cubbies from plant materials during Botanica 19 Beach clean-ups led by Zoos Victoria Drew Ryan 20 Children engaged in nature activities Mallee Catchment Management Authority 20 Winters Flat Primary School participating in Resource Smart Schools 21 Volunteer Sherpas Parks Victoria 21 The nightly Penguin Parade on Phillip Island Phillip Island Nature Parks 21 Spring into Nature event Matthew Newton 22 Weedy Sea Dragon, Flinders, Mornington Peninsula Stephen Colquitt 23 Eastern Barred Bandicoot Michelle Cooper 25 Djarra women painting the landscape with fire Djandak 26 Yellow-footed Antechinus Ian McCann 30 Rainbow Lorikeets David Paul 31 Feral Cat in Little Penguin territory Helen Achurch	11	Couple watching Gelantipy at sunset – Gippsland	Gary Moore / Tourism Victoria
People gathering at Phillip Island beaches to view passing whales Pamilies building cubbies from plant materials during Botanica Beach clean-ups led by Zoos Victoria Drew Ryan Children engaged in nature activities Mallee Catchment Management Authority Winters Flat Primary School participating in Resource Smart Schools Volunteer Sherpas Parks Victoria The nightly Penguin Parade on Phillip Island Phillip Island Nature Parks Spring into Nature event Matthew Newton Weedy Sea Dragon, Flinders, Mornington Peninsula Stephen Colquitt Eastern Barred Bandicoot Michelle Cooper Djarra women painting the landscape with fire Djandak Yellow-footed Antechinus Ian McCann Rainbow Lorikeets David Paul Feral Cat in Little Penguin territory Helen Achurch	12	Red-tailed Black Cockatoos	Rick Dawson
passing whales Families building cubbies from plant materials during Botanica Beach clean-ups led by Zoos Victoria Drew Ryan Children engaged in nature activities Mallee Catchment Management Authority Winters Flat Primary School participating in Resource Smart Schools Volunteer Sherpas Parks Victoria The nightly Penguin Parade on Phillip Island Phillip Island Nature Parks Spring into Nature event Matthew Newton Weedy Sea Dragon, Flinders, Mornington Peninsula Eastern Barred Bandicoot Michelle Cooper Djarra women painting the landscape with fire Djandak Yellow-footed Antechinus Rerol Cat in Little Penguin territory Helen Achurch	14	Canoeing in Lake Carpul	Kathryn Parker
during Botanica 19 Beach clean-ups led by Zoos Victoria Drew Ryan 20 Children engaged in nature activities Mallee Catchment Management Authority 20 Winters Flat Primary School participating in Resource Smart Schools 21 Volunteer Sherpas Parks Victoria 21 The nightly Penguin Parade on Phillip Island Phillip Island Nature Parks 21 Spring into Nature event Matthew Newton 22 Weedy Sea Dragon, Flinders, Mornington Peninsula Stephen Colquitt 23 Eastern Barred Bandicoot Michelle Cooper 25 Djarra women painting the landscape with fire Djandak 26 Yellow-footed Antechinus lan McCann 30 Rainbow Lorikeets David Paul 31 Feral Cat in Little Penguin territory Helen Achurch	18		Marcia Riederer
Children engaged in nature activities Mallee Catchment Management Authority Winters Flat Primary School participating in Resource Smart Schools Volunteer Sherpas Parks Victoria The nightly Penguin Parade on Phillip Island Phillip Island Nature Parks Spring into Nature event Matthew Newton Weedy Sea Dragon, Flinders, Mornington Peninsula Eastern Barred Bandicoot Djarra women painting the landscape with fire Djandak Yellow-footed Antechinus Rainbow Lorikeets David Paul Feral Cat in Little Penguin territory Helen Achurch	19		Mark Gambino
