

Annan River (Yuku Baja-Muliku) National Park Management Statement 2013

Park size:	8,830ha
Bioregion:	Cape York Peninsula
QPWS region:	Northern
Local government estate/area:	Cook Shire Council
State electorate:	Cook



Eucalypt woodland. Photo: NPRSR

Legislative framework

✓	<i>Aboriginal Cultural Heritage Act 2003</i>
✓	<i>Environment Protection Biodiversity Conservation Act 1999 (Cwlth)</i>
✓	<i>Nature Conservation Act 1992</i>

Plans and agreements

✓	Action Plan for Australian Birds 2010
✓	Action Plan for Australian Marsupials and Monotremes 1996
✓	Bonn Convention
✓	Burra Charter 1999
✓	China–Australia Migratory Bird Agreement
✓	Indigenous Land Use Agreement between Adelaide Baird, Irene Bowyer, Sonia Doughboy, Steven Doughboy, Larissa Hale and Joyce Henderson and State of Queensland
✓	Japan–Australia Migratory Bird Agreement
✓	Republic of Korea–Australia Migratory Bird Agreement

Vision

Annan River (Yuku Baja-Muliku) National Park is jointly managed in perpetuity by the Queensland Parks and Wildlife Service (QPWS) and the Yuku Baja-Muliku Land Trust.

The aspirations and cultural responsibilities of the Traditional Owners of the area are recognised and reflected in park management.

The park is managed to protect its wetlands systems, riparian habitats, woodlands and the semi-evergreen vine thickets of the Dowling Range.

Species of cultural significance such as red-tailed Burdekin plum *Pleiogynium timorense* and species of ecological significance including the Bennett's tree kangaroo *Dendrolagus bennettianus* are protected within the park.

Access to places of cultural significance within Annan River (Yuku Baja-Muliku) National Park is guided by the Yuku Baja-Muliku Land Trust.

Conservation purpose

Annan River (Yuku Baja-Muliku) National Park was gazetted on 8 September 2006, to conserve the diversity of lowland vegetation types including the marine wetlands system—the Annan River wetlands—eucalypt woodlands and the semi-evergreen vine thickets of the Dowling Range.

The park also conserves many places and species of cultural significance to the Traditional Owners of the area. The Yuku Baja-Muliku Land Trust and QPWS aim to cooperatively manage the national park so the lands and culture stay healthy for the benefit of all people.

Protecting and presenting the park's values

Landscape

Annan River (Yuku Baja-Muliku) National Park conserves an array of wetlands including tidal flats and beaches, coastal dunes and alluvial areas, and a diversity of forest types on sandy plains, metamorphic hills, granitic hills. The landscape is regularly disturbed by floods, fire and cyclones which create a succession of plants and animals, and a dynamic and resilient ecosystem.

Views of the park's white, sandy beaches can be obtained from Archer Point and Walker Bay. The Land Trust has stressed the importance of maintaining the quality of the coastal views and the sea-forest interface.

Much of the Esk River catchment lies within protected area tenure. The river appears to be in a healthy condition with limited siltation and only infrequent pockets of erosion.

Annan River catchment is in a less natural state. Pest plants, such as hymenachne *Hymenachne amplexicaulis* and sicklepod *Senna obtusifolia*, occur along the river's edge bordering the park. A sand quarry borders the north-western corner of the park. More sediment is evident in the river downstream of the quarry.

A couple of tracks used by adjoining landholders to gain access to their properties and the beach are eroding primarily because they are not regularly maintained or appropriately drained. Erosion tends to be most evident in areas where the tracks cross watercourses. This is of particular concern to the Traditional Owners in areas where erosion is threatening to affect cultural sites. Some areas of significant erosion need to be revegetated to prevent access tracks becoming impassable.

The park is bordered by cattle grazing properties, Aboriginal freehold land, the Annan River (Yuku Baja-Muliku) Resources Reserve, the Annan River Nature Refuge and various road reserves, including the Mulligan Highway.

Boundary fences are not well maintained and cattle are straying onto the park and impacting wetlands.

