

Australia's National Biodiversity Strategy and Action Plan

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## This report should be attributed as Australia's Strategy for Nature 2024–2030, Commonwealth of Australia 2024.

This publication was prepared by the interjurisdictional Biodiversity Working Group convened under the Meeting of Environment Ministers. The Biodiversity Working Group consists of representatives of the Australian, state and territory governments. This publication was endorsed at the June 2024 Meeting of Environment Ministers.

We acknowledge the traditional owners of country throughout Australia and their continuing connection to land, sea and community. We pay our respects to them and their cultures and to their elders both past and present. We are committed to working respectfully with Aboriginal and Torres Strait Islander peoples and give particular acknowledgement to their use, knowledge and custodianship of Australia's native plants and animals over countless generations. We support Aboriginal and Torres Strait Islander peoples and their aspirations to maintain, protect and manage their culture, language, land and sea country and heritage.

Prepared by the interjurisdictional Biodiversity Working Group for the Meeting of Environment Ministers

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Right Rottnest Island, Australia ©Curioso.Photography/Shutterstock.com

# Our ision

Australia will halt and reverse biodiversity loss by 2030, putting nature on a path to recovery, meaning that by 2050 we will be living in harmony with nature.

Australia's nature, now and into the future, is healthy and resilient to threats, understood, and valued both in its own right and for its essential contribution to our health, wellbeing, prosperity and quality of life.



Nature in Australia encompasses ancient landscapes millions of years old, Country continuously cared for through First Nations land and water management for tens of thousands of years, modern agricultural lands hundreds of years old, and natural places in more recent urban and suburban development. It includes all the variety of life, genes, species and ecosystems (biodiversity) that makes up the non-human, non-built world.

Nature underpins our economy, climate, First Nations peoples' connection to culture and identity, and our health and wellbeing. This strategy was first adopted in 2019 and updated in 2024 to reflect the urgent need to take action to halt and reverse biodiversity loss. It describes our national vision, shared goals, objectives and targets for protecting and managing nature in all landscapes, from our cities to rural and natural environments on land and at sea.

The strategy sets a national framework for government, non-government and community action to strengthen Australia's response to biodiversity decline and care for nature in our many environments. It accommodates the different priorities and practices across the country and the diversity in our landscapes. It draws on current evidence and local, national and international approaches.

We all have a role to ensure biodiversity is valued, conserved and restored and continues to deliver benefits that are essential for all people.



## **Global Biodiversity Framework**

In 2022, Australia joined other parties to the Convention on Biological Diversity in adopting the Kunming-Montreal Global Biodiversity Framework. The Global Biodiversity Framework sets out an ambitious agenda to halt and reverse biodiversity loss by 2030 and to live in harmony with nature by 2050. It has 23 action-oriented targets to achieve by 2030 and 4 outcome-oriented goals to achieve by 2050.

The Global Biodiversity Framework aims to conserve, protect and restore biodiversity; enhance participatory decision-making, with an emphasis on Indigenous stewardship; and strengthen benefit sharing. Critically, it also seeks to encourage increased investment in nature and to mainstream biodiversity into government and business decision-making.

In doing so the Global Biodiversity Framework recognises that nature and its decline is not just an environmental issue but one that requires more from all of us. It seeks to motivate and empower not only government but also business, traditional owners and the community to play a greater role in taking action to halt and reverse biodiversity loss and to live in harmony with nature.

The Global Biodiversity Framework obliges each party to the Convention on Biological Diversity to contribute to the framework's goals and targets in line with their national circumstances, priorities, and socio-economic conditions. The targets are multifaceted, reflecting the breadth of issues impacting biodiversity globally.

## This strategy

All governments across Australia – Australian, state, territory and local – play a leadership role in regulating, funding, undertaking and facilitating nature conservation.

Australia's Strategy for Nature brings together existing work across the country and guides the development of new and innovative approaches to implementing the Global Biodiversity Framework. It focuses on overarching goals that support healthy and functioning biological systems by promoting a stronger connection between people and nature, improving the way we value and care for nature, and building and sharing knowledge.

This strategy establishes national targets in 6 priority areas of the Global Biodiversity Framework that are most relevant to addressing the key drivers of biodiversity decline in Australia between now and 2030. The strategy also identifies 3 'enablers of change', which are methods that support us to achieve transformational change and deliver results that meet the targets. Focusing on these enablers recognises the broader efforts required to support Australia's capability to protect our biodiversity.

The Strategy for Nature is a shared roadmap to better understand, care for and sustainably manage nature. Its implementation at the national level will be tracked and measured by the Australian Government, including Environment Information Australia, through the development of key performance indicators and methods for measuring Australia's overall progress towards meeting our commitments.



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# is nature important?

Nature is important to every Australian no matter where we live. It is everywhere throughout our rural, urban and industrial landscapes, not just in national parks or the bush.

From playing in parks as kids, to bushwalking family holidays to treasured camping spots in summer – Australians from all walks of life have an affinity with nature. For many of us, the COVID-19 pandemic increased our awareness of the importance of local parks, walkways and coastal areas and strengthened our feeling of connectedness with the environment.

# **Connection to Country** is central to First Nations peoples' culture, identity and wellbeing.

Knowledge of Country is preserved and passed down through songlines, totem systems and languages, and through caring for Country practices.

There are many reasons why Australians care for nature, from First Nations peoples' deep connection with and obligation to care for Country as an expression of culture and identity, to the intrinsic belief that nature is beautiful and has a right to exist. We also recognise the services nature provides – known as ecosystem services. Ecosystem services sustain life and are critical to maintain Australia's economic, social, financial and ecological stability. They include:

- food
- drinking water
- fibre
- building and manufacturing materials
- carbon storage
- air and water filtration
- pollination
- · protection from storms and floods
- · a place for rest and recreation.

# Nature is essential to our health, wellbeing and quality of life

Whether we live in the city or the country, nature provides the building blocks for our very survival, such as clean air, water and shelter. Beyond providing for our fundamental needs, nature also provides more subtle benefits to people and communities. Both Indigenous Ecological Knowledge passed down through generations and contemporary scientific research show that spending time in nature is necessary for our minds and bodies.

Australians grow up with a close affinity to the natural world: family camping holidays, fishing trips with friends and cooling down at the beach or river on a hot summer's day. Our epic natural and cultural landscapes, unique wildlife and way of life feature strongly in our sense of identity and underpin our sense of place. First Nations peoples have a deep relationship with Country, based on a profound spiritual connection that forms the foundation of culture and identity. First Nations peoples do not own Country; Country owns them and they are obliged to protect it.

## Our economy depends on nature

It is estimated that half of Australia's GDP depends on nature. Nature provides the foundation for thriving societies and prosperous economies. Economic activity is dependent on the ecosystem services and benefits provided by nature. Industries like agriculture, fisheries, forestry, tourism and manufacturing all derive resources from nature and depend on healthy, well-functioning ecosystems.

The grandeur of Australia's land and sea, our unique wildlife and our clean, green cities attract visitors from around the world and are a major contributor to the economy.

The value of conserving biodiversity outweighs the costs of restoration. Protecting, conserving, repairing and regenerating nature must be done collectively to preserve and restore the ecosystem services that are vital to our economic, social and environmental prosperity.

Work is continuing to better quantify the value of all services provided by nature in economic terms, including through the Measuring What Matters Statement and environmental-economic accounting, which is a method for organising information to better understand how the environment and the economy interact. Work to establish a Nature Repair Market is responding to growing demand for businesses to invest in nature-related projects that deliver environmental benefits.







## Australia's nature is unique and diverse

Australia has an enormous variety of landscapes and ecosystems. We are one of 17 countries in the world described as 'mega diverse'. This group of countries cover less than 10% of the world's area but support more than 70% of its biodiversity, including many species unique to individual countries. Australia supports between 600,000 and 700,000 native species, and a very high proportion of these are found nowhere else in the world.

Australia's biodiversity is distinctive because it has developed in isolation from the rest of the world over many millions of years.

Australian biodiversity is influenced by our diverse environmental conditions, which differ from those of most other countries due to characteristics such as nutrient-poor soils, natural climatic variability, high fire frequencies and a generally flat topography. Australia's terrestrial and marine biodiversity is important both nationally and globally. We have an obligation to conserve and sustainably manage our precious ecosystems.

