



Goal 5 Living in balance— sustainably managing resources on land and sea

Ensure the sustainable use of forest, marine and wildlife resources for future generations.

Why is this important?

Biodiversity sustains ecosystem goods and services; that is the social, economic and cultural materials and values that communities depend upon. The products of nature including minerals, energy, food, water and medicine are just some of the many riches that benefit society and our way of life. Culture, employment and standard of living all rely on the continued sustainable use and replenishment of these services.

National parks (all classes) are the most precious assets in Queensland's protected area system. They are managed in accord with the cardinal principle 'to provide, to the greatest possible extent, for the permanent preservation of the area's natural condition and the protection of the area's cultural resources and values'. A number of other QPWS-managed areas do support sustainable industries which are important for Queensland's economic and social wellbeing. State forests provide for native timber and floriculture harvesting, seed collection, grazing, beekeeping, and quarrying for road construction and other activities. Multiple-use marine parks sustain uses such as recreational and commercial fishing industries.

In conservation parks and resources reserves, grazing and beekeeping may be allowed under permit, while nature refuges are good examples of sustainable land use.

Important community infrastructure, such as water pipelines, power supply lines and telephone and radio repeater stations, is sometimes located on protected areas and forests and can often result in significant impacts. Where this kind of development is agreed to, it must be carefully planned and managed to protect natural integrity and ensure the sustainable use of the State's land into the future.

QPWS has a responsibility under a range of legislation to ensure that any natural resource use or necessary development within protected areas and forests is undertaken with minimal impact and managed sustainably.

Protected areas and forests maintain water quality within the catchments that surround dams and water supplies, provide air quality services and provide a range of other services including landscape amenity and wildlife habitat and often form an important component of social and cultural values in local and regional communities.

The importance of maintaining these ecosystem services and other values for future generations cannot be overstated. As Queensland grows there is increasing concern over the potential impacts of development and fragmentation of habitats across the landscape and seascape. The impacts of these activities in protected areas and forests must always be managed based on the principle: ‘avoid, minimise, mitigate and offset’:

- a) **Avoid:** development in these areas will be avoided wherever possible. Utilities and other community facilities can only be permitted on protected areas and forests under demonstrably exceptional circumstances where a clear and long-term benefit to the community is established.
- b) **Minimise:** solutions to minimise loss of biodiversity and other values will always be sought where it is clearly shown that no alternatives exist and impacts cannot be avoided, damage to protected area and forest values will be minimised by making the development ‘footprint’ as small as possible. Strict conditions and very careful management of the entire process is important.

- c) **Mitigate:** the severity of impacts will be reduced through the requirement for environmental management plans and other measures, for example, by providing wildlife crossings over roadways or by replanting food trees for wildlife after areas have been temporarily disturbed.
- d) **Offset:** compensation is provided for unavoidable losses of values through measures that deliver a net gain to the state in conservation and other values.

Bioprospecting is another activity that can occur on protected areas and forests, as these areas may hold the key to new medicines or commercial compounds. Collecting of biological material for such purposes is carefully controlled and authorised under a range of legislation depending on the reason for and the location of the collection. Bioprospectors accessing protected areas for the purpose of collection must enter into a benefit sharing agreement between the State and a biodiscovery entity.

▼ Some of Queensland’s forests provide for a range of sustainable industries including grazing, beekeeping, and seed collection.



Peter Leeson, DERM

State forests

Many of Queensland's state forests are gradually being transitioned to protected areas under the *Nature Conservation Act 1992*. This process began with the Wet Tropics and South East Queensland Forests Agreements, and is being extended to western hardwoods areas, cypress areas, northern ecotone forests and the Mackay highlands. Different resource use activities will continue in these forests depending on their long term future tenure through the transition process. As many of these forests represent Queensland's future protected areas, a balance must be achieved to manage the use of these lands and their resources while protecting and maintaining their ecological and other values to the greatest extent possible.

Wildlife

The *Nature Conservation Act 1992* aims to conserve and protect Queensland's plants and animals in their natural habitats. It also recognises the need to manage wildlife research, native wildlife kept in captivity, and the limited wild harvest that occurs in Queensland. For example, sustainable wild harvest of some species of macropods is regulated through a range of licensing and tag procedures. This harvest is carefully monitored with limits adjusted according to seasonal conditions, and it is subject to independent audits.

Queensland's *Sustainable Planning Act 2009* is also important for threat reduction for wildlife, particularly koalas. It seeks to manage the process and effects of development to ensure sustainable outcomes are delivered. Two koala town planning regulations are listed under this act.

The *Native Title (Queensland) Act 1993* protects the rights of recognised Indigenous people to use and take plant and animal products for the preservation of culture and for sustenance. The sustainable management of hunting, particularly of marine species, is important in Indigenous custom and lore.



- ▼ Important community infrastructure, such as power supply lines, is sometimes located on Queensland forests.
- ▲ Marine parks will help ensure the resilience of Queensland's marine environment into the future.



State marine parks

Queensland's marine ecosystems are a very important resource supporting major industries including fishing and tourism. These activities are managed in part through marine parks (*Marine Parks Act 2004*) which have been established across 72 per cent of Queensland's coastal waters. QPWS marine park management aims to maintain well-functioning, resilient marine and island ecosystems into the future.