The adjacent sand quarry is located within the resources reserve. Erosion on the access road to the quarry is progressively worsening, especially at creek crossings and on slopes. In some places, erosion is two metres deep and starting to eat into the road. Pest plants occur in various places along this access road. The permit holders for the quarry undertake road maintenance to dry season standards. QPWS staff are unaware if a formal agreement is in place with respect to maintenance of this access road.

The Mulligan Highway bisects the northern block of Annan River (Yuku Baja-Muliku) National Park. Drainage off the road is causing erosion in some areas. Pest plants occur within the road reserve and people accessing the park for illegal purposes, such as pig hunting, aide their distribution into and throughout the park.

Prior to gazettal, small areas of the park were cleared for agricultural and grazing purposes and for camping. Areas previously used for camping areas are compacted and contain pest plants.

Regional ecosystems

Fifty-three regional ecosystems are mapped within Annan River (Yuku Baja-Muliku) National Park. Many of these are unique variants on the more widespread regional ecosystem types. Five communities are listed as endangered and 23 as of concern under their biodiversity status (Table 1). The remaining 25 are listed as not of concern at present.

The complexity of vegetation communities reflect the underlying geology and the topography that exist. In general, vegetation communities are dominated by marine wetlands systems such as mudflats, saltwater couch, claypans, beaches and mangroves; the Annan River wetlands which include melaleucas, riparian systems, ephemeral and permanent swamps, rivers and streams; sclerophyll woodlands and semi-evergreen vine thickets of the Dowling Range; riparian rainforests of the Annan River and notophyll vine forests on Mount Ellen.

General threats to the regional ecosystems include inappropriate fire regimes, pest plants and pest animals and activities undertaken illegally on the park, such as 'hooning' on mudflats.

Mudflats and marine grass plains are experiencing localised erosion in areas where they are used for 'circle work'. A high potential exists for the development of acid sulphate soils in areas where the soil crust is broken.

A diversity of mangroves occurs in the park. These communities appear to be reasonably intact and in a healthy condition.

The access road to the quarry passes through an area of riparian rainforest near Pooles Lagoon. Quarrying has not occurred in that particular area for many years. The land trust has submitted an application to close the access road to the quarry site on the basis of the cultural significance of the area. QPWS staff and the land trust actively manage pest plants along this access road. The impacts of pig activity are evident in the rainforest.

The patches of semi-deciduous vine thicket on Dowling Hill and rainforest on Mount Ellen have only been inspected aurally by QPWS staff. While the structure of these communities remains intact, they show potential edge effects from fire. Pest plants on the foot-slopes are slowing plant regeneration and are most likely the result of past grazing in the area. The South Cape York Catchment Group is currently undertaking revegetation work to create a wildlife corridor from the Helenvale area to Dowling Range.

Melaleuca woodlands, sclerophyll woodlands with a grassy understory and poplar gum woodlands appear to be in a relatively healthy condition.

Wetlands including springs, ephemeral wetlands and permanent pools occur largely occur in the north-eastern section of park. Little is known about the vegetation in these areas. Pooles Lagoon is recovering from pig, horse and cattle damage following construction of an exclusion fence in May 2010.

Native plants and animals

Annan River (Yuku Baja-Muliku) National Park is currently known to protect eight species of state or national conservation significance (Table 2). Four birds recorded from the park are listed in international agreements (Table 3), and few species have specific management actions identified through the following national action plans:

- Action Plan for Australian Birds 2010 – golden-backed honey-eater *Melithreptus gularis laetior* and square-tailed kite *Lophoictinia isura*; and
- Action Plan for Australian Marsupials and Monotremes 1996 – Bennett's tree kangaroo *Dendrolagus bennettianus*.

Cooktown orchid *Dendrobium biggibum* occurs on Annan River (Yuku Baja-Muliku) National Park and the nearby Black Mountain National Park. Brown antelope orchid *Cepobaculum johannis* has been recorded from the north shore of Endeavour River National Park. While no records for brown antelope orchid have been confirmed from the park, it is highly probable that the species occurs on the park.

Burdekin plum *Pleiogynium timorense*, a culturally significant species, occurs as individually scattered trees in various locations of the park. The land trust is keen to collect seeds from this species and potentially use them for revegetation works and educational activities relating to bush foods.

The Bennett's tree kangaroo *Dendrolagus bennettianus* has been observed in a patch of rainforest on the Esk River and from adjacent properties. These records mark the northern limit of distribution for the species, and indicate an expanding population.

