

Humboldt Area Management Statement 2013

Management area and size:	Humboldt National Park 7,660ha Humboldt State Forest 5,390ha
Bioregion:	Brigalow Belt Bioregion
NPRSR region:	South West
Local government estate/area:	Central Highlands Regional Council
State electorate:	Gregory



Bearded dragon *Pogona barbata* Photo: NPRSR.

Legislative framework

✓	<i>Aboriginal Cultural Heritage Act 2003</i>
✓	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)</i>
✓	<i>Native Title Act 1993 (Cwlth)</i>
✓	<i>Nature Conservation Act 1992</i>
✓	<i>Queensland Heritage Act 1992</i>

Plans and agreements

✓	Bonn Convention
✓	China–Australia Migratory Bird Agreement
✓	Japan–Australia Migratory Bird Agreement
✓	Republic of Korea–Australia Migratory Bird Agreement

Thematic strategies

✓	Level 2 Fire Management Strategy
✓	Level 2 Pest Management Strategy

Vision

The natural ecosystems and flora and fauna populations within Humboldt management area are conserved.

The management area is managed with an increased understanding of the diversity of natural environments, ensuring significant species and communities are protected and impacts are minimised.

Establish partnerships with Traditional Owners, local community, neighbours, lessees, research institutes, conservation groups, Queensland Fire and Rescue Service and local councils that contribute to the area's ongoing management.

Conservation purpose

The objectives of management for the Humboldt management area are to:

- protect regional ecosystems and species of conservation significance and their habitats
- conserve and protect the management area's natural, cultural and scenic values
- minimise the impact of pests and inappropriate fire regimes on the natural environment
- incorporate the interests and rights of the Traditional Owners and their affiliations to the area by cooperatively protecting and managing cultural heritage of significance
- provide and maintain visitor opportunities that are in keeping with the area's natural values
- provide direction and actions to protect the natural, cultural and social values of the area through appropriate research and monitoring
- foster working relationships with interested parties to build stronger partnerships to assist management.

Protecting and presenting the area's values

Landscape

Humboldt National Park and State forest are located about 35km north-east of the township of Rolleston in the Central Highlands Regional Council. The national park and State forest were gazetted in 2008. The park is relatively flat and extends on the eastern side into the Shotover Range. Two main waterways run through the park—Scrubbers Gully and Washpool Gully. Many tributaries from these gullies provide a network of seasonal water. The park is bounded by cleared grazing country on the northern and western side.

Native plants and animals

The park was gazetted to protect the remnant brigalow *Acacia harpophylla* communities. It is the largest in the subregion and although the acquisition did not acquire the whole brigalow area, the landscape is connected to the Blackdown Tableland National Park.

There are 15 regional ecosystems in the management area, with one listed as of concern and four listed as endangered (Table 1). Humboldt National Park is dominated with *Eucalyptus crebra*. The national park also supports brigalow woodlands. Humboldt State Forest is dominated by poplar box *Eucalyptus populnea*, Dawson gum *Eucalyptus cambageana* with brigalow woodlands and *Micromyrtus capricornia* shrublands.

The Humboldt management area provides habitat for one known plant species of conservation significance and potential habitat for three significant plant species, listed under state legislation (Table 2). The near threatened *Sannantha brachypoda* is a flowering shrub from the Myrtaceae family and is endemic to Queensland.

Two animal species of conservation significance are recorded in the management area (Table 2), and a further 14 are identified as having habitat occurring or potentially occurring in the management area. The waterways and woodlands within Humboldt provide habitat for a variety of birds, reptiles and mammals. The near threatened little pied bat *Chalinolobus picatus* occur in the Humboldt area and require hollow-bearing trees for roosting. Two freshwater turtles, eastern snake-necked turtle *Chelodina longicollis* and the Murray turtle *Emydura macquarii macquarii* have been found within the waterways throughout the area.

There are nine bird species listed in international agreements that occur or are likely to occur in the management area (Table 3).