Winters Flat Primary School participating in Resource Smart Schools Volunteer Sherpas Parks Victoria The nightly Penguin Parade on Phillip Island Phillip Island Nature Parks Spring into Nature event Matthew Newton Weedy Sea Dragon, Flinders, Mornington Peninsula Stephen Colquitt Satern Barred Bandicoot Michelle Cooper Djarra women painting the landscape with fire Djandak Yellow-footed Antechinus Rainbow Lorikeets David Paul Feral Cat in Little Penguin territory Helen Achurch	19	Beach clean-ups led by Zoos Victoria	Drew Ryan
Resource Smart Schools 21 Volunteer Sherpas Parks Victoria 21 The nightly Penguin Parade on Phillip Island Phillip Island Nature Parks 21 Spring into Nature event Matthew Newton 22 Weedy Sea Dragon, Flinders, Mornington Peninsula Stephen Colquitt 23 Eastern Barred Bandicoot Michelle Cooper 25 Djarra women painting the landscape with fire Djandak 26 Yellow-footed Antechinus lan McCann 30 Rainbow Lorikeets David Paul 31 Feral Cat in Little Penguin territory Helen Achurch	20	Children engaged in nature activities	Mallee Catchment Management Authority
The nightly Penguin Parade on Phillip Island Phillip Island Nature Parks Spring into Nature event Matthew Newton Weedy Sea Dragon, Flinders, Mornington Peninsula Stephen Colquitt Eastern Barred Bandicoot Michelle Cooper Djarra women painting the landscape with fire Djandak Yellow-footed Antechinus lan McCann Rainbow Lorikeets David Paul Feral Cat in Little Penguin territory Helen Achurch	20		© Sustainability Victoria 2018
21 Spring into Nature event Matthew Newton 22 Weedy Sea Dragon, Flinders, Mornington Peninsula Stephen Colquitt 23 Eastern Barred Bandicoot Michelle Cooper 25 Djarra women painting the landscape with fire Djandak 26 Yellow-footed Antechinus lan McCann 30 Rainbow Lorikeets David Paul 31 Feral Cat in Little Penguin territory Helen Achurch	21	Volunteer Sherpas	Parks Victoria
22 Weedy Sea Dragon, Flinders, Mornington Peninsula Stephen Colquitt 23 Eastern Barred Bandicoot Michelle Cooper 25 Djarra women painting the landscape with fire Djandak 26 Yellow-footed Antechinus lan McCann 30 Rainbow Lorikeets David Paul 31 Feral Cat in Little Penguin territory Helen Achurch	21	The nightly Penguin Parade on Phillip Island	Phillip Island Nature Parks
23 Eastern Barred Bandicoot Michelle Cooper 25 Djarra women painting the landscape with fire Djandak 26 Yellow-footed Antechinus lan McCann 30 Rainbow Lorikeets David Paul 31 Feral Cat in Little Penguin territory Helen Achurch	21	Spring into Nature event	Matthew Newton
25 Djarra women painting the landscape with fire Djandak 26 Yellow-footed Antechinus lan McCann 30 Rainbow Lorikeets David Paul 31 Feral Cat in Little Penguin territory Helen Achurch	22	Weedy Sea Dragon, Flinders, Mornington Peninsula	Stephen Colquitt
26Yellow-footed AntechinusIan McCann30Rainbow LorikeetsDavid Paul31Feral Cat in Little Penguin territoryHelen Achurch	23	Eastern Barred Bandicoot	Michelle Cooper
30 Rainbow Lorikeets David Paul 31 Feral Cat in Little Penguin territory Helen Achurch	25	Djarra women painting the landscape with fire	Djandak
31 Feral Cat in Little Penguin territory Helen Achurch	26	Yellow-footed Antechinus	Ian McCann
	30	Rainbow Lorikeets	David Paul
33 Citizen scientists collecting camera trapping data Tracy Koper	31	Feral Cat in Little Penguin territory	Helen Achurch
	33	Citizen scientists collecting camera trapping data	Tracy Koper
Volunteer Sherpa facilitating connections in nature Parks Victoria	55	Volunteer Sherpa facilitating connections in nature	Parks Victoria