Populations of the northern quoll *Dasyurus hallucatus* are known to exist on the park. An increasing number of records for this species have been made in the wider region.

Aboriginal culture

The Yuku Baja-Muliku Aboriginal people are the Traditional Owners of the park and have a long history of traditional use and occupation. They maintain their strong cultural ties to their traditional land and sea country.

The Archer Point Indigenous Land Use Agreement provides the basis for a multi-tenure approach to cooperative land management with the Traditional Owners of the area, including the establishment of Annan River (Yuku Baja-Muliku) National Park.

A native title application (QC2006/011 – Archer Point People) exists over the park.

Subject to successful negotiation with the Traditional Owners, the park is identified for future transfer to Aboriginal ownership under the *Aboriginal Land Act 1991*. A joint management regime will be established under the framework provided by the *Nature Conservation Act 1992* for the Cape York Peninsula Region.

Sites of material Indigenous culture, such as scar trees, and places of cultural significance, including Pooles Lagoon, exist on the park. The location and significance of these sites and places is being progressively recorded and documented by the Yuku Baja-Muliku Land Trust.

Shared-history culture

A few relics of the park's pastoral heritage remain on the park, for example, the stumps of an old homestead and peanut farm. Several very old mango trees still exist in the Pooles Lagoon area.

Old fences, roads and holding yards also remain on the national park.

Tourism and visitor opportunities

No formal camping or day-use areas are currently provided within Annan River (Yuku Baja-Muliku) National Park.

Vehicle-based access within the national park is limited as most existing tracks into the national park traverse private property. Most visitors explore the park by boat, using the boat ramp located at Annan River Bridge on the Mulligan Highway. Boating allows access to areas that cannot otherwise be reached. On average, four to five boats are launched from the boat ramp each day during the dry season.

Key attractions within the park include the diversity of its vegetation communities, the seclusion afforded by boat access along the park's river systems and the birds and other wildlife that congregate around watercourses and lagoons.

Located only 10 kilometres south of Cooktown, the majority of visitors to the park are Cooktown residents and nearby Aboriginal communities who primarily use the park for both saltwater and freshwater crabbing and fishing on calm days and weekends. Commercial fishing also occurs on the Annan and Esk rivers external to the national park.

General visitor management issues for Annan River (Yuku Baja-Muliku) National Park are vandalism of cultural sites, illegal access and suspected pig hunting, dispersal of pest plants, and responding to unplanned fires emanating from the highway.

The land trust has drafted a visitor management strategy for their lands, including the national park.

Education and science

Local school groups occasionally use the park for educational excursions.

Knowledge gained from research and monitoring programs is an integral part of adaptive park management. The collation of existing information and conduct of ongoing monitoring and survey work improves staff knowledge and guides future park management.

Priority projects for the park include monitoring:

- the recovery of the area around Pooles Lagoon to determine the effectiveness of the exclusion fence
- the closed vine forest to determine the impacts of fire and pest plants and pest animals on rainforest recruitment; and
- monitoring of pig damage on mudflats to determine the feasibility of feral animal control programs and the associated impacts on wetlands within the park.

Partnerships

QPWS staff work cooperatively with the Yuku Baja-Muliku Land Trust and neighbouring property holders to ensure protected area values are appropriately managed.

Where possible, fire and pest management activities are coordinated with adjoining landholders.

Other key issues and responses

Pest management

Pest plants

Pest plants of most significance within Annan River (Yuku Baja-Muliku) National Park include sicklepod *Senna obtusifolia* (Class 2), hymenachne *Hymenachne amplexicaulis* (Class 2, WONS), gamba grass *Andropogon gayanus* and grader grass *Themeda quadrivalvis*.

Sicklepod largely occurs along both sides of the Annan River, along the Esk River and in some secondary creeks. It forms monocultures in some areas and infestations are progressively expanding. It is assumed that feral pigs and cattle are spreading the pest plants when accessing and exiting water.

Hymenachne was found at Pooles Lagoon in November 2010, and along the access road to the lagoon. It was manually removed at the time, and no other infestations are known.