Aboriginal culture

Significant cultural and sacred sites exist within Humboldt National Park and State forest; no current native title claims exist over the Humboldt management area.

Limited information is available about sites of cultural significance and values in the management area. A cultural survey has not been undertaken in the management area; however, it is reasonable to expect that further cultural sites and artefacts occur.

It is important for the Queensland Parks and Wildlife Service (QPWS) to continue to work with the Traditional Owners to identify cultural connections and ensure appropriate measures are taken to protect known sites in the area. QPWS will work towards ensuring Traditional Owners are actively participating in the day-to-day management and that cultural heritage is protected by maintaining relationships with the Traditional Owners.

Shared-history culture

Prior to gazettal, Humboldt National Park and State forest were a sheep and cattle grazing property. Remnants of European settlement include fencing, dams, cattle yards, sheep dip, an outstation tin hut and three concrete hand-made weirs. These weirs were constructed by blocking deep gullies with concrete walls.

Tourism and visitor opportunities

The master plan for Queensland's parks system has categorised settings for how protected areas should be managed to support a spectrum of outdoor recreation in protected areas. These categories range from high profile estates that provide a range of facilities and are internationally renowned, to self-reliant, remote parks that are free from facilities and receive very little visitor use. Protected areas throughout Queensland offer a range of visitor opportunities to cater for different types of visitors. Some visitors may enjoy a safe and comfortable experience; others prefer wild places away from any sign of development. Central Queensland provides a variety of tourism and visitor experiences. The spectacular sandstone country offers some of Queensland's finest national parks, from Carnarvon National Park to the expansive Expedition and Blackdown Tableland national parks. These parks provide four-wheel driving, short to overnight hikes, remote camping and geological and cultural interpretative experiences.

Tourism in the Central Queensland area is a growing economy, driven by a resource and mining industry boom (Tourism Queensland 2009). The management area may see a gradual increase in the visitor use of the area, due to the regions population growth from the mining industry boom.

The Humboldt management area provides a remote, self-reliant, outdoor recreation opportunity such as remote bushwalking, bird watching and photography and will be managed to maintain these values. Humboldt management area can be accessed by a gazetted sealed road. Once on the QPWS estate visitors can explore the park and forest by foot.

Education and science

The Humboldt management area offers learning opportunities in geology and biology. The management area also provides opportunities for scientific research and monitoring. Any research conducted on QPWS estate must be conducted under the appropriate permit. Results from research and monitoring can benefit the area's management and inform staff and the community.

Further surveys would provide a direction on the protection of plant and animal species and the impact of threatening processes of inappropriate fire regimes, pest animal and plant species.

Partnerships

QPWS is directly responsible for planning, managing and regulating activities in the management area. Working with neighbours, Traditional Owners, lessees, organisations, councils, user groups and individuals with similar interests in managing the area is highly desirable to achieve the vision. Efficiencies in resource sharing, improved communications, decision making and enhanced on-ground outcomes is to be facilitated, where possible, through working partnerships.

A working relationship with the Traditional Owners is essential so that their views and aspirations for the land can be included in planning and management. Traditional Owners have a role to protect cultural heritage in the management area and a role to educate QPWS and visitors on cultural heritage management.

Other key issues and responses

Pest management

A pest management strategy exists for the Humboldt area. This strategy helps to prioritise pest plant and animal control actions and guide operational work plans and evaluate program effectiveness on QPWS managed estates. Further pest mapping and monitoring is required to gain an increased knowledge of pest impacts in the management area.

Buffel grass *Cenchrus ciliaris* is considered a major threat to the Humboldt area. Buffel is a perennial grass that colonises any disturbed soils and displaces native grass species. Buffel grass has the potential to impact on the brigalow vegetation and riparian communities by promoting more frequent and intense fires. The aim is to map and identify priority infestations and then determine the appropriate control. Grazing using cattle will be considered as one of the tools to reduce the high buffel fuel levels on Humboldt State Forest.

