

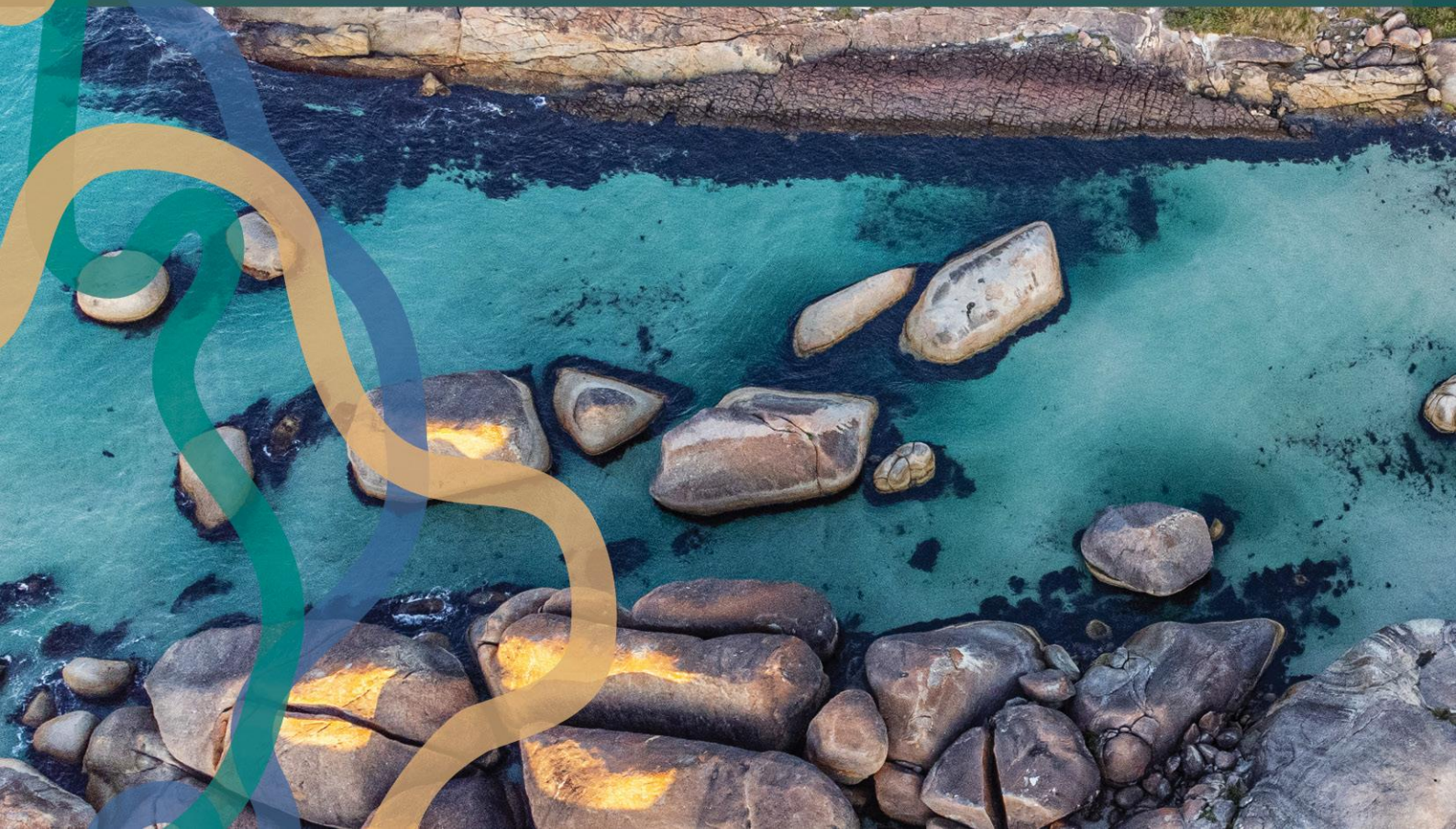


BIODIVERSITY CONSERVATION FRAMEWORK

December 2025



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Conservation and Attractions



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William Bay National Park. Photo – Peter Nicholas, DBCA

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About the framework

Biodiversity conservation planning and delivery is a core function of the Department of Biodiversity, Conservation and Attractions (the department; DBCA). This function is guided by the legislation that the department is responsible for administering, which provides for the protection and sustainable use of biodiversity and the natural areas and attractions that the department manages.

This framework outlines the overarching strategies the department undertakes to conserve biodiversity, and the various ways that these are achieved, providing a high-level overview of the broad range of activities, plans, systems and initiatives that contribute to delivering the department's biodiversity conservation function.

Information boxes explain key principles and definitions that are applicable to the framework.

Further information about the various aspects of the framework can be found on the department's websites that can be accessed via the weblinks embedded in the document.

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Our vision

Biodiversity and natural places are valued by the community and conserved for the future.

The department works with the community to ensure that Western Australia's (WA) environment is valued, protected and conserved, for its intrinsic value and for the appreciation and benefit of present and future generations.

This is achieved by promoting biodiversity and conservation and enriching people's lives through the sustainable management of WA's species, ecological communities, ecosystems, land, waters and attractions in the department's care.

Box 1: What is biodiversity conservation?

The *Biodiversity Conservation Act 2016* includes the following definitions relevant to this framework:

Biodiversity means the variability among living organisms and the ecosystems of which those organisms are a part and includes the following

- (a) diversity within native species and between native species;
- (b) diversity of ecosystems;
- (c) diversity of other biodiversity components.

Biodiversity components includes native species, habitats, ecological communities, genes, ecosystems and ecological processes.

Biodiversity conservation means the conservation and protection of biodiversity and biodiversity components.

Conserve includes to maintain and to restore.

Our approach

[The department](#) brings together the Parks and Wildlife Service; Science, Strategy and Governance; the Botanic Gardens and Parks Authority (BGPA); Rottnest Island Authority (RIA); and Zoological Parks Authority (ZPA; Perth Zoo). Statutory boards operate for the BGPA, RIA and ZPA and the Conservation and Parks Commission (CPC) and Swan River Trust (SRT). The department and its constituent authorities report to the Minister for the Environment, except for the RIA which reports to the Minister for Tourism.

All areas contribute to the planning and delivery of biodiversity conservation, with conservation activities undertaken across multiple business areas within the department in an integrative manner.

The department works to conserve WA's biodiversity, cultural and natural values and provides world-recognised nature-based tourism and recreation experiences for the community. This work is underpinned by scientific excellence to ensure the delivery of effective conservation of the State's biodiversity.

The department respectfully acknowledges all Aboriginal people as the Traditional Owners of the lands and waters it manages and recognises their continuing connection to land, water and community. The department has formal and informal partnerships with Traditional Owners, including joint and cooperative management partnerships, that recognise the intrinsic connection that Aboriginal people have to their traditional lands and waters and support improved protection of cultural heritage values and opportunities to be involved in caring for Country.

Volunteers make a significant contribution to biodiversity conservation, supporting the department to deliver conservation outcomes.

The department also seeks collaborative partnership opportunities with government and non-government organisations, research institutions, industry and the community to leverage optimal conservation outcomes and maximise government investment both on and off department-managed¹ land.

Conservation activities are funded from the department's recurrent budget, as well as through specific government appropriations and external funding arrangements or collaborations.

¹ **Department-managed land** include land and waters managed under the department's legislation. It also applies to 1) land for which the department under a Memorandum of Understanding with the Department of Planning, Lands and Heritage, manages pest animals, weeds and fire on unallocated Crown land (UCL) and unmanaged reserves (UMR) outside the metropolitan area, regional centres and townsites (2004), where resources are available and subject to native title considerations; and 2) Crown land where the department has a management interest (e.g. UCL land that were purchased or identified with the aim of adding them to the formal conservation estate but remain under the management of the *Land Administration Act 1997*).

Box 2: Conservation and fire management

A key responsibility of the department is to manage WA's parks, forests and reserves to conserve wildlife, provide sustainable recreation and tourism opportunities, protect communities and assets from bushfire and achieve other land, forest and wildlife management objectives.

The department's fire management program has the dual aim of managing the risk to people, assets and the environment associated with bushfire, and the conservation of biodiversity and ecosystem services on the land it manages. The department meets these responsibilities by undertaking an active fire management program involving the application of planned fire under prescribed conditions and undertaking bushfire suppression on department-managed land. This fire management program has received longstanding bipartisan support.

The department has responsibility for fire management on more than 27 million hectares of national park, nature reserves, State forest and other lands across the State and is also responsible for fire preparedness activities on a further 91 million hectares of unallocated Crown land and unmanaged reserves outside the Perth metropolitan area and gazetted townships.

Prescribed burning is the primary means at a landscape scale of reducing the level of combustible fuel and therefore the risk of bushfire to our community and the environment. The department has the responsibility of balancing the impacts of prescribed burning on biodiversity against the need to protect our communities from the damaging impacts of bushfires. In doing this, an evidence- and risk-based approach is used, with detailed planning for individual burns often taking several years.

From a biodiversity perspective, prescribed burning is undertaken to maintain a range of wildlife habitat types through the creation of low-fuel areas in a mosaic of burnt and unburnt patches across the landscape. The ecological requirements of flora and fauna are a key consideration when developing fuel management programs and prescribed fire plans and prescriptions. Biodiversity is best supported by varying the scale, seasonality, interval, and severity of fire occurrence, creating a mosaic of vegetation floristic and structural states. Prescribed burns occur in more favourable conditions than intense summer bushfires, minimising impacts on habitat and enabling more opportunities for fauna to safely move into areas of unburnt vegetation and flora to regenerate.