# in decline

Globally nature is in decline. Biodiversity is declining faster than we have ever witnessed. Climate change is altering the world's environment to an unparalleled degree across all ecosystems.<sup>1</sup>

The 2021 State of the Environment Report found:

- the state of Australia's environment is poor and deteriorating
- climate change, unsustainable use of natural resources, habitat loss, invasive species and problematic native species and pollution are driving a decline in the condition of our natural environment
- Australia has lost more mammal species to extinction than any other continent
- the number of ecological communities listed as threatened had increased by 20% in the past 5 years, with places literally burned into endangerment by catastrophic fires.

<sup>1</sup> ES Brondízio, J Settele, S Díaz and HT Ngo (eds) (2019), Global assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) secretariat.

Many of Australia's native plants, animals and distinctive ecological communities are listed nationally as threatened. As of 9 August 2024, 2,118 species<sup>2</sup> and 103 ecological communities were listed as threatened under national environment law, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Additional species are listed under state and territory legislation for protection of threatened plants, animals and ecological communities. Losing biodiversity can change the way the natural world functions. This can have severe and unpredictable impacts that may be irreversible. High biodiversity can provide insurance against change; the more variety we maintain in nature, the greater the chance that some species will survive and adapt in the future. Maintaining high biodiversity and healthy ecosystems is the best way to support adaptation and build resilience: the ability to recover from the impacts of threats, pressures and disasters.

<sup>2</sup> Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW), 'EPBC Act List of Threatened Fauna', Species Profile and Threats Database, DCCEEW website, n.d.; DCCEEW, 'EPBC Act List of Threatened Fauna', Species Profile and Threats Database, DCCEEW website, n.d.

## **Climate change**

In Australia, climate change is already causing:

- a rise in average and extreme (high and low) temperatures
- a change in precipitation patterns
- sea ice melting and sea level rise
- an increase in the frequency and intensity of extreme weather events, including droughts, high fire danger weather and tropical cyclones.

Biodiversity is vulnerable to climate change, as demonstrated by the increased frequency of fires, floods, coral-bleaching events and mass deaths of flora and fauna.

The scale, rate and nature of projected climate change, and the unpredictable interactions between climate change and other drivers of decline that cause stress to ecosystems, have the potential to overwhelm the capacity of current ecosystems to adapt.

We need strategies that will minimise the impact of climate change and promote adaptation to it. Examples include protecting natural ecosystems that provide carbon storage services, particularly primary forests, marine seagrass communities, wetlands and peatlands, and increasing carbon stores through revegetation. Embedding considerations of adaptation and ecological transformation into decision-making, and supporting actions that build resilience, is key to helping natural systems retain their capacity to store carbon and adapt to shifting climatic conditions.

There are physical limits to the capacity of nature to adapt to the impacts of climate change without help. Climate change, particularly rising temperatures, will continue to significantly affect biodiversity and ecosystems. Scientists expect climate change to cause changes to the abundance and geographic range of many species, restrict or alter the movement of species, and interfere with their life cycles and interactions with other species. Climate change also presents a biosecurity risk for Australia's ecosystems by altering the distribution of pest and weed species.

#### Changing fire regimes

Climate change is already affecting the nature of fire risk and increases the need for effective fire management to protect people and property in a way that maintains biodiversity. Fire, or its absence, has directly influenced the evolution of the Australian landscape. European colonisation largely disrupted cultural burning regimes that had been in place for thousands of years. Many native plant species, including eucalypts and acacias, have evolved in fire-prone environments and are dependent on fires of various degrees to maintain ecological cycles. In contrast, rainforest ecosystems developed without fire and are highly vulnerable to changed conditions such as prolonged drought, which increase their susceptibility to fire.

The effect of fire on the ecology of the landscape is mostly shaped by fire regimes and to a lesser extent individual fire events. 'Fire regimes' means fire patterns, such as the extent, seasonality, frequency, intensity and patchiness of fire.

#### Changes to the aquatic environment and water flows

Waterways and wetlands are a critical part of our natural environment. They provide habitat for many species, reduce the impacts of floods, absorb pollutants and improve water quality. Biodiversity in aquatic ecosystems within Australia and in its surrounding marine areas is threatened by climate change, including the impacts of changed frequency, magnitude and intensity of floods and droughts; changes in water quality and the condition of habitats fringing rivers and streams; and marine heatwaves, ocean acidification and the effects of rising sea levels. These impacts are compounded by unsustainable levels of water extraction and invasive species.



# Unsustainable use and management of natural resources

Australia's economy and future growth potential are inextricably linked to our natural resources (including plants, animals, water and even microbes), many of which are finite or may be irreparable if managed unsustainably. While there are significant efforts to sustainably manage these resources, particularly on agricultural land, which makes up 55% of the Australian landscape, issues such as soil degradation, salination, and overuse of water continue to be challenging. These efforts make an important contribution to biodiversity conservation.

## Habitat loss

Plant and animal species are less resilient to external pressures when their habitats shrink or when populations become isolated from each other. Direct causes of habitat loss include clearing of native vegetation, and pollution of waterways and marine areas. The expansion of urban, agricultural and industrial development has direct and indirect impacts on habitats, including habitat degradation, modification and fragmentation, which can expose habitats to further threats from invasive species. Development is regulated by laws in all Australian jurisdictions and we need ecosystem-scale planning and incentives to actively manage and maintain habitat values.

# Invasive species and problematic native species

Invasive species are those that now occur beyond their natural range and threaten valued environmental. agricultural, marine and social resources. Invasive species include weeds, terrestrial and marine vertebrate and invertebrate animals, and disease-causing organisms. Examples of invasive species in Australia include feral cats, European red foxes, cane toads, rabbits, European carp, chytrid fungus, myrtle rust, buffel grass and gamba grass. Native species can also sometimes be problematic for our native biodiversity – for example, the impacts of noisy miners on other woodland bird communities, the impacts of locally overabundant macropods such as kangaroos and wallabies on grasslands, and the impact of long-spined sea urchins on native kelp forests. Invasive and problematic native species reduce biodiversity by predation, competition with native species for food and habitat, bringing diseases, and altering the physical environment in ways that exclude native species.

## Pollution

Pollution, including from chemicals such as pesticides and herbicides, waste and contamination, is driving ecosystem change. It has especially devastating direct effects on freshwater and marine habitats. For example, it is estimated that by 2050 plastic in the oceans will outweigh fish.<sup>3</sup> Australians are amongst the most wasteful people in the world, generating 2.95 tonnes of waste per person each year.<sup>4</sup>

## Interactions across threatening processes

Each of these issues – climate change, unsustainable use of natural resources, habitat loss, invasive species and pollution – is serious in its own right. But their effects also interact to magnify impacts on Australia's biodiversity. Of particular concern is that to survive accelerating climate change, species will need to adapt in place or move to suitable habitats, and to do either of these things they need to maintain large, genetically diverse populations. This fundamental requirement is challenged by other pressures reducing population size (e.g. invasive species, habitat loss) or connectivity of suitable habitat (habitat fragmentation). Sustainable development requires understanding and addressing the interactions among threatening processes.

Natural disasters are also becoming more frequent and intense. Nature is not sufficiently resilient to deal with cumulative impacts or respond to emerging threats and natural disasters. Since the release of Australia's Strategy for Nature 2019–2030, Australia has suffered tragic loss of human life and enormous loss of wildlife and critical habitats in the catastrophic Black Summer bushfires in 2019–2020. We incurred further loss of life and destruction of communities and ecosystems in the devastating flooding across Australia in 2022 and 2023.

<sup>3</sup> Ellen MacArthur Foundation (2017), The New Plastics Economy: Rethinking the future of plastics & catalysing action.

<sup>4</sup> Joe Pickin, Christine Wardle, Kyle O'Farrell, Lara Stovell, Piya Nyunt, Sabrina Guazzo, Yong Lin, Georgia Caggiati-Shortell, Poulomi Chakma, Carmen Edwards, Blake Lindley (Cirq Solutions), Geoff Latimer (Ascend Waste and Environment), Jenny Downes (BehaviourWorks), Isabel Axiö (RMCG) (2022), *National Waste Report 2022*.

## **Protections for biodiversity**

To protect biodiversity and mitigate threatening processes, we must continue to strengthen legal protections for nature and use science and Indigenous Ecological Knowledge to inform best-practice management. Effective management requires collaboration and engagement from all sectors, public and private, in genuine partnership with First Nations peoples and local communities. We must manage threats at the landscape and seascape level through a multi-pronged approach encompassing:

- adaptive management, which involves assessing risk, measuring outcomes, reviewing and adjusting as needed. This allows for flexibility and dynamic decision-making to support actions that protect, maintain and restore our terrestrial, aquatic and marine ecosystems
- the precautionary principle, which involves taking actions against likely environmental threats, without waiting for full scientific certainty
- ecosystems services, which considers the full range of short-term and long-term benefits and costs to humans across future generations associated with decisions that affect, or are affected by, nature
- a robust regulatory regime to ensure protection of conservation values, coupled with effective monitoring and compliance measures.

