Threatened Species Program

2020–2040

Queensland
Government

Queensland Government's Threatened Species Program aims to deliver coordinated actions to identify, protect and recover threatened species across our terrestrial and aquatic environments and mitigate the threatening processes that impact them.

In particular, it is designed to meet the Queensland Government's responsibilities and obligations to manage and conserve threatened species including those under Queensland and Commonwealth legislation and national and international agreements.

By adopting a strategic, integrated and coordinated approach to planning and implementing recovery activities across the sector, this program will help deliver increased outcomes for threatened species and their habitats.

Swamp Spider Orchid

Introduction

Queensland's native animals and plants are unique and valuable elements of our state's rich biodiversity.

Our state is widely considered to be a global biodiversity hotspot and is home to a number of species with national and global significance including many that are found nowhere else in the world.

Protecting and managing our native animals and plants is important because we are all inter-connected. We share the same communities, environments and landscapes and rely on the same natural and cultural values to prosper and grow.

Conserving our native animals and plants ensures our biodiversity is protected for future generations and supports the vibrancy and prosperity of our environment, our communities and our economy.

Native animals and plants make an important contribution to our health and wellbeing and quality of life by helping to maintain healthy ecosystems, clean air and clean water.

They also underpin our economic productivity and growth through their contribution to the tourism, agriculture, natural resource and medical/pharmaceutical industries.

Queensland context

Queensland has some of the most naturally diverse animal and plant species in Australia.

For many First Nations people, these threatened species have been part of their history and culture for thousands of generations and provide an important connection to Country.

Queensland is the custodian of a globally and nationally significant proportion of Australia's biodiversity. It is home to 50 per cent of the nation's threatened species despite only representing 24 per cent of the landmass.

As at 31 August 2020, there were 1000 threatened species listed under Queensland legislation including 230 animal and 770 plant species. They are found in terrestrial, freshwater and marine environments throughout Queensland. Of these, more than 40 per cent of the fauna and more than 70 per cent of flora are endemic to the state. For many threatened species their recovery is dependent on recovery actions undertaken in Queensland.

Threatened species fast facts:

Queensland is home to:
- More than 50% of Australia's native species including:
  - 85% of Australia's native mammals
  - 72% of its native birds
  - more than 50% of Australia's native reptile and frog species
  - more than 14,000 native plant species.
- 1000 threatened species
  - 230 animal species—more than 40% of which are native to Queensland
  - 770 plant species—more than 70% of which are native to Queensland

What is a threatened species?

Every species requires a certain set of environmental conditions to be able to survive and thrive.

A threatened species is any animal or plant species that has been assessed as being at risk of extinction. All native species are protected under Queensland's *Nature Conservation Act 1992,* but threatened species are afforded a higher level of protection.

There are many threats that impact on species and contribute to their risk of extinction.

These can be human-induced such as population growth, habitat loss, pollution, overharvesting, introduced species or natural events such as cyclones, floods, droughts and fire. Land clearing causes species decline and habitat loss, exacerbates other threatening processes, and reduces the resilience of threatened species to survive future challenges such as a changing climate.

Threatened species are allocated to different conservation classes depending on their risk of extinction. These classes are based on a number of criteria including trends in population size, health and distribution.

These classes are:
*   Extinct
*   Extinct in the wild
*   Critically endangered
*   Endangered
*   Vulnerable.

Lamington National Park

The Threatened Species Program provides a long-term plan for managing threatened species conservation and recovery.

Our vision

Queenslanders support threatened species to prosper in self-sustaining populations, now and into the future.

Our goals

- Threatened species persist and recover.
- Threatened species are resilient to changing environments.
- Queenslanders value threatened species and contribute to their recovery.

Our long-term outcomes

Protect

- Threatened species are protected in healthy habitats across all land tenures.
- Protection reduces species risk of extinction.

Mitigate

- Impacts on species and habitats are mitigated.
- Threats to species are reduced.

Recover

- Habitats are restored and connected for threatened species.
- Threatened species are recovering.

Enable

- A robust, adaptively managed program has long-lasting positive impacts on Queensland's wildlife and habitats.
- More Queenslanders actively participate in the protection and recovery of threatened species.

Our principles

- Evidence-based
- Collaborative
- Cost-effective
- Culturally appropriate
- Adaptive
- Strong governance and leadership.