Prescribed burning aims to reduce the likelihood of large and severe bushfires. Contemporary prescribed fire practices include the application of fire at varying size, scale and frequency to meet diverse environmental, community, asset protection and cultural needs across WA.

A significant body of peer reviewed research supports prescribed burning in WA. The department's strategy, planning and practices continue to be shaped by and responsive to findings developed by internal and external research programs. The department maintains an active fire research program that has a state-wide focus and collaborates with a range of organisations across Australia and internationally with expertise relevant to bushfire science.

The department engages with stakeholders from all sectors to design and deliver its research program with practical, locally-relevant implications. As an initiative of the *Forest Management Plan 2024-2033*, the department's Fire Research Collaboration program aims to bridge gaps in understanding of prescribed burning effects on forest ecosystems and biodiversity, through scientific research undertaken in partnership with research institutions in WA.

The department also embraces and pioneers new technologies and analytical techniques to inform fire research and management. For example, the department has developed and implemented a systematic approach to assessing the outcomes of prescribed burns and bushfires using remote sensing and field surveys, which greatly improves data on fire severity, extent and patchiness. Applying this approach to historic imagery, the department is investing in historic fire regime data to improve understanding of fire risk patterns and drivers.



OVERARCHING BIODIVERSITY CONSERVATION STRATEGIES

Overarching biodiversity conservation strategies

The department's Biodiversity Conservation Framework is organised around seven overarching strategies² that guide the biodiversity conservation activities implemented by the department. These strategies and activities are guided by the department's strategic directions or plans, and contribute to State, national and international biodiversity conservation legislative and policy requirements and commitments. A system of monitoring, evaluation and reporting tracks progress towards achieving desired outcomes and informs an adaptive management approach. Figure 1 provides an overview of these strategies and the types of activities undertaken to deliver them (summarised as themes), as is further detailed in the supporting text in this section³.

² The department supports government goals with more specific desired outcomes, achieved via delivery across 10 services. The overarching strategies outlined in service 6 - *Conserving habitats, species and ecological communities* reflect the overarching biodiversity conservation priorities being delivered across the department, noting that other services also contribute to conservation objectives and outcomes.

³ It is recognised that many initiatives align with multiple overarching strategies. For the purpose of this framework, the initiatives are assigned based on the nature of the initiative (what the initiative is focused on doing) rather than the objective (what the initiative is focused on achieving).

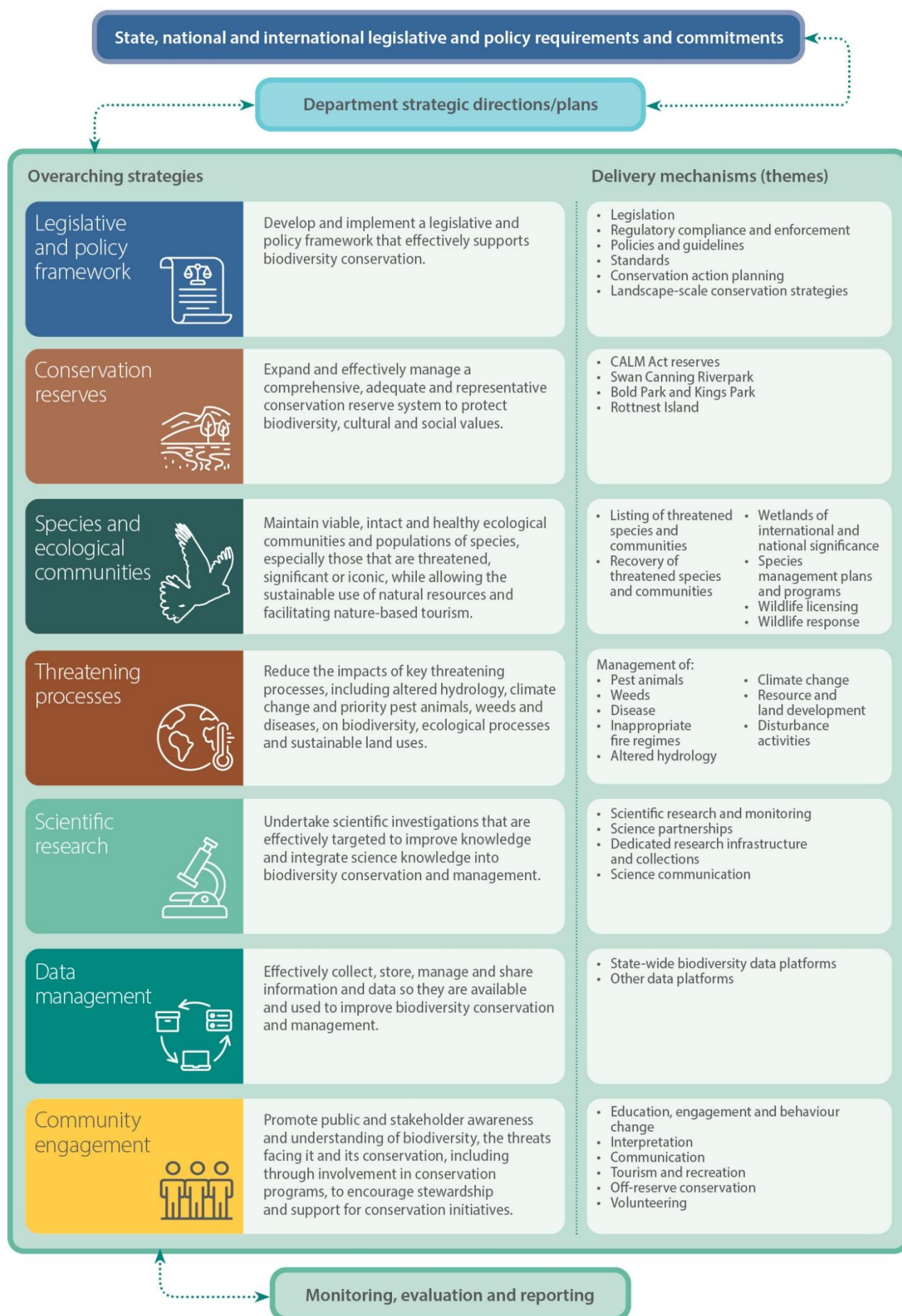


Figure 1 Summary of DBCA's Biodiversity Conservation Framework.

Legislative and policy framework



Develop and implement a legislative and policy framework that effectively supports biodiversity conservation.

The department delivers biodiversity conservation in accordance with State and national legislation and a suite of departmental, state and national policies, strategies and plans, as well as international commitments, as summarised in Appendix 1.

Legislation

The department has responsibility for six key acts and their associated regulations. These acts and regulations can be accessed from the [Parliamentary Counsel's Office](#).

Biodiversity Conservation Act 2016 (BC Act) provides for the conservation, protection and ecologically sustainable use of biodiversity and biodiversity components in WA.

Botanic Gardens and Parks Authority Act 1998 (BGPA Act) provides for the establishment of the BGPA to control and manage Kings Park and other lands designated, such as Bold Park.

Conservation and Land Management Act 1984 (CALM Act) provides for the use, enjoyment, protection and management of certain public lands and waters, and the flora and fauna and Aboriginal culture and heritage they contain, and the establishment and function/ role of the Conservation and Parks Commission.

Rottnest Island Authority Act 1987 (RIA Act) provides for the establishment of the RIA to control and manage Rottnest Island.

Swan and Canning Rivers Management Act 2006 (SCRM Act) provides for the protection of the Swan and Canning Rivers and associated land to ensure maintenance of ecological and community benefits and amenity, and establishment of the Swan River Trust.

Zoological Parks Authority Act 2001 (ZPA Act) provides for the establishment of the ZPA to control and manage Perth Zoo.

Regulatory compliance and enforcement

The department ensures that the functions required under its legislation are executed, and that the obligations and rules outlined in this legislation are met, to enable the sustainable management and protection of WA's biodiversity and lands managed by the department.

The department is committed to ensuring that the Western Australian community understands, respects and adheres to the legislation the department administers. The department's primary aim is to strive for an outcome where stakeholders believe in and understand their legislative responsibilities, are aware of the practices and behaviours required, and display high levels of willing compliance and stewardship. Where this outcome is not met, the department will take appropriate action depending on risk and circumstance.

The Parks and Wildlife Service's approach to compliance and enforcement is outlined in its **Statement of Regulatory Intent** (in development).

Regional compliance plans (in development) outline regulatory priorities for each of the Parks and Wildlife Service nine regions based on a risk assessment approach.

The department also has officers cross-authorised to enforce components of legislation that are the responsibility of other agencies, including the *Animal Welfare Act 2002*, *Bush Fires Act 1954*, *Fish Resources Management Act 1994* and *Biosecurity and Agriculture Management Act 2007*.

Policies and guidelines

The department has a suite of key documents that outline the department's position and guide decisions and actions in the conduct of the department's biodiversity conservation business. These include:

- **[Corporate policies](#)** – A strategic statement of the intent, principles and approach of the department in relation to its major business obligations, services and management issues.
- **Corporate guidelines** – Corporate level set of procedures that will guide actions by departmental staff to achieve consistency and required standards.
- **Guidelines, protocols and procedures** (including standard operating procedures) – Set of protocols to guide and direct actions, at the appropriate business level (e.g. Authority, Division, Branch, Section, Unit, Region or District).
- **Manuals and user guides** – Functional level compendium of documents, mostly technical in nature, to assist people to locate and use a particular system or process.
- **Prescriptions** – Business-area level documents that direct people how to undertake a particular task.

