1. Management directions and purposes

1.1 Management directions

Mt Coolum National Park is designated under the Nature Conservation Act 1992 as a national park and will be managed in accordance with s17.1 of the Act which sets out the following principles for management:

- 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;
- to present the area's cultural and natural resources and their values; and
- to ensure that the only use of the area is nature-based and ecologically sustainable.

The requirements of other legislation administered by the Department and other State and Commonwealth agencies will be met where necessary.

Management of the park will be directed towards the increasing number of park visitors and the need to balance a conservation ethic with public expectation for recreational opportunities.

Minimal development will ensure park users have the opportunity to experience and reflect on the park's natural state. Development on the park will aim to lessen degrading impacts caused by visitor use.

1.2 Management purposes

The major purposes of management will be to ensure that:

- natural vegetation and geological formations are protected;
- sensitive habitats and threatened species are monitored and their requirements are reflected in management programs;
- appropriate fire management regimes protect plant and animal communities from the adverse effects of wildfires;
- cultural heritage values are protected;
- limited nature-based recreation opportunities are provided;
- scientific and educational opportunities focus on the impacts of adjacent modified environments on a small conservation reserve; and
- Aboriginal groups and the local community are aware of park management issues and given opportunities to help achieve desired management outcomes.

2. Management basis

2.1 Bioregional context

Mt Coolum National Park is located on the Sunshine Coast 4km south of the Coolum township. It covers 69ha and lies within the South East Queensland biogeographic region. Mt Coolum was the subject of intense interest from many sectors of the local community before its gazettal in 1990. Formal recognition of its significant values followed detailed documentation and numerous calls from residents, environmentalists, scientists and politicians for its permanent protection.

Extensive development in the area and consequent changes in the character of the coastal plains highlight the gradual isolation of parks such as Mt Coolum from surrounding natural systems. Development in the surrounding area continues to be for residential, recreational and tourism purposes.

2.2 Mt Coolum National Park values

Geology and landform

Mt Coolum is one of several isolated volcanic domes found on the Sunshine Coast — the others are Dunethin Rock to the west and the Glass House Mountains to the south-west. Prominent examples of columns, joining along natural cliff lines are found at Mount Coolum and vertical placement of these structures is well displayed at the park's quarry site. Mt Coolum's most spectacular geological feature is the radial arrangement of leaning columnar structures, especially on the eastern cliff face.

Plants and animals

Mt Coolum National Park protects 50 percent of the vascular plant species recorded for the Sunshine Coast. Plant species on Mt Coolum represent more than 40 percent of fern families in existence.

Plant communities on Mt Coolum are valued for their distinctive structural formations and concentric distribution. Open forests, woodlands and small rainforest pockets ring the lower slopes while open shrubland and low woodland communities occur on the upper slopes. The mountain has a community of montane heath which encompasses 34 percent of the park's area. This coastal occurrence of montane heath is restricted to Mt Coolum and Mt Emu.

The mountain protects the endangered Allocasuarina tholosseriana, found only on Mt Coolum, and the rare Benta sherpeana. The sedge Lepidosperma quadangulatum is only found in Queensland on Mt Coolum and Mt Emu.

The park is a refuge for animals displaced by modification to the local environment. A broad range of habitats support a variety of mammals including wallabies, bandicoots, possums and echidnas. Mt Coolum also has a high reptile species diversity and it has value for migratory and local bird species.

The cliffs provide habitat for the peregrine falcon Falco peregrinus which is of conservation significance within Australia.

Cultural heritage

The Mt Coolum area has a record of use and association in Aboriginal and European heritage. Mt Coolum featured in the local stories of the Undabi people of the Kabi Kabi language group. These stories emphasise the spatial relationships between local topographical features, including places such as Maroochy River, Mudjimba Island, Mt Ninderry, Mt Coolum and Mt Coconowrin, further south.

Scenic

Mt Coolum, bounded on all sides by either precipitous cliffs or very steep slopes, is an imposing local landmark. Rising 268m above the flat coastal plains, the mountain is a landmark for visitors. The summit provides panoramic views of the area, extending from Moreton Island to the south-east, Buderim and the Glass House Mountains to the south, the Blackall Ranges to the west, the Cooloola sand mass to the north and the Pacific Ocean to the east.