# Australia's nature needs



Globally, pressures on biodiversity have been increasing and there is recognition of the need to address biodiversity loss. Much of Australia's unique nature is under threat, and the health of many of our ecosystems is declining due to the cumulative impacts of climate change, unsustainable use of natural resources, habitat loss, invasive species and pollution.<sup>5</sup> These drivers often result from undervaluing nature in financial and business decision-making. All sectors of our society can be involved in valuing and protecting nature. If we are to protect our unique places and species, maintain our quality of life and support our economy over the long term, we must tackle the drivers of environmental decline and create the circumstances and conditions in which nature can thrive. Ecosystems are complex and dynamic. To keep our ecosystems functioning and our biodiversity healthy, we must adopt a systems-based approach. This brings together land, water and living resources management practices including adaptive management and applying the precautionary approach.

The cumulative effects of climate change, habitat loss, changes in fire regimes and water flows, incursions of damaging weeds and feral animals, pollution of air and water, marine debris, and overexploitation of some natural resources have left a lasting impact on many of our natural systems.





## We need to continue to work together

Working together in a coordinated way to build connectivity of fragmented ecosystems, increase the use of nature-based solutions, protect native habitat and biodiversity and reduce invasive species and other pressures is critical to supporting adaptation and building the resilience of our unique nature. Building and applying both Indigenous Ecological Knowledge and Western scientific knowledge about how nature responds to climate change will ensure our interventions are more effective.

We need urgent and concerted efforts to conserve, restore and sustainably manage nature. This is essential if nature is to continue to provide essential services for present and future generations and to remain integral to our national identity. All Australians must recognise that our natural world is continually changing and there are many ways we can work together to care for it, now and into the future.

Overcoming the challenges and threats to Australia's nature is only achievable if all sectors and organisations work together. Governments, the private sector, civil society, academia, First Nations peoples, local communities and individuals all have a role to play. In some cases, it may be appropriate for governments to lead; in other cases, leadership by other groups, such as First Nations groups, may make the most sense. Collaboration will enhance the response to complex environmental challenges through sharing diverse knowledge and ideas, supporting different perspectives to identify risks and opportunities, and creating a shared purpose to enable effective outcomes. A national approach to conserving nature is required to recognise that ecosystems exist and function beyond state and territory boundaries, to agree on coordinated national priorities and targets for action, to emphasise the importance and urgency of taking action, to measure and monitor progress against our targets, and to demonstrate all Australians' contributions to achieving a global approach. This strategy seeks to support enabling actions by all – not just governments and not just the environment sector.

Caring for nature is the shared responsibility of all Australians. The goals and objectives in this strategy establish clear priorities and targets for action that contribute to the Global Biodiversity Framework for the years to 2030. All Australians are invited to commit to doing their part to achieve these goals and to share in the success of our collective efforts.

# We need to meet our international commitments

Australia has been a party to the United Nations Convention on Biological Diversity since 1992. In 2022, Australia adopted the Kunming-Montreal Global Biodiversity Framework at the 15th Conference of Parties to the Convention on Biological Diversity.

Australia is a party to a number of international biodiversity agreements (see Figure 1). Halting and reversing biodiversity loss is a local, national and global issue. No country, including Australia, can achieve its objectives under the Global Biodiversity Framework without both international cooperation and a national effort to implement the framework.

As a party to the Convention on Biological Diversity, Australia contributes to the Global Biodiversity Framework and its objectives to:

- · conserve biological diversity
- · use biodiversity in a sustainable manner
- share benefits arising from genetic resources in a fair and equitable way.

Australia's Strategy for Nature coordinates national delivery of Australia's commitments to the Convention on Biological Diversity, the Global Biodiversity Framework, and other international agreements including the United Nations Sustainable Development Goals, the Ramsar Convention on Wetlands and the Convention on Migratory Species (Figure 1). Australia's Strategy for Nature has been updated to reflect how Australia is boosting its efforts to meet the new challenges and deal with the ongoing pressures outlined in the Global Biodiversity Framework.

Australia will report to the Convention on Biological Diversity on all 23 targets of the Global Biodiversity Framework. We will focus our actions to halt and reverse biodiversity loss on 6 targets in priority areas of most relevance to Australia, and 3 enablers that will underpin broader work to contribute to the Global Biodiversity Framework's vision of:

a world of living in harmony with nature where 'by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people.'

To see how Australia's Strategy for Nature aligns with the Global Biodiversity Framework and the Sustainable Development Goals, refer to Figure 5. Figure 1: How the strategy contains and coordinates our national and international actions to manage and care for nature

#### International commitments



Commonwealth, state, territory and local governments policies,

#### Australia's Strategy for Nature 2024-2030:

programs and regulation:

Australia's Nature

Australia's Nature

Positive Plan

Repair Market

Environment

Australia's National Biodiversity Strategy and Action Plan Umbrella policy for all Commonwealth, state and territory government biodiversity-related efforts.

#### Other national strategies

- The Australian Pest Animal Strategy
- Australian Weeds Strategy
- Australia's Strategy for the National Reserve System
- Australia's National Representative System of Marine Protected Areas
- Information Australia

  Environment
- Protection AustraliaAustralia's National
- Adaptation Plan
- Threatened Species
   Action Plan
- Natural Heritage Trust
- Reef 2050 Plan
- Sustainable Ocean Plan
- Indigenous Protected Areas

- 30 x 30 Roadmap
- National Waste Policy Action Plan
- Net Zero Plan
- Environment Protection and Biodiversity Conservation Act 1999
- Protecting Victoria's Environment

   Biodiversity 2037
- WA Biodiversity Conservation Act 2016
- NSW Biodiversity Conservation Act 2016
- Conserving Nature – a Biodiversity Conservation Strategy for Queensland

#### International / domestic action and investment by:

- Community and non-government organisations
- Business sector
- Research/ academia
- Individuals

# A national

Australia's Strategy for Nature 2024–2030 is the result of extensive collaboration between the Australian Government and all state and territory governments. It updates Australia's Strategy for Nature 2019–2030 and represents the continued commitment of governments to work better together to meet the targets of the Global Biodiversity Framework.

This updated strategy is the overarching framework for all national, state and territory and local strategies, legislation, policies and actions that target environmental decline and create the conditions for nature to thrive. The strategy builds on previous and existing work and is underpinned by science.

The strategy sets the framework for local, state, territory and federal government actions to contribute to achieving all of the 23 Global Biodiversity Framework targets by 2030. It also helps those outside government identify where they can contribute.

The updated strategy retains the 3 **goals** of the original strategy, underpinned by 12 **objectives** and 6 new national **targets**, which are supported by 3 **enablers** of change.

The goals work together in continuous loops designed to reinforce each other (Figure 2). By connecting people with nature, we enhance their desire to care for nature, which in turn builds knowledge that can be shared to improve our care for nature and the benefits we receive from connecting with nature. Each objective has **progress measures**, which will be used as one method to track the success of the strategy.

The 6 national targets are those determined to be of highest priority to protecting and restoring Australia's biodiversity. They reflect Australia's increased ambition to focus action in areas of most relevance and impact.

The 3 enablers identify mechanisms that are critical to achieving progress toward the Global Biodiversity Framework targets. These targets and the enablers are closely related. Delivery against each of them will also result in outcomes for other targets and enablers. Boosting our efforts to achieve the targets will enhance the delivery of Australia's existing policies, programs and legislation that tackle the drivers of biodiversity decline.