Standards

Animal ethics

The department is required to comply with the *Animal Welfare Act 2002*, including the requirement for scientific institutions to be licensed and operate according to the [Australian code for the care and use of animals for scientific purposes](#). Staff are required to comply with licence conditions and abide by the Code, treating animals with respect and considering their welfare as an essential factor when participating in work using animals.

The department has an [Animal Ethics Committee](#) (AEC) responsible for ensuring, on behalf of the Director General, that all the department's activities relating to the care and use of animals are conducted in compliance with the Code. The AEC membership is comprised of department staff and external representatives, and includes wildlife veterinarians, research scientists, those with a commitment to the welfare of animals and community members.

Perth Zoo is also classed as a scientific establishment and has a separate AEC that is responsible to the ZPA Board.

Furthermore, Perth Zoo is a member of the World Association of Zoos and Aquariums and the Zoo and Aquarium Association (ZAA) Australasia. As a member of these associations, Perth Zoo is accredited under the ZAA Accreditation Program and adheres to the Australian Animal Welfare Standards and Guidelines for Exhibited Animals.

To demonstrate the department's commitment to transparency and ethical decision-making with the use of animals for research and teaching, and to enable well-informed public discussion, the

department is a signatory to the [Openness Agreement on Animal Research and Teaching in Australia](#), developed by the Australian and New Zealand Council for the Care of Animals in Research and Teaching (ANZCCART).

Cultural knowledge

'Cultural knowledge' refers to a range of knowledge held and continually developed by Aboriginal people and includes both traditional cultural expressions (e.g. stories, dance, art) and traditional knowledge (relating to a range of areas such as science, ecology, agriculture, medicine) and constitutes part of the broader concept of Indigenous cultural and intellectual property. The department is developing a **Cultural Knowledge protocol** to guide staff in how to engage meaningfully and respectfully with Aboriginal partners and manage the collection, access and use of Cultural Knowledge.

Conservation action planning

The department has several plans that prioritise strategic conservation actions to guide on-ground management.

[Regional conservation plans](#) document the Parks and Wildlife Service priority conservation actions for landscape-scale threat abatement, and targeted actions and information requirements for threatened and Priority species and ecological community conservation. Each of the nine Parks and Wildlife Service regions identified and prioritised conservation actions through transparent and repeatable structured decision-support processes, for implementation within existing resources to maximise conservation benefits. The priority actions are implemented by regions through regional and district works programs. Regional conservation plans also support the delivery of conservation actions outlined in CALM Act reserve management plans, species recovery plans and other strategic programs.

The **Bold Park and Kings Park Bushland Conservation Action Plan (BCAP)** identifies the natural values of BGPA's designated bushland (natural) areas, determines current and desired health, considers threatening processes, research priorities, opportunities and identifies priority conservation actions to enable resources to be directed where most needed. The BCAP establishes measures of condition (biodiversity health or viability), pressure (threats) and response (action and resources) to inform adaptive management and evaluation of management effectiveness of BGPA's biodiversity conservation program.

Rottneest Island Terrestrial and Marine Conservation Action Plans reflect the conservation goals, strategic actions, objectives and targets derived from Conservation Action Planning (CAP) processes for the terrestrial and marine environments respectively. The CAP process was used to identify natural values, determine current and desired health, consider threatening processes, and identify priority conservation actions to enable resources to be directed where most needed. Assessment of the key factors affecting conservation targets was undertaken to determine how to overcome critical threats and restore degraded targets. The development of conservation strategies included consideration of direct threats, indirect threats, knowledge gaps and opportunities.

Landscape-scale conservation strategies

Three conservation strategies have been developed by the department since 2010 that guide landscape conservation outcomes across a range of tenures. These strategies were developed in the context of State Government investment at the time. Whilst the State Government funding may have concluded, these strategies still provide strategic guidance for conservation action.

- [Pilbara Conservation Strategy](#) (2017)
- [Kimberley Science and Conservation Strategy](#) (2011)
- [A Biodiversity and Cultural Conservation Strategy for the Great Western Woodlands](#) (2010)

Conservation reserves



Expand and effectively manage a comprehensive, adequate and representative conservation reserve system to protect biodiversity, cultural and social values.

A key function of the department is to establish and manage a comprehensive, adequate and representative (CAR) conservation reserve system as a major contribution to biodiversity conservation. The majority of WA's terrestrial reserves managed by the department meet scientific criteria and other minimum standards for designation as a 'protected area' and form part of Australia's [National Reserve System](#) (NRS). The NRS is Australia's network of protected areas, conserving examples of unique landscapes, flora and fauna for future generations. WA's marine reserves form part of the [National Representative System of Marine Protected Areas](#) (NRSMPA). The primary goal of the NRSMPA is to establish and effectively manage a CAR system of marine reserves to contribute to the long-term conservation of marine ecosystems and to protect marine biodiversity.

The reserve system also contributes to protecting and conserving cultural heritage values and supports Aboriginal connection to Country, including through customary activities and cooperative and joint management. Further, the reserve system plays an important role supporting community wellbeing through the provision of ecosystem services, nature appreciation and recreation opportunities; and contributes to State and regional economies through nature-based tourism and sustainable resource use and extraction.

Box 3: The CAR reserve system

The primary goal of the National Reserve System and National Representative System of Marine Protected Areas is to develop and effectively manage a **comprehensive, adequate and representative** (CAR) national system of protected areas as the primary means for securing long-term protection for Australia's biodiversity. The reserve system is underpinned by a scientific framework that seeks to protect examples of the full range of regional ecosystems and other important environmental values across Australia. CAR means:

- **Comprehensive:** the inclusion of examples of regional-scale ecosystems in each bioregion⁴.
- **Adequate:** the inclusion of sufficient levels of each ecosystem within the protected area network to provide ecological viability and to maintain integrity of populations, species and communities.
- **Representative:** the inclusion of areas at a finer scale, to encompass the variability of habitat within ecosystems.

⁴ Australia's bioregions are defined by the following:

- The Interim Biogeographic Regionalisation of Australia (IBRA), classifies landscapes into large geographically distinct bioregions and sub-regions based on common climate, geology, landform, native vegetation and species information.
- The Integrated Marine Bioregionalisation for Australia (IMCRA) classifies marine areas into benthic and pelagic bioregions based on ecological characteristics and spatial scales useful for marine planning.

Other reservation priorities include key habitats for threatened and specially protected species and ecological communities and other significant sites, as well as areas that contribute to whole-of-landscape conservation outcomes, such as places that offer refuge and/or contribute to connectivity and the adaptation of biodiversity to changing climate.

(Source: [Australian Government](#))

The reserve system managed by the department includes national parks, nature reserves, conservation parks, regional parks, State forest, timber reserves, marine nature reserves, marine parks and marine management areas and other land and waters managed under the CALM Act, predominantly for a conservation purpose⁵. The Swan Canning Riverpark, Bold Park, Kings Park and Rottnest Island have reserve purposes that include conservation as well as other multiple use purposes as set out in their associated legislation.

The department, in consultation with the Department of Planning, Lands and Heritage (DPLH) and Landgate, undertakes the administrative work connected with the creation or amendment of reserves in accordance with the *Land Administration Act 1997* (LA Act).

Some reserves deemed to be of high conservation or community value are classified as class 'A' under the LA Act. Bold Park, Kings Park, Perth Zoo Rottnest Island, all marine conservation reserves and most national parks and nature reserves are class 'A'. All other reserves are referred to as unclassified reserves. Class 'A' reserves have the highest security of tenure. Major amendments⁶ to class 'A' reserves, national parks and conservation parks require approval or consideration by the Western Australian Parliament. The security of tenure for State forest is equivalent to that of class 'A' reserves, requiring Parliamentary approval for cancellations or major amendments.

CALM Act reserves

The management of conservation reserves under the CALM Act is informed by reserve [management plans](#). A plan may cover a single or several parks and reserves. Management plans are prepared by the CPC through the department and are approved by the Minister for the Environment. The department is responsible for preparing and implementing management plans for marine and terrestrial parks and reserves in accordance with the CALM Act. The CPC has the responsibility to prepare and deal with proposed management plans for land and waters vested in or under the care, control and management of the CPC, whether solely or jointly with a joint responsible body, such as an Aboriginal body corporate representing the Traditional Owners of an area.

Management plans contain a statement of the policies, guidelines and a summary of current and proposed management activities for a reserve. Community input is sought through a statutory public submission period during which the community is invited to provide comment on the draft plan. The department must act in accordance with these management plans, as they are statutory and reflect how the community wants to conserve, protect and use reserves.

Management plans have a term of 10 years, however they remain in force until they are revoked or replaced.

[Marine reserve planning](#) includes zoning schemes to achieve multiple use outcomes. The marine reserve planning process is guided by design principles that consider biodiversity conservation, Aboriginal culture and heritage and ecologically sustainable use.

The [Forest Management Plan 2024-2033](#), prepared in accordance with the CALM Act, is the overarching framework to protect and manage forests on public lands in WA's south-west. The plan

⁵ Under the *Land Administration Act 1997* (LA Act), Crown land may be reserved for various purposes.