Queensland Government key focus areas

The Threatened Species Program is underpinned by five key focus areas that will guide Queensland Government implementation and actions.

1. Legislation, policy and governance
2. Planning and management
3. Science and knowledge
4. Connect and communicate
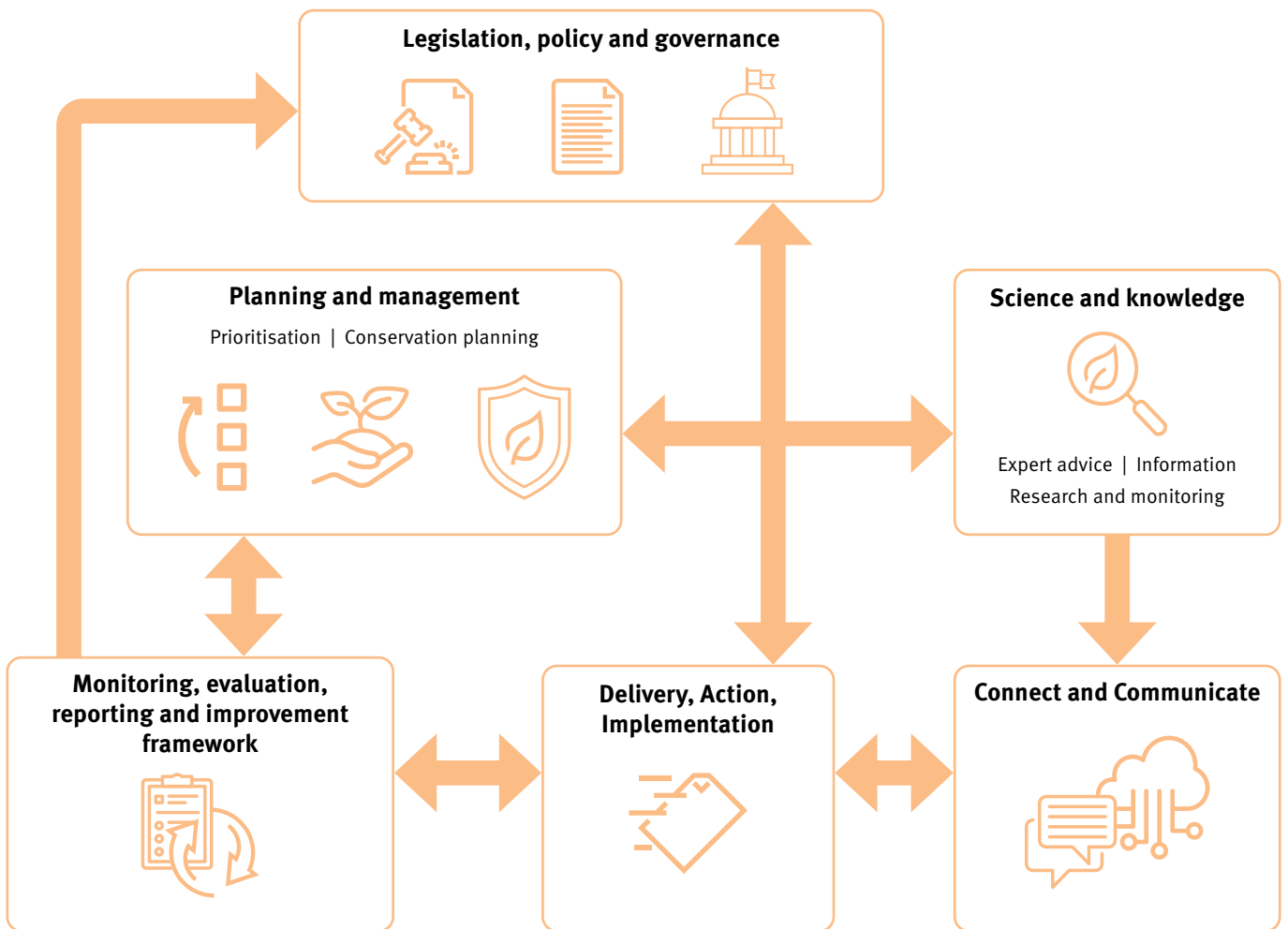5. Monitoring, evaluation, reporting and improvement framework

Figure 1. Threatened Species Program focus areas are interlinked and implemented using an adaptive management approach.