Olive hymenachae *Hymenachne amplexicaulis* is considered a minor threat to the Humboldt Area. It is a declared Class 2 under the Weeds of National Significance database. Olive hymenachae has the potential to cover waterholes and restrict access to water points. Plants occur along the dam edge on the national park and State forest boundary. The aim is to eradicate the plants within five years using chemical control.

Parthenium *Parthenium hysterophorus* is considered a minor threat to the management area. It is a declared Class 2 pest plant within the Weeds of National Significance database. Parthenium occurs on disturbed areas including roads and fire control lines. The aim is to control the infestations and prevent further spread by chemical and biological control.

Feral pigs *Sus scrofa* are considered a moderate threat to the Humboldt management area. Feral pigs are declared a Class 2 pest animal under the *Land Protection (Pest and Stock Route Management) Act 2002*. Feral pigs disturb areas along riparian zones, eat native species including frogs and promote weed infestation. The aim is to monitor damage and impacts and control where required.

Stray stock *Bos* spp. are considered a moderate threat to the Humboldt area. The eastern boundary of the park is unfenced due to the terrain and cattle have occasionally entered through this area. They create significant grazing pressure, particularly following fires, on selected native grass species and promote the spread and establishment of weeds including buffel and parthenium. The aim is to return stray stock to neighbours by mustering and trapping.

Fire management

QPWS has a statewide fire management system. QPWS is the primary agency for fire management on protected areas and State forests. Fire strategies provide the overall framework and direction for fire management and are the foundation from which planned burn programs are developed. There is a draft fire management strategy for Humboldt National Park.

The park is surrounded by cleared grazing country (buffel grass) and fire escaping the park has the potential to seriously impact on available pasture, particularly during the dry season. Incorrect fire regimes will favour buffel grass over native species. Fire escaping neighbouring properties and entering the estate has the potential to significantly impact on fire sensitive ecosystems and promote the spread of buffel grass.

The eastern boundary of the park borders Shotover Range and therefore fire approaching the park from the east will generally be a mild-fire burning down the steep slopes.

The main threat to the Humboldt area is inappropriate fire regimes and wildfires. The long-term fire management aims for the area are to maintain the current diversity ecosystems and native plant and animal species while allowing for natural change. The intention is to ensure the conservation of fire sensitive ecosystems and species, including brigalow and semi-evergreen vine thicket. The encroachment of buffel grass is a concern for several of the vegetation communities, especially the ecosystems requiring fire exclusion or long fire-free intervals. Buffel grass is likely to increase the intensity and frequency of fires. A coordinated approach to fire management with surrounding neighbours will be maintained to ensure fire is managed appropriately. Grazing at appropriate times within the State forest is considered an acceptable method of reducing fuel load and thus fire intensity in the conservation parks where buffel grass is established and abundant; in these circumstances the benefits to conservation outweigh the risks.

It is recommended that the location and density of buffel grass be mapped and that a monitoring program be established to identify whether fire, or other management regimes, exacerbate or mitigate the buffel grass problem.

Authorities

Exploration and mineral development approvals exist over the Humboldt management area.

Exploration permits and mineral development licences are accessed in accordance with the *Environmental Protection Act 1994* and *Mineral Resources Act 1989*. All mining and exploration permits and licences issued on QPWS estate are assessed by the Department of Natural Resources and Mines with advice from QPWS in relation to management of sensitive areas and protection of significant species, habitat and biodiversity values.

Grazing authorities have been previously issued on Humboldt State Forest; however no current authorities exist over the area. Stock from adjoining properties maybe found on the national park or on State forest. Stock found within the management area is due to poor boundary fencing or open gates. In cooperation with QPWS, adjoining landholders will ensure fences are erected and maintained to keep stock in neighbouring properties. QPWS will review the need for grazing on the State forest if it is determined that it will improve the environmental and timber benefits.

References

Tourism Queensland 2009, Central Queensland Tourism Opportunity Plan 2009–2019, Tourism Queensland.