⁶ As defined by the relevant legislation applicable to the reserve.

was prepared by the CPC through the department. The [*Regional Forest Agreement for the South-West Forest Region of Western Australia*](#) (WA RFA) is a 20-year agreement between the Western Australian and Commonwealth Governments on the management and use of the south-west forests. It was first signed in May 1999 and extended for a further 20 years in May 2019. The WA RFA provides a strategic framework for forest management, including consideration of ecologically sustainable forest management principles, in combination with the establishment of a CAR reserve system, to ensure the long-term conservation and protection of forest biodiversity, old-growth forest and wilderness values; the management of multiple-use forests outside reserves; and supporting the sustainable development of forest-based industries. The WA RFA region is a subset of the planning area covered by the Forest Management Plan.

Joint management bodies

[*Joint management*](#) is a partnership between the State Government and other parties to manage land and waters in WA. It often involves Aboriginal people who have a cultural connection with a park or reserve and wish to be involved in park management.

Joint management can be achieved through informal and formal management partnerships. Informal joint management strengthens working relations and builds the capacity of staff and Aboriginal partners. This may be achieved through an Aboriginal group providing advice on management issues or participating in projects and activities on Country. These arrangements can include a Memorandum of Understanding or other forms of agreement. Formal partnerships are provided for under the CALM Act and involve a Joint Management Agreement (JMA) that sets out how Traditional Owners and the department will come together to make decisions and provide recommendations about how the conservation estate is managed. The JMA sets up a Joint Management Body (JMB) of Traditional Owner members and senior departmental staff. The chairperson of the JMB is a Traditional Owner.

Co-operative management committees

The South West Native Title Settlement involves six Noongar Native Title Agreement groups, and covers 200,000 square kilometres of land. The Settlement enables Noongar people to have a voice in how CALM Act lands and waters in the south-west are managed. Through the Settlement, the department and the six Noongar Regional Corporations have entered into Co-operative Management Agreements. These agreements establish six Co-operative Management Committees (CMCs) made up of Noongar representatives and senior departmental staff. The CMCs play a strategic, high-level role in advising the department on managing the south-west conservation estate, aiming to build a strong and resilient foundation for the Noongar community and the department to work together.

Joint and cooperative management recognises the intrinsic connection that Aboriginal people have with the land and sea, supporting Aboriginal people to access and connect with Country and enable improved protection of cultural heritage values. It offers the potential to merge traditional knowledge with non-Indigenous conservation science and strengthen land management practices. Joint and cooperative management is about looking after Country together, delivering positive outcomes for WA's conservation estate, Aboriginal people and the wider community.

Regional park community advisory committees

Regional parks are areas of land that are formally recognised as having regionally significant conservation, landscape protection, or recreation values. Regional parks contain various land tenures managed by the department, other State government agencies and local governments. The department has established nine regional park community advisory committees within the Perth metropolitan region and Greater Bunbury area, providing a regular forum to exchange advice on

regional park management issues and consider community views. Community members on the committees are appointed by the department's Director General and endorsed by the Minister for the Environment.

World Heritage advisory committees

The department is responsible for the implementation of policy and the day-to-day management for three World Heritage areas in WA: Shark Bay, Ningaloo Coast and Purnululu. [World Heritage advisory committees](#) provide advice to the Commonwealth and State environment ministers on the protection, conservation and management of the Outstanding Universal Value of the World Heritage areas. They represent the viewpoint of the local and broader community and circulate information on key matters relevant to the World Heritage area; develop and provide input into initiatives and opportunities for the promotion and presentation of the Outstanding Universal Value to the local, national and international communities; and contribute to enhancing the stewardship and community connection to the World Heritage area.

Committee members are appointed by the WA Minister for the Environment, and the Commonwealth Minister for the Environment validates the recommended appointee to the position of Chairperson.

Swan Canning Riverpark

The SCRM Act requires a river protection strategy to ensure coordinated management to help protect and enhance the ecological and community benefit and amenity of the Swan Canning Riverpark and catchment area (river system). The [River Protection Strategy](#) for Derbal Yirragan Djarlgarro (Swan Canning river system) provides strategic direction and guidance to the community, Aboriginal partners, government and non-government organisations and other land managers involved in the care and management of the river system, and ensures that collective efforts are aligned and purposeful. The strategy's development and implementation is overseen by the SRT, and supported by the department.

Bold Park and Kings Park

The BGPA Act requires that parks are managed in accordance with management plans that are reviewed every five years. The [Kings Park Management Plan 2021-2026](#) and [Bold Park Management Plan 2022-2027](#) outline activities and initiatives that BGPA plans for Kings Park and Bold Park respectively to progress strategic priorities consistent with statutory functions.

Rottneest Island

The RIA Act requires that RIA control and manage the island in accordance with the management plan. The [Rottneest Island Management Plan 2023-2028](#) outlines RIA's key focus areas and initiatives, both in the day-to-day and long-term focus. The plan is updated every five years.

Species and
ecological
communities



Maintain viable, intact and healthy ecological communities and populations of species, especially those that are threatened, significant or iconic, while allowing the sustainable use of natural resources and facilitating nature-based tourism.

Western Australia has rich and unique biodiversity, much of which is endemic and recognised as being both nationally and globally significant. Conservation of this biodiversity includes maintaining

and restoring variability within and between native species, ecological communities and other biodiversity components, including ecosystems, habitats, genes and ecological processes.

Under the BC Act, native species are listed as threatened when they face a high to very high risk of extinction in the wild, and ecological communities are listed as threatened when they face a high to very high risk of collapse. Conserving and protecting threatened species and ecological communities is a key element of the department's biodiversity conservation responsibilities.

Biodiversity conservation actions are informed by the department's strategic plans and aim to deliver long-term, on-ground outcomes that maintain or recover biodiversity components at local, regional and landscape scales. These actions are informed by best-practice science, in accordance with the principles outlined in the *Framework for Fauna Conservation* and *Framework for Flora Conservation* (internal documents, see key principles summarised in Box 4).

Box 4: Key principles to guide conservation actions for species and ecological communities.

Maintain populations in the wild

Conserve wild, self-sustaining, genetically diverse populations, with particular focus on threatened species and threatened ecological communities.

Manage threats

Mitigate threats to wild populations through co-ordinated management interventions that acknowledge ecological interactions and promote resilience to changing climates.

Efficiency and effectiveness

Management actions are most efficient and effective when they provide benefits for multiple species and/or ecological communities by addressing one or more threats at the largest scale possible or in multiple areas simultaneously.

Priorities for conservation

Priorities for management will be determined based on conservation status, contribution to ecosystem function, feasibility and likelihood of success, iconic status, stakeholder interest and community values, and within a regional context.

Action informed by science

On-ground recovery and management actions will be based on scientific evidence, supported by considerations of cost effectiveness and likelihood of success, and undertaken in an adaptive management context that responds to changing circumstances, and incorporates innovation, while learning from past experiences.

Secure populations

Support wild populations by augmentation, establish new wild populations, and establish secure populations through translocation.

Captive breeding/ex-situ conservation

Facilitate captive breeding if required for species where wild populations require further support to maintain viable populations or to establish new populations. Maintain seed collections in a seed bank and other germplasm collections if necessary, and establish orchards to provide seed to support existing or establish new populations for species where the existing natural population size is too small to maintain reproductive output.

Conservation reserves

Management actions that support species, ecological communities and their habitats within the conservation reserve system will be a priority, followed by highly threatened species, ecological communities and their habitats on other tenure.

Work in partnership

Conservation programs will be undertaken in partnership with other conservation organisations, researchers, community groups, Aboriginal people, local communities and other land managers, including neighbours.

Community engagement

Opportunities to engage the community through communication, education and experiences will be promoted to encourage stewardship and support for species and ecological community conservation.

Listing of threatened species and ecological communities

The BC Act provides a statutory basis for the [listing](#) of threatened species, specially protected species, extinct species, threatened ecological communities, collapsed ecological communities, critical habitat and key threatening processes. While the BC Act provides the broader criteria for listing, [Ministerial guidelines](#) provide further details on the criteria and procedures that apply.

Species and ecological communities that may possibly be threatened that do not meet the criteria for listing under the BC Act because of insufficient survey or are otherwise data deficient; or that are adequately known, meet criteria for near threatened, or are rare but not threatened, or that have been recently removed from the threatened, conservation dependent or other specially protected lists for other than taxonomic reasons, are added to the Priority Fauna, Priority Flora or Priority Ecological Community lists.

There are various [conservation categories for threatened and Priority species and ecological communities](#).

Any person can submit [nominations](#) to amend (listing, delisting or category change) the current threatened and Priority species (flora and fauna) and ecological communities lists.

The Western Australian [Threatened Species Scientific Committee and Threatened Ecological Communities Scientific Committee](#) are appointed by the Minister for the Environment. The role of the committees is to:

- provide advice to the Minister on the listing of threatened species, extinct species, threatened ecological communities, collapsed ecological communities, and key threatening processes;
- review and make recommendations annually to the Minister on threatened species (flora and fauna) and threatened ecological communities;
- allocate the threatened species and ecological communities to International Union for Conservation of Nature (IUCN) categories of threat, for consideration by the Minister; and
- provide advice and recommendations to the Director General in respect of research and management needs arising from the reviews of the threatened species and ecological communities lists and threat categories.

The Minister for the Environment is responsible for listing species and ecological communities and key threatening processes under the BC Act.