Several gamba grass infestations have been identified along the road. Although no plants have been removed since they were treated, the plants were seeding at the time, so ongoing monitoring is required.

Very little grader grass occurred within the park in 2006. Dense infestations now exist along transport corridors and other disturbed areas, such as creek banks. This species is increasing the intensity of fires and staff have had to change the burning program to accommodate grader grass. Consistently hotter fires will decrease biodiversity especially in the mid-stratum, and probably ground layer. In the longer term, this may prevent recruitment of canopy species.

Pest plants are largely confined to the Green Hills area, access tracks such as Archer Point Road and Pooles Lagoon Road, and riparian areas. QPWS staff slash the Pooles Lagoon Road and the waterfall track, and suspect that this may increase the spread of pest plants both directly and indirectly by encouraging use of these tracks by cattle and illegal park users.

Lantana *Lantana camara* is widespread within the park. The thickest infestations occur along the rivers and creeks, where it is impenetrable in places. Aerial inspection indicates that it may occur along the foothills of Dowling Range. A biological control for the species, a leaf borer, was released at the airport and at Helensvale. Land trust staff have observed the borer in areas adjacent to the national park and assume it occurs on most plants in the area.

Pest animals

Feral pig *Sus scrofa* impacts are concentrated along the Annan River, waterholes and around the permanent springs where they are turning over large areas of soil, introduced pest plants and rooting-up water plants. Very little active management of feral pigs is undertaken on the park, other than trapping. Evidence suggests that pig hunters illegally enter the park to hunt pigs. The land trust is planning to undertake a feral pig management training course to explore the most effective methods of control pigs in different ecosystems.

Cattle *Bos* spp. disturbance is most evident around waterholes and in riparian environments, where they compact and erode creek banks, and increase the turbidity of water. Higher numbers occur to the east of Mulligan Highway. The pig exclusion fence installed around Pooles Lagoon is also excluding cattle from the area surrounding the lagoon. Wetland studies are being undertaken on a yearly basis to record to monitor the rate of recovery.

Boundary fences are not maintained in a stock-proof condition, and there are potentially cattle on the park from four or five neighbouring properties.

A small number of horses *Equus caballus* have been observed on the Annan River behind Mount Ellen. They trample vegetation and spread pest plants. Land trust and QPWS staff are starting to see evidence of territory delineation, such as mounds of manure.

Feral cats *Felis catus* and wild dogs *Canis familiaris* are occasionally seen in the area. The significance of their impacts is unknown.

Fire management

Fire regimes play a critical role in maintaining the floristic and structural composition of woodlands and faunal communities within the park.

Few firebreaks exist on the national park and seasonal conditions only provide a small window of opportunity to burn effectively in favourable conditions. This limits the ability of QPWS staff to conduct planned burns safely or to effectively maintain the floristic diversity and structure of the park's vegetation communities.

Due to the lack of firebreaks within the park, QPWS staff primarily conduct burns to protect infrastructure on adjoining properties. It has been suggested that these burns may be too cool and that this is resulting in the thickening of the shrub layer, particularly to the east of the highway. Grader grass will increase the intensity of fires where it is encroaching into the park.

Late season, hot fires have impacted areas of vine thickets and some wetland areas within the park. In 2009 there was extensive wildfire which impacted the majority of the national park. No formal research has been undertaken to determine the impacts of fire on the park's natural ecosystems. However, in some areas west of the Mulligan Highway, the hot fires appear to have had a beneficial impact.

Park access roads double as firebreaks.

Other management issues

Transport and utility corridor

The Mulligan Highway and a power line easement pass through the northern block of Annan River (Yuku Baja-Muliku) National Park. This corridor is the main vector for the introduction and dispersal of pest plants.

References

Reside A.E van der Wal J and Kutt AS 2012, Projected changes in distributions of Australian tropical savanna birds under climate change using three dispersal scenarios. In: Ecology and Evolution 2012 2 (4): 1–14.