#### Figure 2: How targets and enablers of change support Australia's biodiversity goals

#### Enablers

- Mainstream nature into government and business decisionmaking, including in financing, policies, regulations and planning processes
- Ensure equitable representation and participation in decisions relating to nature, particularly for First Nations peoples
- Ensure environmental data and information are widely accessible and supports decision-making

#### Goals



Protect and conserve
 30% of Australia's
 landmass and 30%
 of Australia's marine
 areas by 2030

Minimise the impact

of climate change

on biodiversity

- Priority degraded areas No are under effective restoration by 2030
  - No new extinctions
- Eradicate or control Increas invasive species in circular priority landscapes and and rec

further minimise their

introduction by 2030

 Increase Australia's circularity rate, and reduce pollution and its impacts on biodiversity by 2030



## Science in the strategy

Governments have drawn on extensive practical, on-ground management, science, research and monitoring to inform the goals and objectives in Australia's Strategy for Nature. This wealth of knowledge from domestic and international scientific communities, First Nations peoples, field practitioners and citizen scientists is vital to ensure Australia's interventions and policies are robust. Science provides the evidence base for valuing nature and how it enriches our lives, for understanding how it is declining and for determining what we can do to halt and reverse its loss. Australia's nature is diverse and unique, so there is still plenty to learn to better understand our nature and our vast landscapes and seascapes. We can support the use of Indigenous Ecological Knowledge in respectful, culturally appropriate and equitable ways as part of genuine engagement and partnerships with First Nations peoples, businesses and communities. Science underpins Goal 3 of the strategy, which focuses on working to fill knowledge gaps about Australia's nature. The underpinning enablers, objectives and progress measures will inform effort in areas where new attention is needed. This will assist decision-makers in making choices about policy and project development and funding distribution.

# Enabling *transformational* change

The objectives and targets in the strategy are underpinned by broader approaches that are critical to enabling transformational change. These approaches are referred to as 'enablers', as they will enable progress towards halting and reversing biodiversity loss and enabling Australia to live in harmony with nature. Continued momentum in delivering outcomes through these approaches will be essential to achieving the objectives and targets. There are different streams of work underway across sectors that are applying these enablers. The updated strategy aims to connect and strengthen existing streams of work.

## Enabler of change

### Mainstream nature into government and business decision-making, including in financing, policies, regulations and planning processes

The decline of Australia's biodiversity is a source of systemic risk for the economy, society, business and government. Elevating and mainstreaming nature to be a key consideration in decision-making enables businesses, financial institutions and governments to better understand the value of biodiversity, manage nature-related risks and act on nature-related opportunities. Prioritising nature in decision-making is essential to tackling the drivers of environmental decline and creating circumstances in which nature can regenerate and repair. Mainstreaming nature into decision-making at all levels means better outcomes for biodiversity, which means better outcomes for the environment and ultimately for business. We must use nature in a sustainable way so as to meet the needs of today without compromising the needs of future generations.

Many initiatives are already underway to drive biodiversity repair and regeneration across the economy with the aim of mobilising private and public action and finance for nature. For example, the Taskforce on Nature-related Financial Disclosures has developed a global naturerelated risk management and disclosure framework to help businesses and financial institutions identify and act on nature-related impacts, risks, dependencies and opportunities. Other examples are Australia's Nature Positive Plan, Australia's Sustainable Finance Roadmap, the Measuring What Matters Framework, national environmental-economic accounting, the Nature Repair Market, the Green Bond program and hosting the inaugural Global Nature Positive Summit, together with the establishment of the data and regulatory bodies **Environment Information Australia and Environment** Protection Australia.

Many organisations in Australia are already considering their nature-related impacts. This enabler is intended to reinforce the need to continue to mainstream nature in areas where it matters most.

This enabler is aligned with Global Biodiversity Framework targets 14 and 15.

#### Enabler of change

#### Ensure equitable representation and participation in decisions relating to nature, particularly for First Nations peoples

Ensuring the full and equal participation, engagement and leadership of communities, businesses and individuals across Australia is critical to taking action that can halt and reverse biodiversity loss. Our decision-making and our actions are most effective at local, regional, national and global scales when we include diverse perspectives and voices across age, gender, ability, location, ethnicity and other backgrounds.

The culture, values, knowledge, innovations and practices of First Nations peoples are valued and respected, and inform planning, management and conservation of nature. Collaborative decision-making, alignment of effort and partnerships contribute to effective policymaking.

The Australian Government recognises First Nations peoples' enduring management and custodianship of Country and their cultural and spiritual connection to Country. Working closely with First Nations communities, individuals and organisations to appropriately embed First Nations perspectives and voices in decision-making processes will better represent and protect Indigenous Cultural and Intellectual Property, including Indigenous Ecological Knowledge and caring for Country strategies. This includes co-designing policies and projects as well as forming genuine and equitable partnerships with First Nations peoples. Recognising the knowledge, innovations, practices, institutions and values of First Nations peoples and local communities, and ensuring their inclusion and participation in environmental governance, often makes conservation, restoration and land management efforts more effective and improves the wellbeing of First Nations peoples.

Australia's National Agreement on Closing the Gap sets a target to enhance First Nations peoples' connection to Country. Increased funding for Indigenous Protected Areas and the Indigenous Rangers Program will support First Nations peoples to continue caring for Country.

The development of a National Environmental Standard for First Nations engagement and participation in decisionmaking as part of Australia's nature-positive law reforms represents one element of a broader goal to embed First Nations peoples' participation and perspectives into environmental decision-making. Similarly, the National Environmental Standard for community engagement and consultation, which is also being developed, aims to include the full breadth of voices and perspectives in our community in decisions that affect nature, which is essential to support the effective management and restoration of biodiversity.

This enabler is aligned with Global Biodiversity Framework targets 22 and 23.

#### Enabler of change

## Ensure environmental data and information are widely accessible and support decision-making

Effective decision-making, including planning and management that affects nature, relies on continuous research, innovation and monitoring and evaluation. Sharing data and information contributes to evidence-based and cost-effective outcomes and informs consensus on shared biodiversity values.

Data and information are critical to effectively protecting Australia's biodiversity and restoring degraded ecosystems. Improved data and information can help us target conservation, restoration and management activity in areas where it matters most. Improved data and information enable business and industry to avoid and mitigate environmental impacts and, in doing so, make more effective decisions. Improved data and information are also needed to track and report progress under the updated strategy at both an overall level and an individual target level. This will underpin implementation efforts and support adaptive management.

The Australian Government is establishing Environment Information Australia, which will develop a National Environmental Standard for data and information under Australia's reformed environmental legislation, and the Biodiversity Data Repository. The intent of the Biodiversity Data Repository is to make data and information of an appropriate form, quality and coverage available to and useable for all levels of government, business and the public to ensure that decision-makers adequately consider biodiversity protection and ecosystem restoration. This enabler is a key aspect to the implementation of this strategy. Implementing the strategy will require establishing indicator frameworks and approaches to monitoring and evaluation so that we can report on progress towards achieving our targets. This will leverage the work of the State of the Environment Report, which is a comprehensive assessment of our environment produced every 2 years, written by independent experts and underpinned by multiple long-term datasets.

As specified in the United Nations Declaration on the Rights of Indigenous Peoples, considerations around First Nations data sovereignty and Indigenous cultural and intellectual property rights will be developed as part of the data initiatives outlined above. For example, some elements of Indigenous Ecological Knowledge are not appropriate for broad access and accessibility due to cultural sensitivities. Adherence to free, prior and informed consent processes is one method which we will use to support culturally safe and appropriate use of First Nations data, including Indigenous Ecological Knowledge.

This enabler is aligned with Global Biodiversity Framework targets 1 and 21.





# **Goal 1: Connect all Australians with nature**

Modern life means many Australians feel disconnected from nature in our daily lives and sometimes overlook its importance to our health and wellbeing. Supporting all Australians to connect with nature in a way that is right for them is essential to our long-term mental and physical health, economic prosperity and national identity.

We can all connect to nature in different ways and settings. Visiting a national park, picnicking outdoors, walking on the beach or down a tree-lined road, going camping and enjoying our gardens are all experiences of nature that can build human wellbeing. Interacting with nature does not have to be a planned experience – it can happen where we live, where we work, where we volunteer and where we learn. This strategy encourages all Australians to get out into nature, whether we live in a city, the bush or by the coast, to enjoy nature and enrich our health and wellbeing.

Increasing awareness and understanding of nature's role can lead to a deeper appreciation of its value and contribution to our livelihoods. This can deepen the feeling of connection to nature for those who, through history or lifestyle, feel divorced from nature. It can also change our behaviour to become more mindful of the impacts of our broader actions and decisions that affect nature, directly and indirectly. Connecting all Australians with nature echoes the enduring wisdom of First Nations peoples, whose ancestral connections to the land are fundamental to their identity, spirituality and wellbeing. For First Nations communities, nature is not merely a backdrop for recreational activities but a sacred entity with which they share an inseparable bond. Reconnecting all Australians with nature necessitates respecting and amplifying First Nations knowledge and practices and fostering genuine partnerships rooted in respect, reciprocity and awareness.