The Australian Government and all state and territory governments have agreed to apply a [Common Assessment Method](#) for assessing the extinction risk of species and listing of threatened species. The Common Assessment Method supports the alignment of lists of threatened species across the jurisdictions. The Common Assessment Method uses consistent assessment categories and criteria and is applied at the 'national scale', meaning that all occurrences of a species within Australia are considered in its assessment. The Commonwealth [Environment Protection and](#)

[Biodiversity Conservation Act 1999 \(EPBC Act\) list of threatened species](#) contain all species assessed as eligible using the Common Assessment Method. State and territory lists only include those that occur in their jurisdiction. Species will be listed in the same category in each participating jurisdiction, which reduces confusion around the conservation status of nationally threatened species.

Recovery of threatened species and ecological communities

A [recovery plan](#) or **interim recovery plan** outlines the research and management actions required to stop the decline, and support the recovery, of the threatened species or ecological community to which the plan relates so that its chance of long-term survival in the wild are maximised. The BC Act provides for recovery plans to be prepared for the conservation, protection and management for one or more threatened species, or one or more threatened ecological communities, or a combination of threatened species and threatened ecological communities.

A recovery plan can also be prepared under the EPBC Act. Generally, for species that occur in one jurisdiction only, a recovery plan is prepared under that jurisdiction's legislation (i.e. for a species endemic to WA, it would be prepared under the BC Act) and adopted by the Commonwealth for that species where it is also listed under the EPBC Act. For species that occur across multiple jurisdictions, a recovery plan is prepared under the EPBC Act and adopted by each jurisdiction.

A **conservation advice** is developed at the time of any new listing of a threatened species or ecological community under the EPBC Act to assist its recovery. Conservation advices guide recovery planning and identify actions required for conservation and recovery of the threatened species or ecological community. They can be updated relatively quickly in circumstances where a more responsive approach is required, and inform the Australian Government in regulatory decision-making and investment for threatened species and ecological communities. For some species and ecological communities with more complex planning needs, recovery plans may also be developed to guide recovery.

Recovery teams comprise partners brought together by common objectives to develop and/or coordinate the implementation of recovery plans and conservation advice for a threatened species or ecological community, or for multiple species or ecological communities. They include representatives from government agencies, non-government organisations, scientists, industry, Traditional Owners and the broader community to facilitate collaboration and coordination in threatened species and ecological community management. There are state and [national](#) recovery teams.

[Recovery actions](#)

The department's approach to conserving threatened species and ecological communities balances landscape-scale management to mitigate key threats with targeted conservation actions that are primarily focused *in-situ* and within conservation reserves. Recovery plans and teams inform [recovery actions](#), and conservation action planning processes by the Parks and Wildlife Service (regional conservation plans), BGPA (Bold Park and Kings Park BCAP) and RIA (Terrestrial and Marine CAPs) further identify and prioritise conservation actions.

In addition, management of biodiversity off-reserve and *ex-situ* conservation actions are essential to achieving successful biodiversity conservation outcomes for many threatened and non-threatened species and ecological communities. The department works in partnership with, and recognises the contributions of, Traditional Owners, individual landowners including neighbours, State and local

government authorities, land managers, community groups, non-government organisations and other stakeholders to achieve off-reserve conservation outcomes.

[Conservation translocations, captive breeding, germplasm conservation and seed production areas](#) are important tools for promoting the recovery of threatened species. When significant barriers to recruitment, dispersal and/or recolonisation exist, conservation translocations may be the best way to augment existing populations, establish new populations or re-establish extinct populations.

Translocation, captive breeding and seed production area proposals for conservation significant species can be high risk actions with considerable uncertainty in their outcomes and are only undertaken where considered necessary and beneficial for species conservation. As translocation, captive breeding and seed production area outcomes can be unpredictable, these activities are not considered a substitute for *in-situ* conservation actions.

The department's approach to conservation translocations, captive breeding, germplasm conservation and seed production areas is aligned with current best practice methods. Proposals for translocation, captive breeding and seed production areas require approval by DBCA's Executive Director Biodiversity and Conservation Science, and those involving threatened species will require further authorisation under the BC Act. Additionally, all translocation and captive breeding programs for vertebrate fauna require approval by a registered Animal Ethics Committee under the *Animal Welfare Act 2002*.

The [BGPA Ex-situ Conservation Strategy](#) guides the development, management and use of BGPA's extensive *ex-situ* collection including seed bank, tissue culture, cryostorage collections, fungi collections, plants cultivated by the Kings Park nursery, and the plants on display in the Western Australian Botanic Garden.

In partnership with Parks and Wildlife Service, Perth Zoo undertakes *ex-situ* breeding of native animals through its [Native Species Breeding Program](#) to support conservation outcomes. This includes managing animal collections at Perth Zoo and undertaking aligned research to contribute to regional and global animal conservation programs.

Wetlands of international and national importance

There are 12 internationally important wetlands in WA recognised under the [Ramsar Convention](#) and protected in Australia under the EPBC Act. Western Australia also has 120 nationally important wetlands and wetland systems listed in the [Directory of Important Wetlands in Australia](#), with most of these located on department-managed land.

The department is responsible for reporting on Western Australian Ramsar wetlands and the management of wetlands on department-managed land. The department also provides advice about wetlands to decision-makers and is involved in wetlands research and monitoring.

Species management plans and programs

A **biodiversity management programme** is a document prepared under the BC Act that provides for the conservation, protection and management of one or more native species or ecological communities (other than threatened); or one or more critical habitats; or a combination of such species, communities and habitats. The [Sandalwood Biodiversity Management Programme](#) outlines processes for the ecologically sustainable use of sandalwood.

Management plans for the commercial harvest of [kangaroos](#) and [flora](#) in WA are prepared by the department to satisfy the requirements for approval of the wildlife trade management plan under the EPBC Act, and to meet the legislative, policy and other requirements of the Western Australian Government.

Wildlife management programs to support the conservation and protection of species subject to nature-based tourism interactions are in place for [whale sharks](#) and [humpback whales](#) along the Ningaloo Coast, and [seals and sea lions](#).

Wildlife interaction protocols and codes of conduct are in place to mitigate impacts from human interactions on [whale sharks](#), [whales](#), [seals and sea lions](#), and [marine turtles](#).

Management plans and protocols are also in place for native species that present public safety risks, including crocodiles, sharks and dingoes, to support keeping people safe whilst also conserving and protecting native species.

Wildlife licensing

A suite of [wildlife licences and authorisations](#) are administered under the BC Act and CALM Act for private and commercial activities related to native species and ecological communities, including taking, disturbing, supplying, dealing, possessing, importing, exporting, displaying and modifying, to ensure their ecologically sustainable use.

Where activities occur on lands managed by the department, licences or other authorisations under the relevant legislation may also apply. This includes regulation of commercial nature-based tourism activities, beekeeping, firewood collection and use of moorings to ensure activities are ecologically sustainable and impacts to lands and biodiversity are mitigated.

The department also has a role in administering exotic pet bird keeping permits on behalf of the Department of Primary Industries and Regional Development (DPIRD) under the *Biosecurity and Agriculture Management Act 2007* (BAM Act).

Wildlife response

The department is involved in the prevention of, preparedness for, response to and recovery from **incidents** involving native wildlife in WA. Wildlife can be impacted by events for which the broader incident response is led by another agency. Such incidents include marine fauna strandings and entanglements; [oil spills](#) and other maritime incidents; natural events such as bushfires, floods and storms; and biosecurity incursions (such as [H5 avian influenza](#)). Roles and responsibilities of government agencies in WA is outlined in the [State Emergency Management Plan, State Hazard Plans and the State Support Plan Animal Welfare in Emergencies](#), under which DPIRD has a role and responsibilities in relation to coordinating animal welfare during emergencies.

Fauna can become a [nuisance](#) or potential hazard to people and property in certain circumstances, such as swooping magpies, cockatoos that damage orchards, and venomous snakes. The department provides support and guidance on how to effectively address issues with native wildlife.

Wildlife can also be sick, injured or abandoned and in need of rehabilitation before being returned to the wild. The department facilitates the [Wildcare Helpline](#) to provide advice to members of the public on how to find care for an animal in need. This may include connecting them with **wildlife rehabilitators** registered as volunteers and licenced with the department.

Perth Zoo also provides **veterinary wildlife health and conservation medicine** services for injured native wildlife. These services include undertaking health assessments and treatment of confiscated and injured wild animals, and deploying specialist wildlife emergency response veterinary assistance at wildlife incidents.

Threatening processes



Reduce the impacts of key threatening processes, including altered hydrology, climate change and priority pest animals, weeds and diseases, on biodiversity, ecological processes and sustainable land uses.

Biodiversity and biodiversity components face a range of pressures, and multiple threats can interact and compound, resulting in increased impacts.

The department manages a range of threatening processes to biodiversity, with a focus on those that impact significant conservation values, such as threatened species and ecological communities, and other values on department-managed land. The department manages threatening processes to protect and maintain key environmental values and other assets; as a good neighbour to adjoining landholders; to comply with legislation and codes; and to reduce their impact including on public use and enjoyment of department-managed land.

The department prioritises its management efforts based primarily on biodiversity asset protection management programs to ensure effective use of available resources. In addition, priorities may also be determined as a response to community issues and legislative requirements.

DPIRD is responsible for regulating harmful pest plants and animals, with a focus on declared pests, through administering the BAM Act. [Recognised Biosecurity Groups](#) (RBGs) are community-based, independent associations recognised under the BAM Act that support landholders manage widespread and established declared pests in their area of operation. The department works with DPIRD, RBGs and other community groups, including [hunting groups](#), to manage pests on department-managed land.