Management directions

Desired outcomes	Actions and guidelines
<p>Landscape</p> <p>The health, diversity and integrity of regional ecosystems are maintained across the landscape.</p> <p>Park operations have minimal impact on the quality of the park's ground and surface water or on catchment values.</p>	<p>A1. Maintain habitat heterogeneity and ecosystem health through appropriate burning regimes and pest programs.</p> <p>A2. Liaise with relevant catchment groups with respect to the control of pest plants external to the park, especially with respect to species that have the potential to significantly impact on the park's wetland values.</p> <p>A3. Protect rainforests, particularly in the Dowling Range area, from fire and pests in cooperation with neighbouring landholders.</p> <p>A4. Reduce impacts of pest plants and pest animals on the Pooles Lagoon area and compile management guidelines for the site.</p> <p>A5. Map and record ephemeral wetlands within the park.</p> <p>A6. Establish baseline data to identify any critical native plants and animals within the closed vine forest on Mount Ellen and the Dowling Hill semi-deciduous vine thicket.</p> <p>A7. Determine if a formal agreement exists with respect to maintenance and use of the quarry access road within the national park.</p> <p>A8. Install water diversion drains where significant soil erosion is identified or anticipated.</p>
<p>Native plants and animals</p> <p>Species of conservation significance and ecosystems with a restricted distribution are protected from threats.</p>	<p>A9. Focus management on species and ecosystems that have a limited distribution and are currently threatened by human impacts, fire or pests, such as finch species.</p> <p>A10. Determine distribution and habitat of Burdekin plum on the park.</p>
<p>Aboriginal culture</p> <p>The Yuku Baja-Muliku Land Trust and QPWS have a strong and positive collaborative working relationship, built on trust and respect for each others' knowledge and responsibilities.</p> <p>Places and species of cultural significance are appropriately protected and presented.</p>	<p>A11. Maintain communication with and work collaboratively with the Yuku Baja-Muliku people in accordance with the Indigenous Services Agreement for the national park.</p> <p>A12. Work collaboratively with the land trust to develop a comprehensive record of cultural heritage sites and places on Annan River (Yuku Baja-Muliku) National Park.</p> <p>A13. In consultation with relevant Traditional Owner groups, determine the appropriateness of allowing access to places of material culture and areas of spiritual significance.</p>
<p>Shared-history culture</p> <p>Places of heritage significance are appropriately protected and presented or allowed to decay where appropriate.</p>	<p>A14. Identify and record shared-history cultural heritage places within the relevant State databases.</p> <p>A15. Allow sites and places of shared-heritage significance with no feasible management use or other significance to age naturally over time.</p>

Desired outcomes	Actions and guidelines
<p>Tourism and visitor opportunities</p> <p>Annan River (Yuku Baja-Muliku) National Park offers a range of sustainable recreational opportunities which are consistent with the character of the park and protect and showcase its natural and cultural values.</p>	<p>A16. Work with the Yuku Baja-Muliku Land Trust to develop a visitor management strategy for Annan River (Yuku Baja-Muliku) National Park, giving consideration to the recommendations and vision of the Yuku Baja-Muliku Land Trust, as outlined in the visitor management strategy they have developed for their lands.</p> <p>A17. Increase patrols and on ground management presence, especially during peak visitor use periods, to minimise inappropriate visitor behaviour and illegal access to culturally sensitive sites.</p> <p>A18. Emphasise the hazards and risks presented by the natural environment, and the need for visitors to be self-sufficient and take appropriate precautions before and during park visits in written materials relating to the park.</p>
<p>Education and science</p> <p>Research and monitoring programs increase understanding of park values and provide information to improve management decisions.</p>	<p>A19. Identify information gaps and natural and cultural research opportunities for the park.</p> <p>A20. Support research activities where demonstrated benefits to the management of the national park exist.</p>
<p>Partnerships</p> <p>Relationships with neighbours are maintained and collaborative management occurs across the landscape.</p>	<p>A21. Maintain positive community relationships with Yuku Baja-Muliku Land Trust, Cook Shire Council, local schools, South Cape York Catchments group, Cape York Weeds and Feral Animal group and neighbouring landowners to manage pest plants and erosion along roads adjacent to the park, especially where they threaten the park's values.</p> <p>A22. Coordinate pest and fire management activities with those being undertaken by park neighbours, catchment groups, other government departments and local authorities, where possible.</p>
<p>Pest management</p> <p>The integrity of native plant and animal communities is maintained by coordinating pest management across the landscape.</p>	<p>A23. Focus vertebrate pest control activities on essential habitat areas such as wetlands, lagoons and riparian corridors, with particular emphasis on feral pigs and feral cattle.</p> <p>A24. Progressively complete boundary fencing to reduce the impacts of stray stock wandering on the park.</p> <p>A25. Maintain the Pooles Lagoon exclusion fence in a pig-proof condition and consider constructing similar exclusion fences around other sites of ecological or cultural significance.</p>
<p>Fire management</p> <p>The integrity of native plant and animal communities is maintained through strategic, sustained fire management.</p>	<p>A26. Develop and implement a Level 2 Fire Strategy for the Annan River protected area aggregation.</p> <p>A27. Minimise the impacts from late season, large-scale and high intensity fires by implementing suitable fire regimes with relation to the frequency, intensity and timing of burns for natural communities and populations within the park once effective firebreaks have been installed.</p> <p>A28. Use low intensity perimeter burns to protect margins of vine thickets, rainforests and other fire sensitive communities.</p>
<p>Extractive activities</p> <p>Sand extraction activities are formalised and managed to protect the natural and cultural resources.</p>	<p>A29. Liaise with Cook Shire Council to ensure cultural and environmental compliance of on-ground extractive activities.</p>