In Queensland, marine parks are multiple-use marine protected areas, where the marine environment is zoned for different levels of protection; from very high (marine national park zones or no-take 'green' zones), to areas that allow for wider uses. Zoning plans and field management actions are in place to maintain, and strengthen where feasible, the natural integrity and resilience of these systems.

Multiple-use marine park zoning helps ensure that there are refuges for species and ecosystems from extractive uses and other pressures, such as climate change and coastal development. The high level of protection in marine national parks allows aquatic species to prosper and repair, while also providing for continued opportunities for non extractive recreational and commercial uses such as commercial dive operations and boat based tourism. Other zoning in marine parks provides for a higher level of use and extraction. Marine parks therefore play a key role in maintaining the resilience of marine ecosystems, while also balancing the continued utilisation of the marine environment's commercial, recreational, social and cultural values.

What is our approach?

Queensland's protected areas, forests and wildlife will be managed to maintain and conserve their intrinsic values to the greatest possible extent while providing for appropriate resource use and development for sustainable environmental, economic and social benefits to the Queensland community. QPWS will:

- ensure that commercial use of terrestrial protected areas always deliver a net gain for conservation.
- recognise that, while protected areas have a fundamental conservation purpose, they contribute to the economic, social and aesthetic well-being of Queensland.
- ensure that in cases where sustainable use of native plants and terrestrial wildlife is permitted, the resource is maintained for long-term benefit.
- ensure resource use allowed under permit in protected areas and forests is sustainable and complies with relevant policies (including State planning policies), guidelines, environmental codes and conditions of use.
- ensure the impacts of commercial uses authorised on protected areas, forests and in relation to wildlife are managed in accordance with the principle of 'avoid, minimise, mitigate and offset'.
- plan and manage marine parks to ensure conservation of the fundamental values and resilience of marine ecosystems are maintained into the future.
- encourage the sustainable management of nature refuges.



Fishing on Moreton Bay Marine Park's artificial reefs

QPWS has established six artificial reefs in Moreton Bay Marine Park at a cost of \$2 million. The reefs are not intended to replace fish habitat. Instead, they provide anglers with new and diverse fishing opportunities after sections of the park were zoned as marine national park (green zones) in 2009.

To find locations for the reefs, QPWS undertook significant mapping and industry and community consultation leading to the establishment of three inshore and three offshore sites. These are expected to be completed in 2011. The reefs benefit a range of fishing techniques, including spear fishing, bottom fishing (for reef species) and game fishing for pelagic species. Each reef is constructed of environmentally suitable material which will last around 30 years. The reefs are designed to attract fish, but in time they will most likely also increase fish production.

What we will do: priorities for 2020

5.1 Manage natural resource use on state forests, conservation parks and resources reserves.

- a) Maintain the appropriate systems, policy and procedures for strategic auditing of native forest timber harvesting operations and maintain training and use by appropriate field staff.
- b) Ensure the sustainability of any resource use allowed under permit, such as grazing, quarrying, beekeeping, foliage harvesting and seed collecting on protected areas and forests.
- c) Condition, monitor and audit, to the highest environmental standards, the direct and indirect impacts of any resource use and infrastructure development on protected areas and forests.

5.2 Manage impacts of infrastructure and utilities on protected areas and forests.

- a) Ensure that national parks (all classes) remain free from resource use and development consistent with the provisions in the *Nature Conservation Act 1992*.
- b) Develop and implement a contemporary policy framework to define the exceptional circumstances under which utilities (such as telecommunication facilities, powerlines and water pipelines) can be permitted on protected areas and forests; and determine the impact assessment criteria that must be followed to minimise and mitigate likely negative impacts.
- c) Develop strategies and codes of practice in conjunction with managers of existing utilities and community infrastructure on, or adjacent to, protected areas (for example, power lines, roads and access tracks, water extraction, telecommunications facilities) to ensure the operation, management and use of this existing infrastructure delivers a net gain in environmental, economic and social benefits to the Queensland community.

5.3 Avoid, minimise, mitigate and offset the impacts of resource use and infrastructure development on protected areas and forests and in relation to wildlife.

- a) Develop contemporary policy framework for protected areas that delivers a net improvement for conservation where impacts to natural and cultural values are unavoidable and enduring. Where impact is unavoidable, compensation is provided for losses of values through measures that deliver a net gain to the state in conservation and other values.
- b) Establish incentives for industry to protect and enhance natural and cultural values through direct and indirect offset mechanisms.

5.4 Protect and strengthen the resilience of marine ecosystems and species through marine park management activities.

- a) Work with commercial and recreational fishers and the Department of Employment, Economic Development and Innovation to develop strategies for sustainable management of vulnerable species and ecosystems in marine parks and other waters.
- b) Demonstrate the benefits of managing for resilience through multiple-use marine parks to all users.

5.5 Efficiently and effectively manage the transition of state forests to protected areas.

- a) Effectively manage the transitional arrangements for the phase out of grazing, beekeeping, foliage harvesting and seed collecting on state forests converted to national park.
- b) Consider the needs of different resource users during the transition of state forests to protected areas.