The Australian Government has developed [threat abatement plans](#) for key threatening processes listed under the EPBC Act to guide and coordinate Australia's response to their impacts on biodiversity. The department's approach to managing threatening processes is consistent with these plans and contributes to the delivery of the objectives and actions.

Pest animals

The department's management of pest animals is guided by several strategies that aim to mitigate their impact on native wildlife.

[Western Shield](#) is WA's and one of Australia's, largest and longest-running conservation program working to protect native fauna from foxes and feral cats since 1996. Landscape-scale feral predator management is delivered at prioritised sites primarily through 1080 baiting, with other management methods, including fencing and trapping, also used in specific locations to protect vulnerable native species. The program is supported by research and monitoring to understand and enhance the program's effectiveness. The program is guided by the *Western Shield Strategic Plan 2017-2026*.

The [Cane toad strategy for WA 2021-2026](#) applies across WA to guide research, planning and operations related to cane toad management, with a focus on education and collaboration with stakeholders to manage and reduce the spread.

The [Western Australian feral cat strategy 2023-2028](#) applies across WA to guide feral cat management with a focus on proven, effective and humane management techniques.

Other pest animal species are managed at site and regional scales based on regional priorities, including feral pigs, rabbits, rodents, camels, cattle, horses, donkeys and goats. The department also responds to invertebrate pests, including polyphagous shot-hole borer, under the direction of DPIRD.

These strategies are consistent with, and contribute to the delivery of, the [Australian Pest Animal Strategy 2017 to 2027](#).

Weeds

The department assesses weed species in each region based on their ecological impact, current and potential distribution, invasiveness, and the feasibility of controlling them. This [species-led prioritisation process](#) helps identify the weeds considered high impact, rapidly invasive and still at a population size that can feasibly be eradicated or contained to a manageable size. This process guides the department's weed management actions.

This approach is consistent with, and contributes to the delivery of, the [Australian Weeds Strategy 2017-2027](#).

Disease

The department manages a range of plant diseases, with a focus on [Phytophthora dieback](#) due to the large impact it has on native plant species and ecosystems in the south-west of WA. The [Phytophthora dieback Management Manual](#) describes the process for assessing dieback risk associated with a disturbance activity and developing a plan to mitigate the risk.

Other significant plant diseases managed by the department include [myrtle rust](#), [marri canker](#) and [Armillaria root disease](#).

Inappropriate fire regimes

The department is responsible for managing fire on the lands where it has responsibility by managing fuel loads through prescribed burning and other means, responding to bushfires, and undertaking research into fire behaviour and effects.

The [Parks and Wildlife Service Fire Management Strategy](#) outlines the key strategic priorities for fire management across the breadth of the department's bushfire risk mitigation and suppression responsibilities. The **Bushfire Risk Management Framework** provides the principles and rationale for programming fuel management, including identifying the indicators that demonstrate that bushfire risk has been reduced to an acceptable level, as determined through a risk assessment and prioritisation process. **Regional fuel management plans** have been developed for each of the Parks and Wildlife Service's nine regions that demonstrate the application of the framework, prioritise regional targets for fuel management and provide measures of effectiveness.

The department maintains a variety of technical resources to guide its operations and assist other land managers in making informed decisions about the application of fire in natural environments.

Altered hydrology

Management of WA's water resources is largely the responsibility of the Department of Water and Environmental Regulation (DWER). The department contributes advice to DWER in relation to environmental water requirements and provisions. Actions undertaken by the department to mitigate impacts of altered hydrology on conservation significant ecosystems are site-specific and may include determination of water-dependent environmental values; surface water management using infrastructure; groundwater management using pumping systems; and revegetation to restore native vegetation.

Climate change

DWER is the lead agency for the [Western Australian Climate Policy](#), which outlines the priority themes and practical actions the State Government is taking to enhance climate resilience and achieve net zero emissions by 2050. The department is contributing to action on [climate change](#) through initiatives that support biodiversity adaptation to climate change, as well as mitigation measures to reduce or remove emissions that also benefit biodiversity.

- **Adaptation** measures include building resilience to climate change through addressing existing pressures to species and ecosystems, such as invasive species, disease, and altered fire and hydrological regimes, as well as ecosystem restoration. Assisted migration of flora and fauna via gene migration or translocation may also assist adaptation of specific species under predicted climate change settings. DBCA is leading development of the Natural Environment Sector Adaptation Plan.
- **Mitigation** measures include transitioning to renewable energy sources, reducing the risk of high carbon emissions from large, intense bushfires through fuel reduction programs, and land management activities that support carbon storage in vegetation and soils, such as revegetation.

Ecological thinning is an active forest management tool undertaken to support forest health and resilience as the landscape continues to become drier and warmer. It involves the selective removal of individual trees to reduce water stress and improve the biodiversity of a given area. The department is responsible for identifying candidate areas and developing ongoing guidelines and prescriptions for ecological thinning while the Forest Products Commission provides operational support, contract management and planning.

Resource and land development

The department provides advice on a range of developments, including extractive industry, infrastructure and urban development. This advice primarily relates to proposals that directly or indirectly impact on lands and waters for which the department has a legislative management responsibility and/or threatened species and ecological communities. Advice may be provided to development proponents, regulatory agencies and the Minister for the Environment.

Exploration for minerals (including basic raw materials like sand and gravel) under the *Mining Act 1978* on reserves managed by the department requires the concurrence or recommendations of the Minister for the Environment before consent to activities within that reserve can be granted by the Minister for Mines and Petroleum. A [reserve activity management plan](#) that outlines the proposed exploration activities, and how risks and impacts on the environment and the reserve values and uses have been understood, avoided or mitigated, is used to inform the approval process. Advice may also be needed from the CPC and, where reserves are jointly vested, the Joint Responsible Body.

Exploration for petroleum resources on reserves managed by the department requires the formal recommendations of the Minister for the Environment on conditions of approval before consent can be granted by the Minister for Mines and Petroleum, under the *Petroleum and Geothermal Energy Resources Act 1967*.

Land use planning policy and decision-making are largely the responsibility of the Western Australian Planning Commission (WAPC), DPLH, local governments and redevelopment authorities. The department's role in providing advice to land use planning decision-makers is linked closely to, and complements, the referral and assessment processes of the Environmental Protection Authority (EPA). The EPA is responsible for formally assessing planning proposals and schemes that are likely to have a significant impact on the environment. Guidance on protecting the environment during planning and development is set out in the [Environmental Protection Authority's Guidance Statement No. 33 - Environmental Guidance for Planning and Development](#).

The department has planning and development authority over the [Swan Canning Development Control Area](#) (DCA) and consults with the SRT, local governments and other agencies in the assessment of applications for activities and development in, or that may affect, the DCA. The department and/or the SRT also provides advice on approvals by other authorities that may affect the DCA. These types of approvals are processed by the WAPC or local governments.

Actions that take or disturb listed threatened species, or cause modification of the occurrence of threatened ecological communities, require **authorisation under the BC Act**. Authorisations may be sought independently or in association with other regulatory processes, including wildlife licence applications under the Biodiversity Conservation Regulations 2018; planning schemes and scheme amendments; development proposals and clearing permit applications under the *Environmental Protection Act 1986*; land use planning under the *Planning and Development Act 2005* and related State Planning Policies; and referrals of Matters of National Environmental Significance under the EPBC Act. The department routinely provides advice to decision-makers during the [assessment](#) of proposed activities through these processes.

Offsets policy in WA is the responsibility of DWER, however DBCA is involved in offsets in various ways. This involvement includes assessing biodiversity offsets as a condition of authorisation for the taking or disturbance of threatened species, or the modification of threatened ecological communities under the BC Act; providing advice to other regulators and decision-makers on proposed offsets related to departmental matters required under other legislation; and being involved in the implementation of environmental offsets. Implementation of environmental offsets can include land acquisition for CALM Act purposes; facilitation and delivery of on-ground management to enhance conservation outcomes; and/or research on terrestrial and marine biodiversity to address priority knowledge gaps.

Disturbance activities

Applications to carry out a selection of disturbance activities on department-managed land can be applied for by internal and external proponents via the department's [Disturbance Approval System](#) (DAS). DAS facilitates the process to seek permission to carry out work that can potentially affect conservation values, as well as providing a consistent approach for assessing these activities and setting conditions. Disturbance activities assessed through DAS include establishment or maintenance of public utilities, roads and tracks, recreation sites and infrastructure; ecological thinning; plantation management; and fire management.

Scientific research



Undertake scientific investigations that are effectively targeted to improve knowledge and integrate science knowledge into biodiversity conservation and management.

Science provides the evidence base to inform best practice management to protect biodiversity and manage threatening processes, as well as how biodiversity and natural areas are valued and enrich people's lives.

Science, which includes scientific research, monitoring and science communication, is undertaken across the department to support the conservation and protection of biodiversity and Aboriginal cultural heritage; sustainable management of WA's species, ecosystems, cultural heritage, lands and attractions; and nature-based tourism.

Science underpins the department's work, with the department maintaining scientific expertise and biodiversity knowledge that meets the department's management needs, including informing its response to emerging issues.