Scientific and educational

Mt Coolum has generated extensive scientific interest over the last decade, highlighting its importance in the Sunshine Coast area. Mt Coolum's high species diversity is valuable for benchmark studies in fields such as vegetation mapping (especially of non-vascular plants) and geology.

Mt Coolum is a useful educational resource for schools and colleges. The park is compact and close to major transport links on the Sunshine Coast, and it offers examples of natural processes that have shaped the mountain. Its proximity to the coastal lowlands makes it accessible to the general public, increasing its interpretive value. Public awareness and appreciation of the park's natural values could be enhanced by emphasising the impacts of development on the surrounding wallum.

Recreation and tourism

Mt Coolum is one of the most visually significant landmarks on the Sunshine Coast. Its character provides scope for activities that are different from the usual type of nature-based recreation associated with coastal areas. These activities include nature observation, steep walks and climbs associated with areas closer to ranges, and scenic viewing from the summit.

Economic

Mt Coolum is promoted by local tourism operators as a feature and a recreational resource, and as a backdrop for surrounding residential area developments. Mt Coolum is also a popular destination for people who holiday on the Sunshine Coast.
<table>
<thead>
<tr>
<th>Current situation</th>
<th>Desired outcomes</th>
<th>Proposed policies, guidelines and actions</th>
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<tbody>
<tr>
<td><strong>Native plants</strong></td>
<td>Biological diversity and integrity of the ecosystems and plant communities are conserved.</td>
<td>Conduct a vegetation survey and develop a vegetation map for the park. Establish a scientifically based fire management program. Close informal tracks and prevent erosion of the east and west tracks. Establish monitoring projects for visitor impact, fire and threatened species. The monitoring project for threatened species will focus on Allocasuarina thelecosta and Lepidoperma quadragulatum. Identify the location and any threatening impacts to the <em>Bunya</em>* sharpiana populations.</td>
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<tr>
<td>Mt Coolum’s plant communities have been mapped and a comprehensive plant list was compiled in 1983.</td>
<td><strong>Native animals</strong></td>
<td>Develop and implement an animal survey program, including an amphibian search. Liasse with local natural history groups and Coolum residents who have an interest in documenting fauna. Protect the habitat and reproductive potential of the peregrine falcon by rehabilitating disturbed areas around the base of nesting sites.</td>
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<tr>
<td>Drought monitoring and specific monitoring of the <em>Lepidoperma</em> population began in 1992.</td>
<td>Animal species diversity and vulnerable and rare native animal populations are maintained.</td>
<td>Implement a weed control program which specifies site and species and considers the following species as priority targets: groundsel bush, molasses grass, Singapore daisy and red natal grass. Prepare a weed map and monitor the spread of weeds by comparing data obtained in 1983 and updating information as appropriate. Liasse with Department of Natural Resources (DoE) to develop a feral animal control plan for Mt Coolum. Educate park neighbours on the impacts of garden refuse on the integrity of the plant communities. Seek local community assistance to keep domestic animals off the park.</td>
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<tr>
<td>Conservation management will be required for the noteworthy plant species Allocasuarina thelecosta, <em>Bunya</em> sharpiana and <em>Lepidoperma</em> quadragulatum.</td>
<td>Declared plants and other pest weed species are controlled and their spread is eliminated. The impact of feral animals on the park is reduced.</td>
<td>Develop a fire action plan in consultation with Maroochy Shire Council and neighbours which would include specific objectives and appropriate fire regimes for each fire block, location of adequate firebreaks, risk assessment, resources required, and procedures for early detection of fires. Continue collecting fire-related data by monitoring permanent photo points established in accordance with current DoE procedures.</td>
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<tr>
<td>A survey of ground mammals was conducted in a variety of habitats on Mt Coolum in 1991. Animals found include the echidna <em>Tachyglossus aculeatus</em>, yellow-footed antechinus <em>Antechinus flavipes</em>, grassland melomys <em>Melomys buettneri</em> and northern brown bandicoot <em>Bandicota rufocanescens</em>.</td>
<td></td>
<td>Develop a quarry rehabilitation plan in consultation with Maroochy Shire Council which will consider fencing and signs, realignment of tracks away from the site, rehabilitation and revegetation, and access requirements for park management. Purposes. No pesticides will be used on the park unless it is to address a serious health risk.</td>
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<tr>
<td>Park surveys are needed to establish current fauna records, especially whether or not acid frogs are on the park.</td>
<td><strong>Introduced plants and animals</strong></td>
<td>Establish the indigenous and historic cultural values of the park by liaising with local Aboriginal groups and historical societies. Ensure the construction of any firebreaks and fences takes into account cultural heritage values. Continue to develop awareness and understanding of Mt Coolum’s cultural heritage values.</td>