Conservation values management

Table 1: Endangered and of concern regional ecosystems

Regional ecosystem number	Description	Biodiversity status
7.11.26a	Rock pavements with <i>Allocasuarina littoralis</i> and <i>Syncarpia glomulifera</i> open to closed shrublands or <i>Bombax ceiba</i> and <i>Cochlospermum gillivraei</i> open woodland, or <i>Acacia</i> spp. shrubland, on metamorphics	Endangered
7.12.38b	Deciduous microphyll vine forest and/or blue-green algae-covered granite and rhyolite boulderfields	Endangered
7.12.5d	<i>Eucalyptus pellita</i> +/- <i>Corymbia intermedia</i> open forest, or <i>Acacia mangium</i> and <i>Lophostemon suaveolens</i> open forest (or vine forest with these species as emergents), on granites and rhyolites	Endangered
7.2.7a	<i>Casuarina equisetifolia</i> +/- <i>Corymbia tessellaris</i> open forest +/- groved vine forest shrublands of the beach strand and foredune	Endangered
7.3.16c	<i>Eucalyptus platyphylla</i> woodland to open forest on alluvial plains	Endangered
3.1.2a	<i>Avicennia marina</i> +/- <i>Ceriops tagal</i> low open forest landward side of mangroves	Of concern
3.11.19a	<i>Themeda triandra</i> tall grassland or <i>Asteromyrtus lysicephala</i> , <i>Neofabricia myrtifolia</i> , <i>Grevillea pteridifolia</i> dwarf open heathlands on headlands and islands	Of concern
3.11.6b	<i>Eucalyptus platyphylla</i> , <i>E. leptophleba</i> open forest to woodland on hill slopes	Of concern
3.2.10a	<i>Eucalyptus tetradonta</i> , <i>Corymbia clarksoniana</i> +/- <i>E. brassiana</i> woodland on stabilised dunes	Of concern
3.2.1b	Evergreen notophyll vine forest on coastal dunes and beach ridges	Of concern
3.2.24	Closed herbland of mixed graminoids and forbs. Occurs on exposed foredunes	Of concern
3.5.21	<i>Corymbia clarksoniana</i> +/- <i>C. tessellaris</i> open forest on coastal lowlands	Of concern
3.5.23	<i>Corymbia nesophila</i> +/- <i>Eucalyptus crebra</i> +/- <i>E. brassiana</i> woodland on plains	Of concern
7.11.10a	<i>Acacia celsa</i> open to closed forest on metamorphics	Of concern
7.11.3	Semi-deciduous mesophyll vine forest on metamorphics, of the moist and dry foothills and lowlands	Of concern
7.11.34	Complex of shrublands, low heathy or shrubby woodlands and low forests, with <i>Corymbia tessellaris</i> and <i>C. intermedia</i> or <i>Melaleuca viridiflora</i> , <i>Allocasuarina</i> spp. and <i>Acacia</i> spp. on metamorphic coastal headlands and islands	Of concern
7.11.3a	Semi-deciduous mesophyll vine forest on metamorphics, of the moist and dry foothills and lowlands	Of concern
7.11.44	<i>Eucalyptus tereticornis</i> open forest to woodland of coastal metamorphic foothills	Of concern