Scientific research and monitoring

Key areas of research and monitoring undertaken by various areas of the department include biological and physico-chemical survey of land and waters; investigating ecosystem threats and the effectiveness of management techniques; remote sensing; fire science; systematics and taxonomy; *ex-situ* conservation; conservation medicine; population and landscape genetics, demography, ecology, eco-physiology, reproductive biology; monitoring technologies, restoration ecology; climate adaptation; and human usage. Multidisciplinary approaches are used to investigate complex knowledge gaps.

Biodiversity and Conservation Science division leads the department's biodiversity science function and is structured into [programs](#) focused on key themes for the delivery of targeted science to support evidence-based decision-making and the conservation and land management functions of the department. Parks and Visitor Services division coordinates social and human use research and monitoring, including public feedback in Parks and Wildlife Service-managed lands and waters. Other areas of the department also lead and support research and monitoring.

Research projects are managed through a robust process facilitated via the department's [Science Project Management System](#), to ensure that science delivery is prioritised, targeted and cost effective; and provides evidence to support decision-making that meets the highest possible standards of scientific rigour and public accountability.

The [Science Strategic Plan](#) describes the key outcomes that science is delivering to support the strategic directions of the department. **Science Program Plans** further outline each science program's approach, activities and key deliverables that contribute to achieving the overarching Science Strategic Plan goals.

Science partnerships

The department seeks collaborative partnership opportunities to leverage optimal science outcomes and maximise government investment in the science undertaken by the department.

Science collaborations are undertaken with external researchers, including those from other government agencies, universities, the WA Museum, WA Biodiversity Science Institute, WA Marine Science Institute, CSIRO, and other research organisations and are formalised through **research collaboration agreements**.

Science partnerships may be undertaken directly with collaborating organisations or through various Australian Government research programs, including the Australian Research Council, Cooperative Research Centres and the National Environmental Science Program.

The department also partners with Traditional Owners, industry, non-government organisations and the community to undertake research and monitoring projects.

The department supports postgraduate **students** through scholarships and in-kind contributions, including supervision where they provide scientific knowledge to inform conservation and biodiversity priorities.

Dedicated research infrastructure and collections

The department has facilities dedicated to scientific research and biodiversity collections.

The [Western Australian Herbarium](#) houses, manages and curates the State collection of scientific specimens of plants, algae, cyanobacteria, lichens, slime moulds and fungi. The Herbarium plays a vital role within the department, providing taxonomic names and occurrence information that is essential for biodiversity conservation planning and management. The physical collections are accessed by staff botanists and visiting researchers. The Herbarium also offers public and professional services for the identification of botanical specimens and their incorporation and long-term storage within the State Herbarium.

The [Western Australian Seed Centre](#) (Kensington) houses the state seed collection of conservation-significant species, insuring against extinction and loss of genetic diversity in the wild and providing material for seed-based flora recovery actions.

The [Western Australian Seed Centre](#) (Kings Park) conserves seeds as an insurance against plant species extinction, as well as a resource for science and restoration. Seeds are stored for a range of purposes including for the conservation of WA's flora, the management and restoration of the managed bushlands, the propagation of plants for display and education in the WA Botanic Garden, and for plant breeding and scientific research.

The **Sid James Conservation Genetics Laboratory** is a facility supporting genomic, genetic and environmental DNA research used in applications such as animal and plant population management, taxonomy, systematics and biodiversity monitoring.

The [DBCA Library](#) collection specialises in the environment, ecology, conservation, botany, forestry, wildlife, national parks and nature reserves. It comprises extensive materials to serve the information needs of the department as well as providing some services to the community.

Science communication

The department reports its research findings and activities in a variety of formats.

- The [Biodiversity and Conservation Science Annual Report](#) highlights the department's research programs and projects, including progress updates, management implications and future directions.

- [Nuytsia](#) is a refereed journal that publishes original scientific papers on systematic botany with a focus on papers relating to the flora of WA.
- Science information sheets (available from the [DBCA Library website](#)) are prepared by staff that summarise key research projects.
- Department staff also lead and contribute to scientific papers in other peer-reviewed journals, as well as technical reports, conference papers, books and popular media.

Data management



Effectively collect, store, manage and share information and data so they are available and used to improve biodiversity conservation and management.

The data and information collected and managed by the department are valuable resources that inform a broad range of business decisions and underpin biodiversity conservation and land management actions and outcomes. The effective management of data and information is essential to support the needs of the department and its stakeholders, maintain its integrity and accuracy, and ensure its availability and reliability to inform decision-making.

The department manages state-wide biodiversity data and information, as well as local or project-specific data, for biodiversity conservation and management. These data and information are held in databases centrally, regionally and across the statutory authorities. A central biodiversity data repository for departmental projects is the department's **Data Catalogue**.

Some of the biodiversity data and information held by the department is confidential or sensitive and must be managed and shared in accordance with legal and best practice requirements for these types of information. The use of department-held data by external parties is managed through formal **data sharing agreements**.

'Data' includes observations, measurements, experimental outputs and other factual information. Data may be in the form of digital, paper, photographic, video and audio records, physical specimens and samples, illustrations, outputs of quantitative analyses, computer models and code.

State-wide biodiversity data platforms

The department manages state-wide data biodiversity platforms and databases that can be accessed by third parties.

The [Biodiversity Information Office](#) (BIO) is responsible for making Western Australian biodiversity data more discoverable, accessible and useable. BIO has developed the [Dandjoo](#) biodiversity data platform to mobilise data from all environment-related sectors, including government, industry, research, and the community. BIO's day-to-day work also includes a program of data-sharing and outreach work, identifying and sourcing priority datasets for release.

Dandjoo has been designed to support seamless integration with other government platforms, including DWER's [Environment Online](#) service to support high-quality, efficient, and transparent decision-making with reliable data for environmental assessment and approvals.

The department manages databases that contain records of **conservation significant species and ecological communities** and provides a [database search service for threatened and Priority flora, fauna and ecological communities](#) to assist proponents in ascertaining if threatened or Priority flora, fauna or ecological communities may be present at a particular location.

Information on the State's flora is made freely available through the Western Australian Herbarium's portal [Florabase](#), and the [Australasian Virtual Herbarium](#).

The department coordinates [mapping of WA's wetlands](#). As a minimum, mapping identifies the presence of wetlands, but it can also identify the wetland boundary, [classification](#) and values, and assign the wetland to a management category on the basis of its values. Wetland mapping can be viewed via Landgate's public map viewer [Locate](#). Wetland mapping datasets can be downloaded via the [WA government data portal](#).

Other data platforms

The [Wildlife Licensing and Compliance online system](#) allows some BC Act licensees to manage licence requirements, including applying for and renewing licences, and submitting licence return information.

Community engagement



Promote public and stakeholder awareness and understanding of biodiversity, the threats facing it and its conservation, including through involvement in conservation programs, to encourage stewardship and support for conservation initiatives.

Increasing the community's awareness and understanding of biodiversity, including through memorable personal experiences, can lead to a better appreciation of its value and how it contributes to people's wellbeing and livelihoods. This can strengthen people's connection to nature and influence their behaviour to become more mindful of the broader impacts of actions and decisions on biodiversity, both directly and indirectly, as well as gain support for the department's management responsibilities.

Education, engagement and behaviour change

The department runs a range of [environmental education](#) and behaviour change programs and events, for primary and secondary schools as well as seasonal holiday and community activities. Environmental education and behaviour change activities have a range of benefits, including promoting environmental stewardship, encouraging science, technology, engineering, and mathematics (STEM) careers and fostering a connection with nature. The department also engages directly with universities supporting student development through lectures, co-supervision of research, internships and grants.

Interpretation

Interpretation is a key management strategy used by the department. Interpreting biodiversity and cultural values through stories, information and key messages enhances visitor experiences in the natural areas and attractions the department manages. Interpreters can use a variety of methods to convey messages, including printed and electronic media (brochures, posters, publications, signs, exhibits, radio trails, films, websites, podcasts, mobile apps), artwork and design and personal presentations (talks, guided walks, experiences, and interactive activities). The department produces [publications](#) to enhance readers knowledge and appreciation of the State's parks, reserves and wildlife and to help visitors enjoy their visits to the areas managed by the department.

Communication

Communicating with the community is crucial to provide up-to-date information so that it is available to guide people's behaviour. This includes educating visitors on appropriate conduct

within areas managed by the department to protect conservation values, as well as how to enjoy these areas safely so that they have a positive experience. Additionally, sharing the department's actions and decisions enhances awareness and fosters appreciation for the department's management responsibilities.

Tourism and recreation

Nature-based tourism and recreation activities are powerful vehicles to develop public awareness, appreciation, enjoyment and support for conservation. When people have positive experiences of nature, they value it and become advocates for conservation. Visitation to parks and attractions also provides many personal and community benefits, making a positive contribution to the social, psychological, physical and economic wellbeing of the community.

The department supports and promotes compatible and sustainable recreation and nature and culture-based tourism in the natural areas that it manages. This includes seeking to partner with the recreation and tourism industries that broaden the range of experiences, services and facilities available for visitors, and deliver outstanding, enjoyable and safe experiences of WA's biodiversity, cultural heritage and natural attractions. These arrangements can be by way of a lease, licence or other commercial arrangement that involves assessment and monitoring to ensure land uses are ecologically, culturally and socially sustainable, equitable and appropriate for visitors' use and enjoyment.

Visitor fees (entry and camping) that apply at many parks and attractions, and lease and licence charges, generate revenue that contributes to the costs of management, including protection of the environment and the development and maintenance of visitor services and facilities.