This strategy seeks to increase Australians' understanding and awareness of the value of nature for keeping our communities safe and healthy, producing clothing and food, helping to sustain jobs and cultural practices, and creating opportunities for the future.

Being empowered to care for nature benefits Australia and Australians. Given the opportunity, all Australians can take action to care for nature, whether in cities, on farms, in the outback or at sea. Individuals, communities, industries, businesses and all levels of government can be active stewards of nature, inspiring others to contribute, and building partnerships for effective action. This is supported by valuing nature and ecosystem services and incorporating this into decision-making, within a sound and effective regulatory regime that protects key values. Community stewardship of nature can contribute to Australia's nature conservation objectives and also build the health and resilience of our society, businesses and economy.

### **Objective 1: Encourage Australians** to get out into nature

Sustainable Development Goals (SDGs)



Australians can be encouraged to get out into nature by diversifying nature experiences, appropriately increasing access, growing nature-based tourism, and increasing promotion of human health benefits from nature-based activities. Access to nature should be undertaken with consideration of the cultural significance of Country to First Nations peoples and the fragile nature of some of our ecosystems.

#### **Progress measures:**

**1A** Extent of promotion of human health benefits from nature-based activities

**1B** Rates of visitation to public nature conservation areas (land, water and sea)

**1C** Value and diversity of sustainable nature-based tourism

## **Objective 2: Empower Australians** to be active stewards of nature

Global Biodiversity Framework (GBF) targets and SDGs



All Australians – including First Nations peoples, women, young people and people with disabilities – and all Australian communities and organisations have an important role in caring for nature.

For example, people may volunteer for nature-based activities, contribute to citizen science programs or enter conservation covenants or stewardship agreements. The capacity of community groups to participate in stewardship programs can be increased. Looking after nature through participation in public– private partnerships and cross-sector collaborations are also avenues that can be pursued.

#### **Progress measures:**

**2A** Number and diversity of volunteers for nature-based activities

**2B** Number of people contributing information through citizen science programs

**2C** Number and extent of terrestrial, aquatic and marine ecosystems managed for conservation such as privately managed protected areas, covenants or stewardship agreements

**2D** Number and scope of publicprivate partnerships and cross-sector collaborations to look after nature

**2E** Extent of public consultation on decision-making related to nature-focused policy, strategy or regulatory matters



## **Objective 3:** Increase Australians' understanding of the value of nature

GBF targets and SDGs



Australians' understanding of the value of nature, and its role in supporting economic prosperity and health and wellbeing, can be improved by:

- incorporating considerations of nature into all decision-making
- encouraging organisations and businesses to report their performance against environmental measures
- using environmental-economic accounts to more clearly demonstrate the value of nature.

Equally, all levels of government and the private sector must consider impacts on nature in decision-making, particularly in policy, regulatory and planning processes.

#### Progress measures:

**3A** Extent of activities to increase awareness of the importance of nature, including to human health and wellbeing

**3B** Progress on quantification of natural capital and its benefits including (but not limited to) the national environmental-economic accounts and the State of the Environment Report

**3C** Extent of funding delivered nationally for biodiversity from both private and public sector finance

## **Objective 4:** Respect and maintain Indigenous Ecological Knowledge and First Nations stewardship of nature

GBF targets and SDGs



Indigenous Ecological Knowledge brings a fundamental understanding to assessing changes to the environment and identifying appropriate management strategies. Under the guidance of and in partnership with First Nations peoples, these programs and initiatives based on Indigenous Ecological Knowledge can increase the participation and engagement of First Nations peoples and achieve better environmental, cultural and wellbeing outcomes for everyone.

#### **Progress measures:**

**4A** Number of programs working with First Nations communities to support the appropriate protection, documentation and retention of Indigenous Ecological Knowledge

**4B** Number of conservation and land, water and ocean management plans that have appropriately and equitably integrated First Nations peoples, partnerships, perspectives and Indigenous cultural knowledge

**4C** Extent of recognition and use of Indigenous cultural knowledge in interpretation, practices and decisions relating to environmental management

**4D** Number of First Nations rangers and First Nations ranger programs managing terrestrial, aquatic and Sea Country

**4E** Number and extent of terrestrial and marine areas managed by First Nations peoples as part of Indigenous Protected Areas or other management or co-management arrangements



# **Goal 2: Care for nature in all its diversity**

Nature is an asset from which all Australians benefit. While supporting adaptation and building the resilience of our native species and the health of our landscapes, seascapes and aquatic environments is challenging, the benefits of success greatly outweigh the costs.

Maximising a diverse mix of species and ecosystems benefits all Australians by conserving and improving a valuable asset. There are opportunities for us to lead the world in practical approaches to environmental protection and management and to export our natural resource management expertise and experience.

Caring for nature in all its diversity embodies First Nations wisdom by recognising nature as a sacred inheritance essential for the collective wellbeing of all Australians. Since ancient times, First Nations peoples have stewarded diverse ecosystems with reverence, understanding the intricate balance between species and landscapes. Upholding this ancestral legacy, the strategy calls for universal approaches to conservation, resilience-building and adaptation, supported by First Nations knowledge systems. By embracing the resilience inherent in nature and fostering partnerships across diverse communities, we share our responsibility to protect and nurture the rich tapestry of biodiversity that sustains us all.

The objectives under this goal work together to support adaptation and enhance resilience, an important quality of nature. The focus on adaptation recognises that our ecosystems are changing due to climate change.<sup>6</sup> To support adaptation, we must change how we manage ecosystems and what we seek to conserve. Resilience refers to the ability of nature to recover from disturbance and resist ongoing threats. Resilience can be improved by protecting a wide variety of terrestrial, aquatic and marine ecosystems in an ecologically viable habitat network, increasing biodiversity, reducing threats, managing trade-offs in the use of natural resources, and actively encouraging and connecting nature in urban environments. This goal ensures a multi-pronged approach to caring for nature that incorporates engagement of people from all walks of life.

6 Cresswell et al., Australia state of the environment 2021: overview.

Australia's ecosystems have developed a range of strategies to cope with the natural high variability of the Australian environment. Protecting a wide variety of terrestrial, aquatic and marine ecosystems through both government and private mechanisms provides insurance against future change, protects nature from some threats and provides dispersal opportunities and refuges for species to survive and adapt to potential threats.

There is evidence that protecting high biodiversity improves the ability of the environment to recover from disturbances as well as protecting ecosystem function and stability.

The key drivers of biodiversity decline in Australia are destabilising our complex ecosystems. A resilient environment is best placed to moderate intensifying impacts from these drivers of decline. Supporting naturebased solutions and effective environmental management can reduce the risks to biodiversity and local communities that arise from drivers of decline and disasters caused by natural hazards.

Particular features of agricultural land provide natural infrastructure. Improvements in natural resource management practices can result in increased productivity and improved farm sustainability as well as enhanced environmental protection. Nearly 90% of all Australians live in urban areas. The expansion of urban areas has impacted biodiversity, yet human urban settings in Australia retain substantial natural areas and native species. These areas can help maintain connectivity, provide habitat for native species and keep valuable ecosystems healthy and resilient. For example, urban wetlands provide both important habitat and critical water and nutrient management, helping maintain water quality in rivers and waterways. Connectivity in built landscapes can flow between towns, suburbs, parks and reserves, and lead to raised awareness and engagement of communities in nature conservation and management.

Urban nature also supports healthy and sustainable inner-city and suburban communities, enhancing the liveability of our urban environments. Urban green spaces provide many public health benefits from contact with nature, such as relaxation, stress reduction, enhanced physical activity, and mitigation of exposure to air pollution, excessive heat and noise. There are benefits to both people and nature from enriching and connecting urban green spaces.



# **Objective 5:** Improve conservation management of Australia's landscapes, waterways, wetlands and seascapes

GBF targets and SDGs

Target<br/>02Target<br/>03Target<br/>08Target<br/>11Image: Comparison of the compariso

Conservation management of landscapes, waterways, wetlands and seascapes can be improved in a number of ways. These include through enhancing the representativeness, extent, connectivity and condition of government- and non-government-managed protected areas, conserved areas and conservation reserves. Indigenous Protected Areas and marine protected areas. Other measures include supporting landowners' protection of significant ecosystems through stewardship programs, covenanting or other conservation programs. The restoration and connection of habitats should aim to maximise the genetic diversity and complexity of restored ecosystems, requiring the maintenance of viable seed supplies.