Regional ecosystem number	Description	Biodiversity status
7.11.49	<i>Eucalyptus leptophleba</i> , <i>Corymbia clarksoniana</i> and <i>E. platyphylla</i> open forest to woodland, on moist metamorphic foothills	Of concern
7.11.50b	<i>Eucalyptus platyphylla</i> +/- <i>E. drepanophylla</i> +/- <i>Corymbia</i> spp. open woodland to open forest on metamorphics	Of concern
7.11.51	<i>Corymbia clarksoniana</i> and/or <i>Eucalyptus drepanophylla</i> open forest to woodland on metamorphics	Of concern
7.11.8a	<i>Acacia polystachya</i> woodland to closed forest, or <i>Acacia mangium</i> and <i>Acacia celsa</i> open to closed forest, on metamorphics	Of concern
7.12.12b	<i>Acacia mangium</i> and <i>A. celsa</i> open to closed forest, or <i>A. polystachya</i> woodland to closed forest on granites and rhyolites	Of concern
7.12.37h	Rock pavements and see areas of wet lowlands, uplands and highlands of the eastern escarpment and central range (excluding high granite areas of Hinchinbrook Island and Bishops Peak) on granite and rhyolite, with <i>Allocasuarina</i> spp. shrublands and/or sedgelands	Of concern
7.12.55	<i>Eucalyptus leptophleba</i> woodland to open forest of dry foothills and uplands on granite and rhyolite	Of concern
7.12.61a	<i>Eucalyptus tereticornis</i> +/- <i>E. granitica</i> woodland to open forest of moist and dry foothills and uplands on granite and rhyolite	Of concern
7.12.65k	Rock pavements or areas of skeletal soil, on granite and rhyolite, mostly of dry western or southern areas, often with shrublands to closed forests of <i>Acacia</i> spp. and/or <i>Lophostemon suaveolens</i> and/or <i>Allocasuarina littoralis</i> and/or <i>Eucalyptus lockyeri</i> subsp. <i>exuta</i>	Of concern
7.12.6a	Semi-deciduous mesophyll vine forest on granites and rhyolites, of the moist and dry lowlands and foothills	Of concern

Table 2: Species of state or national conservation significance

Scientific name	Common name	Nature Conservation Act 1992 status	Environment Protection and Biodiversity Conservation Act 1999 status	Back on Track status
Plants				
<i>Myrmecodia beccarii</i>	ant plant	Vulnerable	Vulnerable	High
<i>Centotheca philippinensis</i>	creek grass	Near threatened	Vulnerable	Low
<i>Gossia lucida</i>		Near threatened		Low
Animals				
<i>Crocodylus porosus</i>	estuarine crocodile	Vulnerable		Low
<i>Melithreptus gularis laetior</i>	golden-backed honey-eater	Near threatened		Low
<i>Lophoictinia isura</i>	square-tailed kite	Near threatened		Low
<i>Dendrolagus bennettianus</i>	Bennett's tree kangaroo	Near threatened		Low
<i>Dasyurus hallucatus</i>	northern quoll	Least concern	Endangered	Medium

Table 3: Species listed in international agreements

Scientific name	Common name	Bonn	CAMBA	JAMBA	ROKAMBA
<i>Tringa stagnatilis</i>	marsh sandpiper	✓	✓	✓	✓
<i>Ardea modesta</i>	eastern great egret	-	✓	✓	-
<i>Haliaeetus leucogaster</i>	white-bellied sea-eagle	-	✓	-	-
<i>Pandion cristatus</i>	eastern osprey	✓	-	-	-

Bonn – Bonn Convention

CAMBA – China–Australia Migratory Bird Agreement

JAMBA – Japan–Australia Migratory Bird Agreement

ROKAMBA – Republic of Korea–Australia Migratory Bird Agreement

Table 4: Species of local or regional conservation significance

Scientific name	Common name	Conservation Significance / Notes
Animals		
<i>Dendrolagus bennettianus</i>	Bennett's tree kangaroo	northern limit of distributional range, icon species