Legislation, policy and governance

Legislation, policy and governance are effective measures for supporting the recovery and protection of threatened species.

Queensland has a comprehensive legislative framework in place to protect and manage threatened species including the *Nature Conservation Act 1992* and the *Marine Parks Act 2004*, which is administered by the Department of Environment and Science.

At a national level, threatened species are protected through the Commonwealth Government's *Environmental Protection and Biodiversity Conservation Act 1999*.

The Threatened Species Program will continue to review opportunities to better use existing legislation to protect, mitigate, and recover threatened species.

The Threatened Species Program uses a range of policy tools to support threatened species conservation.

Key actions

- Continue to ensure a strong legislative and policy framework is in place to protect, mitigate, and recover threatened species.

Protected area expansion

Queensland's protected area system, which includes public areas such as national parks and forests, ensures there are dedicated places for the protection of threatened species and their habitats and other natural, social and cultural values.

Our parks and forests provide clean air and water, maintain healthy ecosystems, and play a vital role in sustaining our environmental, cultural and social values.

Healthy ecosystems also increase the environment's resilience to climate change.

The conservation of our natural environment supports our economic prosperity facilitating ecotourism, recreation and heritage experiences and providing economic benefits to local and regional communities.

Glossy black cockatoo

Planning and management

Through effective planning and management, the program identifies priority threatened species and manages coordinated recovery actions across tenures. It also identifies key threats and develops strategic responses to reduce the impacts on threatened species.

The program is supported by a framework that includes prioritisation, information gathering, identification of knowledge gaps and barriers, stakeholder engagement and identification of recovery actions. An adaptive management approach allows for continual improvements to be incorporated into threatened species planning and management.

An updated threatened species prioritisation framework will underpin the program and will identify priorities for investment and actions. While initially being species focused, spatial prioritisation and other more advanced tools will be incorporated as information and resources allow, to prioritise for threats and habitat-based actions.

Recovery Action Plans will be developed for priority species where needed to guide recovery actions and address gaps in existing recovery efforts.

Threat abatement hotspots will be identified and threat mitigation plans will be developed for priority threats to guide targeted on-ground delivery at both a landscape and local scale across terrestrial and aquatic environments.

The Queensland Parks and Wildlife Service (QPWS) uses a Values Based Management Framework to guide park management. This framework develops strategies for threats like pests and fire on all parks, forests and reserves contributing to the conservation of threatened species and their habitats.

Emergency situations may arise that threaten a species survival and require urgent and/or unplanned actions. Emergency response processes will be developed to ensure timely, effective and coordinated actions are delivered to support affected threatened species, prevent their extinctions and reduce their vulnerability to disasters.

Key actions

- Develop an updated threatened species prioritisation framework to identify priorities for investment and actions.
- Develop recovery action plans for priority species.
- Identify threat abatement hotspots and develop threat mitigation plans for priority threats to guide targeted on-ground delivery.

Mahogany glider   © Queensland Museum

Science and knowledge

The program uses the best available science and knowledge to inform policy, management and recovery of threatened species. Effective partnerships across the sector promote innovation and fill knowledge gaps to improve protection, threat mitigation and recovery of threatened species.

Science and knowledge are integral to the development and implementation of threatened species conservation policy and programs. Science and knowledge activities help advance understanding of threatened species, improve management and support evidence-based decision-making.

Through a coordinated approach, the program will prioritise threatened species research to identify and address knowledge gaps, build evidence-based knowledge systems and develop relationships with the research community.

It will build on existing departmental research initiatives including the QPWS threatened species and conservation estate research priorities, Queensland Herbarium's flora and ecosystem science, research and monitoring and the Queensland Museum's collections and associated research.

The department will continue to strengthen links with the research sector and build on existing research relationships to grow science-based knowledge and improve evidence-based decision-making.

Through collaboration and co-design with First Nations people, the program will identify key cultural conservation values and integrate traditional knowledge and practices to improve threatened species planning, management, education and awareness.

Key actions

- Science and knowledge remain integral to threatened species conservation policy and management and support evidence-based decision-making.
- Develop a coordinated approach to prioritise and undertake research for threatened species, including building on existing research initiatives and relationships.
- Identify opportunities to co-design processes with First Nations people and integrate traditional knowledge and cultural learnings to improve threatened species education, awareness, planning and management.