#### **Progress measures:**

**5A** Extent and representativeness of governmentmanaged protected and conserved areas and, where available, its condition and connectivity

**5B** Extent and representativeness of marine protected areas and Sea Country Indigenous Protected Areas

**5C** Number and extent of areas, including significant ecosystems, protected and conserved by private landowners through stewardship or other arrangements

**5D** Number of protected areas that include explicit consideration of future climate scenarios and adaptation responses in their planning and management

**5E** Extent of retention, protection and/or restoration of aquatic and marine systems to maintain or improve ecological integrity, connectivity and ecosystem function

**5F** Extent of effective restoration efforts underway in priority degraded areas across terrestrial, marine, coastal and inland water areas

# Target: Protect and conserve 30% of Australia's landmassand 30% of Australia's marine areas by 2030

Protect and conserve at least 30% of Australia's terrestrial and inland water areas, and marine and coastal areas by 2030, especially areas of particular importance for biodiversity and ecosystem functions and services, ensuring protected and conserved areas are ecologically representative, well connected and effectively managed, recognising and respecting the rights of First Nations peoples.

Protected and conserved areas are a critical response to the cumulative pressures on Australian ecosystems. Protected and conserved areas support healthy ecosystems and are important for improving the recovery of threatened species. Protecting and conserving at least 30% of the planet's land and marine areas is considered the minimum required to maintain a healthy and sustainably managed environment. Scientific research has found that managing 30% of the world's land 'optimally located for conservation' will help improve the conservation status of over 80% of the Earth's plants and animals.

Protected and conserved areas also help sustain and enhance human life. Our food and water, our agricultural industries and much of our infrastructure all rely on healthy functioning ecosystems. This strategy recognises the rights, interests and responsibilities of First Nations peoples to care for Country. Respecting and integrating First Nations peoples' ecological knowledge, practices and innovations is essential for effective and equitable management of protected and conserved areas.

Ensuring that at least 30% of land and marine areas are protected, conserved and effectively managed by 2030 to achieve our 30 by 30 target will require collaborative action from the Australian Government, state and territory governments, the private sector and non-government stakeholders, including environmental and philanthropic organisations.

This target aligns with Global Biodiversity Framework target 3.

## Target: Priority degraded areas are under effective restoration by 2030

Priority degraded areas (across terrestrial, inland water, coastal and marine ecosystems) are under effective restoration by 2030 to recover biodiversity and improve ecosystem functions and services, ecological integrity and connectivity.

Ecosystem degradation in Australia is widespread. Many native ecosystems have been extensively cleared and at least 19 Australian ecosystems have shown signs of collapse or near collapse. These ecosystems span the entire Australian continent.

The prioritised restoration of degraded areas is a critical complement to the conservation of representative ecosystem types, managing invasive species, reducing the impacts of pollutants, and adapting to climate change. Restoration provides for the creation of buffer zones around protected areas, restoration of connectivity in the landscape (particularly between areas of high-value habitat) and recovery of ecosystems under imminent threat (such as threatened ecological communities or ecosystems under-represented in protected and conserved areas).

To achieve these outcomes and ensure restoration activity has the greatest possible impact, it is important to prioritise and target restoration activity. Key considerations include cost-effectiveness, cultural values, level of threat and the identification of locations where restoration effort can make the greatest contribution.

The identification of priority degraded areas for restoration is a critical first step, enabling targeted deployment of resources by governments, business and industry, non-government organisations, First Nations peoples and community groups. Defining 'effective restoration' will also be important to guide actions towards agreed best practice for different biomes.

Mechanisms such as the Nature Repair Market will better facilitate collective investment from a variety of sources to maximise opportunities for effective restoration of priority degraded areas.

This target aligns with Global Biodiversity Framework target 2.

### **Objective 6: Maximise the number of species secured**

#### in nature

GBF targets and SDGs



Supporting the persistence of species and ecosystems in nature will require protection and restoration of native habitats, mitigation of threats, management of risks to environments and their species. Action to support threatened species is needed both in natural habitats and through off-site (ex-situ) conservation efforts such as captive breeding programs, seed banks and other managed environments. Preventing extinctions requires timely identification of species at very high risk so that appropriate action can be taken.

Conservation efforts could include improved cross-boundary and cross-border collaboration and the provision of consistent, robust and transparent approaches for assessing and listing species.

Support for species could also involve increased support for landowners and custodians who protect threatened species; establishment of predator- and threat-free 'safe havens' for threatened species; effective and targeted reductions in the intensity of key threats; programs for captive breeding; storage of living plants and seed; and emergency intervention for the most at-risk species.

#### **Progress measures:**

**6A** Consistency, robustness and transparency of assessment and listing of threatened species across all jurisdictions

**6B** Improvement of trajectories of threatened species, as measured by the Threatened Species Index or other measures

**6C** Number of populations of threatened or nearthreatened species protected through reserves or safe havens or by private landowners through stewardship or other arrangements

**6D** Number of species at high risk of imminent extinction that are identified and supported to persist

**6E** Number and extent of natural habitat areas managed to support threatened species

#### Target: No new extinctions

Prevent new extinctions of native species, support the recovery of threatened species and maintain their genetic diversity.

The global extinction rate is at least tens to hundreds of times higher than the average over the past 10 million years, and the rate is increasing. Australia has one of the world's highest extinction rates, and our native species and ecological communities face significant challenges from cumulative and compounding threats. Major threats include habitat loss and fragmentation, invasive plants, animals and diseases, inappropriate fire regimes, climate change impacts, and pollution.

This target is ambitious but it is achievable with collective action. The evidence shows that where governments work cooperatively, collaborate with other partners, ensure species and their habitats are fully considered in decisionmaking, and focus efforts, knowledge and resources, species recovery can be achieved and the extinction of species known to persist can be prevented. Species recovery includes maintaining the genetic diversity of threatened species and ensuring their ecosystems are healthy.

Efforts to protect and recover threatened species in the wild will often also benefit other native species occupying the same habitat.

This target builds on the commitment by Australia's environment ministers in October 2022 to accelerate work towards achieving zero new extinctions by 2030.

This target aligns with Global Biodiversity Framework target 4.

#### **Objective 7: Reduce threats and risks to nature and build resilience**

GBF targets and SDGs

Target 06 Target 08 Target 13 Target 15 Target

Major threats to nature include climate change, unsustainable use of natural resources, habitat loss, invasive species and pollution. Options for joint action to reduce threats and their impacts include ensuring the design and management of the protected area network considers and accommodates future threat scenarios, and establishing robust mechanisms to respond effectively to new and emerging threats. There are opportunities to improve planning, regulation, environmental impact assessment and approvals processes. In addition, threat abatement activities could include targeted pest management, ecosystem restoration (integrated fire management, revegetation), pollution control, greenhouse gas emissions management and climate change adaptation.

#### **Progress measures:**

**7A** Explicit consideration of climate change risks, adaptation and resilience in the management of species, ecosystems and landscapes

**7B** Extent and success of management programs to implement appropriate fire regimes that reduce impacts of fire on species and/or ecosystems that are vulnerable to this threat

**7C** Extent and success of management programs for established invasive species that pose a significant threat to native species and/or ecosystems that are vulnerable to this threat

**7D** Extent and success of management programs to minimise incursion and spread of new and emerging invasive species

**7E** Extent of retention, protection and/or restoration of landscape-scale native vegetation corridors

**7F** Extent of retention, protection and/or restoration of native vegetation in urban, peri-urban and agricultural contexts

**7G** Extent of retention, protection and/or restoration of marine ecosystems



#### Target: Minimise the impact of climate change on biodiversity

Minimise the impact of climate change on biodiversity and increase its resilience through mitigation, adaptation and disaster risk reduction actions, including by embedding climate change adaptation in all relevant decision-making, and through nature-based solutions and/or ecosystem-based approaches, while minimising negative and fostering positive impacts of climate action on biodiversity.

Climate change is a direct and compounding threat to biodiversity. The changing climate is affecting species and ecosystems by driving changes in distribution and behaviour, altering the composition and functioning of ecological communities, and exacerbating the impacts of other threats. Climate change is also causing extreme weather events and sustained changes to temperatures and rainfall patterns. Climate change is one of the key drivers of biodiversity decline in Australia.