Management directions

Desired outcomes	Actions and guidelines
<p>Natural values</p> <p>The landscape is protected, particularly areas of high scenic quality or traditional or cultural significance, while allowing natural processes to continue.</p> <p>The full range of naturally occurring biological diversity, ecological processes and landscape dynamics are maintained.</p>	<p>A1. Monitor the impacts from natural processes, pests, fire and recreation. Use the information to guide management decisions and amend current and future plans and strategies.</p> <p>A2. Develop a cooperative approach to pest management in consultation with park and forest neighbours, to extend good pest management practices across the landscape, including the movement of stock and feral animals in the landscape.</p> <p>A3. Review and implement the pest management strategy.</p> <p>A4. Decommission and revegetate any artificial water sources not required on the management area.</p> <p>A5. Conduct a comprehensive plant and animal survey in the management area.</p> <p>A6. Finalise and implement the fire management strategy.</p>
<p>Tourism and visitor opportunities</p> <p>Visitor use is low-key, nature-based and self-reliant, in the absence of permanent facilities.</p>	<p>A7. Manage activities to be consistent with the high scenic landscape values. Activities that compromise these values which cannot be mitigated or managed will not be permitted.</p>
<p>Partnerships</p> <p>The effectiveness of future management is strengthened through cooperative partnerships.</p>	<p>A8. Continue to build relationships with the local community, organisations, visitors and interest groups to improve knowledge of the management area, and to highlight its significance to the region.</p> <p>A9. Encourage and support Traditional Owners in conducting a comprehensive cultural heritage survey including recording sites, stories, language names and cultural heritage places.</p> <p>A10. Encourage and allow access for the implementation of research programs, particularly those that will benefit conservation management.</p>

Tables – Conservation values management

Table 1: Endangered and of concern regional ecosystems

Regional ecosystem number	Description	Biodiversity status
11.4.7	Open forest to woodland on <i>Eucalyptus populnea</i> with <i>Acacia harpophylla</i> and/or <i>Casuarina cristata</i> on Cainozoic clay plains.	Endangered
11.4.8	<i>Eucalyptus cambageana</i> woodland to open forest with <i>Acacia harpophylla</i> or <i>Acacia argyrodendron</i> on Cainozoic clay plains.	Endangered
11.4.9	<i>Acacia harpophylla</i> , <i>Lysiphyllum carronii</i> +/- <i>Casuarina cristata</i> open-forest to woodland.	Endangered
11.5.18	<i>Micromyrtus capricornia</i> shrubland on Cainozoic sand plains/remnant surfaces.	Of concern
11.9.1	<i>Acacia harpophylla</i> - <i>Eucalyptus cambageana</i> open forest to woodland on fine-grained sedimentary rocks.	Endangered

Table 2: Species of 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>*Sannantha brachypoda</i>	-	Near threatened	-	Low
Animals				
<i>Chalinolobus picatus</i>	little pied bat	Near threatened	-	Medium
<i>Phascolarctos cinereus</i>	koala	Least concern	Vulnerable	Low

Table 3: Species listed in international agreements

Scientific name	Common name	Bonn	CAMBA	JAMBA	ROKAMBA
<i>Apus pacificus</i>	fork-tailed swift	-	✓	✓	✓
<i>Ardea ibis</i>	cattle egret	-	✓	✓	-
<i>Ardea modesta</i>	eastern great egret	-	✓	✓	-
<i>Gallinago hardwickii</i>	Latham's snipe	✓	✓	✓	✓
<i>Haliaeetus leucogaster</i>	white-bellied sea-eagle	-	✓	-	-
<i>Hirundapus caudacutus</i>	white-throated needletail	-	✓	✓	✓
<i>Merops ornatus</i>	rainbow bee-eater	-	-	✓	-
<i>Myiagra cyanoleuca</i>	satin flycatcher	✓	-	-	-
<i>Rostratula australis</i>	Australian painted snipe	-	✓	-	-

Bonn – Bonn Convention

CAMBA – China–Australia Migratory Bird Agreement

JAMBA – Japan–Australia Migratory Bird Agreement

ROKAMBA – Republic of Korea–Australia Migratory Bird Agreement