Indigenous Land and Sea Ranger program

Through the Indigenous Land and Sea Ranger program, the Queensland Government partners with Indigenous communities to care for land and sea country, provide jobs and training and engage future generations.

Indigenous Land and Sea rangers play a vital role in conserving important ecosystems and cultural heritage combining traditional knowledge and expertise with contemporary land management techniques.

The rangers undertake conservation activities including feral animal and pest plant control, soil conservation, cultural heritage recording and protection, biodiversity and species monitoring and managed burns—all of which contribute to protecting threatened species and their habitat.

Indigenous Land and Sea ranger collecting turtle eggs

Connect and communicate

The successful implementation of the program relies on productive and effective partnerships that work towards common goals. The program aims to have more stakeholders involved as active partners and co-stewards in the protection and recovery of threatened species.

There are many stewards, partners and stakeholders making substantial contributions to protecting and recovering threatened species in Queensland including:

- First Nations people
- Regional natural resource management groups
- Non-government organisations
- Business/industry/commercial sector
- Science/research/university sector
- Landholders and managers
- Community groups and individuals.

The program will strengthen existing partnerships and forge new collaborative partnerships to ensure greater coordination of conservation effort and establish pathways for information exchange across the sector.

A key focus will be continued partnerships with First Nations people to care for land and sea country. The joint management of protected areas and programs such as the Indigenous Land and Sea Ranger program, help conserve important ecosystems and Aboriginal and Torres Strait Islander cultural heritage through a wide range of conservation activities.

Targeted education and engagement activities will be vital to help raise community awareness and encourage community action to support threatened species protection, recovery and threat mitigation actions.

Key actions:

- Continue to collaborate and co-design projects with key stewards, partners and stakeholders to help protect and recover threatened species.
- Undertake targeted education and engagement to raise community awareness and encourage community action to support threatened species protection, recovery and threat mitigation actions.
- Continue to partner with First Nations people to care for land and sea country through joint management and other programs including opportunities for the delivery of environmental and cultural heritage conservation and community engagement activities.

Private protected areas

Private protected areas are an important part of Queensland's protected area system and play a vital role maintaining our biodiversity including our iconic threatened species. In partnership with landholders, the Queensland Government is expanding the amount of private land with significant conservation value through nature refuges and special wildlife reserves. Queensland was the first state in Australia to establish special wildlife reserves, a specific type of protected area that provides a national park-level protection to private land with exceptional natural and/or cultural values.

Monitoring, evaluation, reporting and improvement framework

Adaptive management underpins the program and supports continual improvements to threatened species recovery and protection.

The Monitoring, Evaluation, Reporting, Improvement (MERI) framework will be used to monitor the outcomes of conservation management actions and support continuous evaluation of the program's progress, effectiveness and implementation.

- **Monitor** the outcomes of conservation management actions and program management actions.
- **Evaluate** outcomes against performance indicators to determine if project and program objectives are being achieved and are contributing to the final goals.
- **Report** the outcomes and communicate learnings to government and the community.
- **Improve** policy, planning and management using learnings from project and program evaluations.

The framework will be used at the program and project scale to analyse information and facilitate improvements in implementation, support transparency and accountability and inform policy development. Consistent and standardised protocols for data collection, evaluation and reporting will identify areas for improvement and adaptation where required.

Key action

- Develop and implement Monitoring, Evaluation, Reporting, Improvement (MERI) framework.

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Program implementation—working together to take action

The Threatened Species Program provides the framework needed to direct efforts where it is needed most to help conserve Queensland's most vulnerable flora and fauna species.

Threatened species management is a complex and challenging task that requires a collaborative approach and a united effort in order to achieve positive outcomes for a range of species.

By taking a partnerships approach, we aim to stimulate knowledge and resource sharing and demonstrate the effectiveness of working together for threatened species.

We will continue to partner with First Nations people and communities across Queensland in our management of threatened species.

We will continue to work with and support the many non-government and community groups across the state who undertake vital on-ground action in their regions to deliver better environmental outcomes.

Households and individuals also have a vital role to play in helping threatened species in their local areas by supporting on-ground conservation activities, contributing to scientific knowledge through citizen science programs or adopting sustainable environmental practices.

The protection of our native animals and plants is a shared responsibility and everyone can play their part to ensure our species survive and thrive.

Images from left to right:
Cassowary, Northern hairy-nosed wombat, Australian lace-lid frog, Red Goshawk © Jason Searle

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