Both adaptation and mitigation are essential to reducing the expected impacts of climate change. Enhancing adaptation and improving the resilience of biodiversity to deal with the impacts of climate change will complement the significant work underway to minimise the impact of climate change through mitigation, such as our work towards net zero emissions by 2050 and our international engagements. Actions to mitigate or adapt to the effects of climate change should also consider and minimise the impacts on biodiversity.

Efforts to mitigate climate change and minimise impacts on biodiversity will need to continue well beyond the time frame of this target.

Delivery against the other proposed Strategy for Nature national targets will also build the resilience and adaptability of species and ecosystems by conserving more land and sea, building connectivity and managing the threats of invasive species and pollution. Nature-based solutions such as protecting blue carbon ecosystems will aid in mitigation as well as resilience and adaptation by building biodiversity and protecting coastlines from climate threats, while providing important ecosystem services.

This target seeks to embed climate change adaptation in all relevant decision-making by government, businesses, organisations and the wider community, through institutional settings and capacities that consider long-term future scenarios.

This target aligns with Global Biodiversity Framework target 8.

## **Target:** Eradicate or control invasive species in priority landscapes and further minimise their introduction by 2030

Minimise and mitigate the impacts of invasive species by eradicating or controlling established invasive species in priority landscapes and places; and further minimise the introduction and establishment of new invasive species, to maximise threatened species recovery and protect biodiversity and related cultural heritage values.

Invasive species are a leading cause of biodiversity loss and species extinction in Australia. Invasive species also impact the delivery of ecosystem services, devastate the primary industries sector, reduce business access to export markets, and impact social amenity and wellbeing, ecotourism, and culturally significant plants, animals and places for First Nations peoples. Australia has close to 3,000 invasive species, many of which are widely established. Each year it costs \$25 billion to manage invasive species in Australia's agricultural sector and protected estates.<sup>7</sup>

This target focuses on improving coordination of action across Australia, protecting biodiversity assets from established invasive species and enhancing Australia's strong risk-based biosecurity system.<sup>8</sup>

This target aligns with Global Biodiversity Framework target 6.

<sup>7</sup> Bradshaw CJA, Hoskins AJ, Haubrock PJ, Cuthbert RN, Diagne C, Leroy B, Andrews L, Page B, Cassey P, Sheppard AW, Courchamp F (2021), Detailed assessment of the reported economic costs of invasive species in Australia. In: Zenni RD, McDermott S, García-Berthou E, Essl F (Eds) The economic costs of biological invasions around the world. NeoBiota 67: 511-550.

<sup>8</sup> Consistent with our Appropriate Level of Protection which is prescribed in the Biosecurity Act 2015 and was agreed by all states and territories.

# **Objective 8:** Use and develop natural resources in an ecologically sustainable way

GBF targets and SDGs

Target<br/>05Target<br/>07Target<br/>09Target<br/>10Target<br/>14Target<br/>16Image 12

All businesses and industries use and therefore have an impact on natural resources, either directly or indirectly. Ecologically sustainable use and management of natural resources can be achieved through valuing impacts and dependencies, strategic planning and, if necessary, trade-offs between use and protection.

Sustainable consumption and production have the potential to generate multiple benefits to the environment, society and the economy, including enhanced predictability of raw materials and products within supply chains. Other options include encouraging innovation in agricultural practices to maintain and restore soil and water health as well as incorporating robust and accurate measures of natural capital.

#### **Progress measures:**

**8A** Number of catchment-scale water management plans and decisions that include explicit consideration

of environmental flow requirements

**8B** Level of innovation and implementation of agricultural practices that maintain and restore soil and water health

**8C** Level of innovation and implementation of fisheries management practices that ensure sustainability and minimise impacts on other marine or freshwater biodiversity

**8D** Extent to which measures of natural capital are explicitly considered in the sustainable development of Australia's natural resources

**8E** Rate of the circularity of Australia's economy

8F Extent of total material footprint

8G Level of resource productivity

**8H** Extent of total waste generated in Australia per person

**8** Average resource recovery rate from all waste streams

# **Target:** Increase Australia's circularity rate and reduce pollution and its impacts on biodiversity by 2030<sup>9</sup>

Increase the circularity of Australia's economy, to reduce our material footprint and waste generation by 2030. Reduce pollution in Australia's environment and its impacts on biodiversity, including reducing plastic pollution.

A circular economy is a holistic economic strategy to reduce our material footprint, improve materials efficiency, and reduce waste and pollution. It is the mechanism Australia will use to address several fundamental drivers of biodiversity loss that stem from patterns of consumption, production and disposal.

In a circular economy, products are designed to be reused, repaired and recycled, minimising waste and maximising resource efficiency. This creates a closed loop system where materials are continuously circulated and repurposed rather than being discarded as waste or lost into the environment as pollution. It ultimately seeks to conserve resources and regenerate nature.

This target aims to increase Australia's circularity rate so as to reduce our material footprint and pollution from many sources – with associated benefits to biodiversity.

Pollution takes various forms. Globally, pollution from chemicals and plastics has been found to have particularly

harmful impacts on biodiversity and ecosystem functions and services, as well as human health. Plastics pollution is driving ecosystem change, particularly within freshwater and marine habitats. The United Nations has advised that plastics are so prevalent throughout the environment that they are becoming part of the Earth's fossil record. This target reflects a commitment to strong action on plastics, both domestically and through international engagement.

Chemical pollution can have significant effects on both human health and the environment, including by contaminating water sources, harming wildlife, and disrupting ecosystems. In Australia, sustainable management of chemicals focusses on monitoring chemical releases, assessing risks, and promoting safer alternatives to minimise environmental harm. This target reflects a commitment to robust environmental management of chemicals to reduce pollution and its risks.

This target aligns with Global Biodiversity Framework targets 7 and 16.

<sup>9</sup> Note: This is the interim circular economy target. The target will be refined through consultation on the national circular economy framework, including associated sustainability scenario modelling.

#### **Objective 9: Enrich cities and towns with nature**

GBF targets and SDGs



Australia's cities and towns can be enriched with nature by prioritising inclusion of ecologically diverse green spaces in design and planning and encouraging their use. Some options include increasing the tree canopy in our urban areas, transforming old rail lines into greenways, and planting gardens on rooftops. Initiatives such as these can help reduce carbon emissions, alleviate heat stress, increase energy efficiency and leave a positive effect on residents' wellbeing. Urban ecology and biodiversity policies should be better integrated into land use planning, transport and other key urban policy and statutory planning requirements. Individuals and communities can help by encouraging residential wildlife gardening programs and sharing information on effective ways to engage residents in meaningful landscape-scale conservation.

#### **Progress measures:**

**9A** Number and extent of urban greening initiatives

**9B** Extent to which ecologically diverse green spaces are included in the design and development of urban areas

**9C** Extent of programs promoting urban nature-based initiatives



# **Goal 3: Share and build knowledge**

Effective management and protection of nature in Australia is best supported by an evidencebased approach built on sound knowledge.

Decisions should draw on scientific information and data, including from biodiversity; taxonomic, ecological and sociological sciences; nature management methods and approaches; and Indigenous Ecological Knowledge. There is significant effort around Australia to extend this knowledge base and to monitor, evaluate and report on actions at regional and national levels.

Much of our biodiversity remains undiscovered or poorly known. We need to better understand our biodiversity as a foundation for protecting it. Knowing more about nature helps us make better choices about its management for longterm conservation. This extends to gaps in policy, regulation, education, data collection and management strategies.

Sharing and using information can improve effectiveness of planning and management and reduce duplication of effort. Making information publicly available and developing stronger relationships among information users can lead to collaboration, coordination, a shared sense of stewardship and, ultimately, better outcomes.

Sharing and building knowledge aligns with First Nations principles of collective wisdom and intergenerational learning, recognising the vital role of diverse knowledge systems in effective nature management. Indigenous Ecological Knowledge, passed down through generations, enriches our understanding of ecosystems and fosters harmonious relationships with the natural world. By valuing and integrating Indigenous perspectives alongside scientific data, this goal promotes shared decision-making validated by both evidence and cultural wisdom. Embracing partnerships across sectors and communities, including First Nations peoples, academia, government and industry, fosters a collaborative approach to knowledge-sharing and capacity-building. By transparently assessing and reporting on our collective efforts, we cultivate a shared sense of stewardship, driving continuous improvement towards our shared vision of a thriving, resilient natural environment for generations to come.

Assessing and reporting on our successes, failures and areas for improvement in caring for nature requires a broad set of meaningful measures that reflects the multiple benefits of understanding, connecting with and caring for nature, which should include public health and economic measures. More frequent and more coordinated reporting of environmental performance will contribute to understanding how actions at multiple scales contribute to national nature management. It will enhance a shared sense of stewardship of nature and identify additional actions and resources that may be needed to achieve the strategy's vision.