The department also actively encourages Aboriginal businesses to participate in nature-based and cultural tourism, to create economic and social opportunities for Aboriginal people to live and work on Country in a way that is compatible with biodiversity conservation.

Off-reserve conservation

Whilst the department's primary conservation focus is to manage the lands and waters for which it has responsibility, it also contributes to programs and initiatives that engage the community in [off-reserve conservation](#).

Under the department's [Nature Conservation Covenant](#) program, private landholders voluntarily agree to a covenant being registered on the title of the land. The purpose of the covenant is to permanently protect the biodiversity values of the land by binding current and future owners to the conditions of the covenant. The department also engages in covenants that are applied as conditions of development or subdivision approvals (known as 'conditional covenants').

Under the department's [Land for Wildlife](#) program, landowners who join the program sign voluntary agreements to manage their land for its nature conservation values. Landowners receive an assessment of the conservation values present on their property, management advice and a recognition sign for their property gate.

The department coordinates a number of **grant programs** to support conservation actions both on and off-reserve.

The department also plays an important role providing advice and support for conservation actions that occur off-reserve, particularly where these involve threatened and Priority species and ecological communities or benefit department-managed-land. This includes provision of advice to

landholders, non-government organisations including Natural Resource Management (NRM) groups, other government agencies and industry. The department's [Good Neighbour Policy and Guideline](#) guides the department's approach to managing cross-boundary issues with its neighbours.

Volunteering

Community involvement is an integral part of the department's operations, reflecting the high level of support for conservation in the community, as well as the value the department places on involving or supporting community members to undertake conservation activities. The department has a long history of receiving support from volunteers in groups or as individuals, working cooperatively in well-established relationships with staff to the mutual benefit of the department and the community.

Volunteer groups and individuals may be involved either by working directly with the department on activities managed by it, or through planned independent activities that assist in the achievement of the department's objectives.

The department has a wide range of [volunteer activities and opportunities](#), including scientific research, community education, wildlife rehabilitation and management activities.

The image features a solid teal background. A horizontal band of a slightly lighter teal shade runs across the middle. On the left side, there are several thick, wavy, vertical lines in various shades of teal and blue, creating a sense of movement and depth. The text 'MEASURING SUCCESS' is positioned on the right side, within the lighter teal band.

MEASURING SUCCESS

Measuring success

Understanding how the department's activities are delivering the overarching biodiversity conservation strategies and contributing to biodiversity conservation outcomes is important to ensure the work of the department is targeted to maximise benefits. The department undertakes monitoring, evaluation and reporting of its activities to provide accountability and identify opportunities for continuous improvement. Success is measured at various levels, including at the project, program and whole-of-department levels. The processes for department-wide biodiversity conservation reporting, including how this contributes to national-level reporting, are outlined below.

Department annual reports

The department's performance across its 10 services is reported in its [annual reports](#). The department's overarching biodiversity conservation strategies are specifically reported under service 6 - *Conserving habitats, species and ecological communities* and service 7 – *Research and conservation partnerships*, noting that other services also contribute and report on activities that deliver the overarching strategies. The reporting includes measuring performance against key indicators aligned to government goals and desired outcomes.

Management effectiveness reporting

The department has a **Management Effectiveness framework** for evaluating the implementation of management plans approved and applied under the CALM Act. The department's management effectiveness reporting is based on both qualitative assessments and scientific data to inform decision-making. Application of the framework involves a systematic approach to evaluate management effectiveness based on the adaptive management cycle. This includes evaluation of management context, planning, inputs, process, outputs and outcomes. The framework also facilitates periodic evaluation of the effectiveness of management plan implementation in meeting the goals and objectives of biodiversity and cultural values. This includes reporting on the condition, pressure and management response for park key performance indicators. The framework also supports formal [periodic assessments](#) of the implementation of CALM Act management plans undertaken by the CPC.

The framework is supported by a digital system of recording and reporting on implementation of management plans and management effectiveness, known as the Management Effectiveness System.

The department also measures its performance towards achieving key performance indicators for a suite of other management plans, conservation plans and strategies outlined in this framework. The monitoring, evaluation and reporting processes for these other plans and strategies varies and is outlined in the relevant documents.

National biodiversity reporting

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 Australia's commitments to the Convention on Biological Diversity. Western Australia's contribution to the national reporting is via the Western Australian Government representative on the Biodiversity Working Group, DBCA's Executive Director Biodiversity and Conservation Science.

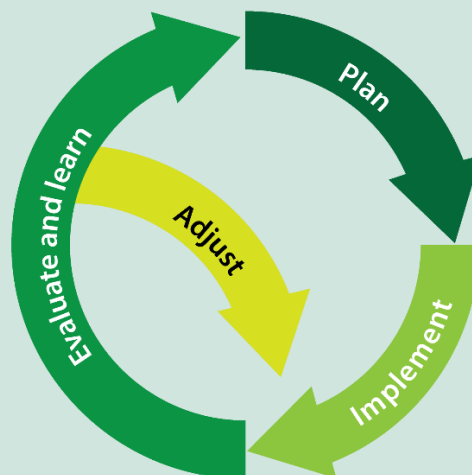
Box 5: Adaptive management

The department takes an adaptive management and evidence-based approach to biodiversity conservation to promote ecosystem resilience and impacts of threats. Adaptive management enables information to feed back into and improve the way management is undertaken over time. It involves planning, management, monitoring and learning.

Monitoring involves the periodic collection and evaluation of data to measure trends relative to agreed benchmarks and stated objectives. Monitoring enables the reporting of trends over time in relation to the condition and pressures on values and the effectiveness of management responses. Effective monitoring uses the minimum amount of resources to provide information needed to determine if implemented actions are on track to achieve objectives and/or address key uncertainties⁷.

Systematically evaluating monitoring results facilitates learning from the information collected, enabling strategies and actions to be adapted and improved. Documenting and sharing learnings contributes to the evidence base and fosters a learning environment that supports generating ideas for improvement and guide the efficacy of current and future biodiversity conservation strategies, investment and activities with respect to reserves, species and ecosystem conservation.

Reporting is undertaken at various intervals to document progress towards achieving objectives and meet accountability requirements.



⁷ Conservation Measures Partnership 2020. *Open standards for the practice of conservation. Version 4.0.*

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APPENDIX

Legislative and policy context for the Department of Biodiversity, Conservation and Attractions' Biodiversity Conservation Framework

International commitments	
Convention on Biological Diversity Convention to Combat Desertification Convention on International Trade in Endangered Species of Wild Fauna and Flora Convention on Migratory Species Framework Convention on Climate Change International convention for the Regulation of Whaling Ramsar Convention on Wetlands Sustainable Development Goals	
National strategies and plans	
Australia's Strategy for Nature Australia's Strategy for the National Reserve System Australia's National Representative System of Marine Protected Areas Australian Pest Animal Strategy Australian Weeds Strategy National Climate Resilience and Adaptation Strategy Sustainable Ocean Plan (draft) Threatened Species Action Plan Threatened species and ecological community conservation advices and national recovery plans Threat abatement plans	
Environmental legislation:	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
State policies	
Bush Forever Environment Protection Policies Natural Environment Sector Adaptation Plan (in development) Native Vegetation Policy for Western Australia Western Australian Climate Policy and Climate Adaptation Strategy	
Environmental legislation:	<i>Environmental Protection Act 1986</i>

Department of Biodiversity, Conservation and Attractions key documents

Governance

Strategic Directions
 Botanic Gardens and Parks Authority Strategic Priorities
 Conservation and Ecosystem Management Strategic Plan
 Parks and Visitor Services Strategic Plan
 Regional and Fire Management Services Division Statement of Purpose
 Science Strategic Plan
 Zoological Parks Authority Strategic Plan

Legislative and policy framework

Corporate policies and guidelines
 A Biodiversity and Cultural Conservation Strategy for the Great Western Woodlands
 Bold Park and Kings Park Bushland Conservation Action Plan
 Kimberley Science and Conservation Strategy
 Pilbara Conservation Strategy
 Regional compliance plans (in development)
 Regional conservation plans
 Rottnest Island Terrestrial and Marine conservation action plans
 Parks and Wildlife Service Statement of Regulatory Intent (in development)

Conservation reserves

Bold Park and Kings Park management plans
 CALM Act reserve management plans
 Forest Management Plan
 Rottnest Island Management Plan
 River Protection Strategy for Derbal Yirragan Djarlgarro (Swan Canning river system)

Species and ecological communities

BGPA Ex-situ Conservation Strategy
 Biodiversity management programmes
 Management plans for the commercial harvest of kangaroos and flora
 Threatened species and ecological community recovery plans and interim recovery plans
 Wildlife management programs for whale sharks, humpback whales and seals and sea lions

Threatening processes

Bushfire Risk Management Framework
 Cane Toad Strategy for WA
 Parks and Wildlife Service Fire Management Strategy
 Regional fuel management plans
 Weed prioritisation process
 Western Australian Feral Cat Strategy
 Western Shield program and monitoring plans

Scientific research

Science program plans

Legislation:	<i>Biodiversity Conservation Act 2016</i> <i>Botanic Gardens and Parks Authority Act 1998</i> <i>Conservation and Land Management Act 1984</i>	<i>Rottnest Island Authority Act 1987</i> <i>Swan and Canning Rivers Management Act 2006</i> <i>Zoological Parks Authority Act 2001</i>
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Department of **Biodiversity,
Conservation and Attractions**