# **Objective 10:** Increase knowledge about nature to make better decisions

GBF targets and SDGs



There are opportunities to target research to reduce gaps in knowledge and improve planning and management strategies, to support development and implementation of innovative tools and techniques, and to build connections between environmental disciplines and social sciences. A sustained and strategic effort across all levels of government and within academia is required to enhance our knowledge about nature, including improved partnerships with First Nations peoples, community groups and businesses.

#### **Progress measures:**

**10A** Extent of science and knowledge programs that support effective management of biodiversity

**10B** Extent to which the likely impacts of climate change on terrestrial, aquatic and marine ecosystems and species are understood, and effective methods to promote adaptation and resilience are implemented

**10C** Quality and scope of systems for capturing data on the diversity of Australian nature and how ecosystems function

#### **Objective 11:** Share and use information effectively

GBF targets and SDGs



Much information about Australia's environment and biodiversity is already publicly available.

Australian governments are working to enhance access to this information by ensuring it is properly collected, maintained, supported and shared so that all Australians have confidence that decisions are made with the best available evidence. There are opportunities to enhance connections with First Nations peoples, scientists, policy developers, decision makers, and land and water managers to enable well-informed decision-making and the development of targeted management strategies.

#### **Progress measures:**

**11A** Accessibility of information to the public on Australia's nature, through a variety of platforms

**11B** Extent of robust data on Australia's nature provided by citizen science programs to public information sets

**11C** Extent of collaboration and coordination between jurisdictions and research agencies in the collection, collation and publication of data about Australia's nature

# **Objective 12:** Measure collective efforts to demonstrate our progress

GBF targets and SDGs



Robust measures of natural capital and ecosystem services that are integrated into monitoring and reporting systems can effectively demonstrate whether our efforts in managing nature are, in fact, achieving our vision of a healthy and resilient environment. Australian governments are working to streamline and coordinate already existing reporting mechanisms, design new and intuitive measures of success, and increase participation in reporting to develop a coordinated national picture of our success.

#### **Progress measures:**

**12A** Progress on development of options for measuring of natural capital and ecosystem services in monitoring and reporting systems through national environmentaleconomic accounts

**12B** Number of organisations and businesses reporting their performance against environmental measures

**12C** Number of organisations and businesses making nature-related financial disclosures



Achieving the goals and objectives in Australia's Strategy for Nature will take a combined effort. We need to continue to take action to prevent further and irreversible damage to our environment. The strategy provides a framework for everyone. Contributions big and small, from all sectors and walks of life, will make a difference.

This update to the strategy is the first step of implementing the Global Biodiversity Framework. It sets out our ambition to achieve the 6 new national priority targets and boost our existing efforts to halt and reverse biodiversity loss, with a focus on 3 enablers of change. Some targets are supported by considerable work that is already underway, while others will require additional effort.

Figure 3: How leadership and direction setting contributes to reporting of actions to Australia's Strategy for Nature

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#### **Our Vision**

eadership and Direction Setting Progress Arease Australia will halt and reverse biodiversity loss by 2030, putting nature on a path to recovery, meaning by 2050 we will be living in harmony with nature.

Australia's nature, now and into the future, is healthy and resilient to threats, understood, and valued both in its own right and for its essential contribution to our health, wellbeing, property and quality of life.

Priority Targets

Governments, business and industry, scientists, community groups, individuals

Action

The next step will focus on implementation planning. It will be completed within 12 months of the adoption of this updated strategy by the Australian Government and all state and territory governments, following submission to the Secretariat of the Convention on Biological Diversity ahead of the 16th conference of the parties to the convention.

Implementation planning will include:

- reviewing current actions being taken in relation to the targets and enablers
- identifying next steps for each target and enabler, including defining key terms
- developing a monitoring, evaluation and reporting framework to monitor progress towards achieving all of the Global Biodiversity Framework targets.

Further public consultation will be undertaken to inform the implementation of the strategy. This will assist in identifying opportunities for individuals, communities, industries, businesses and all levels of government to work together to halt and reverse biodiversity decline.

## Leadership and direction-setting

Governments have a pivotal role to play in delivering the strategy by providing leadership, setting direction, considering emerging information and evaluating, reporting on and communicating biodiversity-related initiatives. The strategy provides a guide to governments for developing future policies and programs.

Australian environment ministers are committed to working together to lead national efforts for a healthy, resilient environment.

Officials from environment departments across Australia support environment ministers in their decision-making through the interjurisdictional Biodiversity Working Group. The working group is responsible for evaluating and reporting on implementation of the strategy to environment ministers every 2 years. Progress reports will be published in 2026 and 2029, aligning with Australia's reporting to the Convention on Biological Diversity.

In the past, painting a complete national picture of how Australia's biodiversity is faring across the wide range of terrestrial, aquatic and marine ecosystems has presented many challenges for Australian governments. Through this strategy, environment officials will draw on existing and new tools to build a more thorough, nationwide set of information products to bring together the full suite of biodiversity-focused initiatives.

## **Evaluation and reporting**

The progress measures are one way of reporting on the goals and objectives of the strategy. Not all progress measures apply to each jurisdiction; jurisdictions will report on the progress measures relevant to their circumstances.

The progress measures are a mechanism to identify trends and test whether positive outcomes are being achieved for each of the objectives and where more work may need to be done. They provide an opportunity for governments, private sector organisations, community groups and individuals to contribute collective actions to meet each objective. The progress measures for each objective have been updated to reflect new developments since the release of Australia's Strategy for Nature 2019-2030, and they will be subject to further review as part of the development of a monitoring and evaluation approach.

Environment Information Australia will support the development of an appropriate baseline and methods for measuring Australia's overall progress towards meeting our commitments. This will include a comprehensive indicator and reporting framework to monitor and report Australia's progress against our objectives and targets.

The Australian Government, supported by the Biodiversity Working Group, will draw on the progress measures outlined for each objective and the indicator framework to track and report on the implementation of the strategy. As a living document, Australia's Strategy for Nature will continue to be updated to meet changing national and international priorities and draw on emerging evidence and science. Public reporting on implementation by ministers provides transparency on the effectiveness of implementation.

#### Figure 4: Implementation and governance of Australia's Strategy for Nature



# **In summary**

To realise the ambition of this strategy, we all need to work together. All governments, non-government organisations, businesses and industries, First Nations peoples, scientists and other individuals should identify areas where they can best contribute through action or influence. This strategy sets priorities, goals and objectives for the Australian Government, state and territory governments, local governments, non-government organisations, the private sector, research institutions, natural resource management bodies and the community.

To succeed, we must all make an investment in our future by acting to halt and reverse biodiversity loss.

This will achieve better outcomes for our unique biodiversity so we can all enjoy nature for generations to come. Figure 5: Australia's Strategy for Nature goals and objectives

	Global Biodiversity Framework targets	Sustainable Development Goals
Goal 1: Connect all Australians with nature		
Encourage Australians to get out into nature		3 mm. 
Empower Australians to be active stewards of nature	TargetTargetTargetTarget0314192223	3 mm 15 m →₩
Increase Australians' understanding of the value of nature	Target 14 19	
Respect and maintain Indigenous Ecological Knowledge and First Nations stewardship of nature	Target 03 Z2	
Goal 2: Care for nature in all its diversity		
Improve conservation management of Australia's landscapes, waterways, wetlands and seascapes	TargetTargetTarget02030811	6 million 13 million 14 million 15 million 1
Maximise the number of species secured in nature	Target 04	15 Fan
Reduce threats and risks to nature and build resilience	Target Target 02 06 08	N == N =
Use and develop natural resources in an ecologically sustainable way	Target 05Target 07Target 09Target 10Target 14Target 16	
Enrich cities and towns with nature	Target 12	
Goal 3: Share and build knowledge		
Increase knowledge about nature to make better decisions	Target 01Target 14Target 21	
Share and use information effectively	Target 01 21	
Measure collective efforts to demonstrate our progress	TargetTarget141521	

**Note:** Not all Global Biodiversity Framework targets are mapped. The enablers of change support action against all Global Biodiversity Framework targets and Australia will report against all 23 targets.

Visit **www.cbd.int/gbf/** for further information on the Global Biodiversity Framework targets **https://sustainabledevelopment.un.org** for further information on the Sustainable Development Goals.