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<td>The only declared plant on the park is groundsel bush but molasses grass, Singapore daisy and red natal grass are also threatening plant communities.</td>
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<td>Feral cats, foxes, black rats and cane toads are on the park. Feral animal management has been on an informal basis only.</td>
<td>Fire management</td>
<td>Fire management acknowledges plant and animal community and species requirements and protects the life and property of surrounding areas.</td>
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<tr>
<td>A fox control plan is being implemented in the North Coast District and will cover areas including Mt Coolum. Department of Environment (DoE) policy is to minimise the use of chemicals on the park.</td>
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<td>Develop a fire action plan in consultation with Maroochy Shire Council and neighbours which would include specific objectives and appropriate fire regimes for each fire block, location of adequate firebreaks, risk assessment, resources required, and procedures for early detection of fires.</td>
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<td>The main influence of change on communities is fire. The park experienced a major fire in 1994. Fire monitoring data is collected from the permanent drought monitoring sites set up in 1992.</td>
<td></td>
<td>Continue collecting fire-related data by monitoring permanent photo points established in accordance with current DoE procedures.</td>
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<tr>
<td><strong>Fire management</strong></td>
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<td><strong>Quarry site</strong></td>
<td>Key areas of the quarry site are rehabilitated and the natural regeneration process over the site is assisted.</td>
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<td>The primary management consideration of the quarry site is to secure visitor safety. High local levels of mosquitoes can not be attributed to the ephemeral water supply in the quarry’s base. Maroochy Shire Council has carried out revegetation work.</td>
<td></td>
<td>Develop a fire action plan in consultation with Maroochy Shire Council which will consider fencing and signs, realignment of tracks away from the site, rehabilitation and revegetation, and access requirements for park management. Purposes. No pesticides will be used on the park unless it is to address a serious health risk.</td>
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<td><strong>Cultural heritage</strong></td>
<td>Aboriginal people’s interests are taken into account in park management.</td>
<td>Establish the indigenous and historic cultural values of the park by liaising with local Aboriginal groups and historical societies. Ensure the construction of any firebreaks and fences takes into account cultural heritage values. Continue to develop awareness and understanding of Mt Coolum’s cultural heritage values.</td>
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<tr>
<td>Aboriginal stories for the Sunshine Coast locate Mt Coolum and other obvious geological landmarks such as the Glass House Mountains, Mt Ninderry, Maroochy River and Mudjimba Island in cultural terms.</td>
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Recreation, tourism and access
The steep nature and small size of the park limit the recreation opportunities that can be provided.
Climbing and abseiling are not appropriate activities for the park due to the natural values and other existing local opportunities.
Commercial use of the park will be for guided walks under permit.
Camping is not compatible with the general nature of the park and will not be permitted.
Visitor impacts on the park include trampling and erosion of track areas, increased fire risk and vandalism.
A small Reserve for Local Government Purposes is contained on the summit of Mt Coolum and provides a navigation beacon enclosure and trigonometrical station.

Public contact
Public contact on Mt. Coolum involves on-park interpretation, education, information sheets, and park law enforcement.
A number of schools and colleges have used Mt Coolum for their field study programs.
No public contact facilities or staff are currently permanently allocated to the park.

A range of low-key, nature-based and ecologically sustainable recreation opportunities are available on the park.
Maintain a west track and east track following the powerline. All other unformed trails not used as firebreaks will be closed for rehabilitation.
Rehabilitate the summit area.
No climbing/abseiling or hang-gliding activities will be permitted.
Confine visitor access to pedestrian use only. No toilet facilities will be provided.
Allow access to the navigation beacon site for maintenance.
Monitor recreational impacts such as erosion, trampling and littering.
No recreational helicopter/aircraft access will be permitted.
No parking will be provided at west track entrance and the carpark at the main entrance will be limited.
Develop guidelines for commercial and group activities.
Continue discussions with Maroochy Shire Council on the use of solar energy for supplying the Reserve for Local Government Purposes.

The community and visitors are aware of, and appreciate, the natural and cultural values of the park.
Provide occasional park information to visitors on the values and special needs of Mt Coolum National Park and acceptable behaviour within the park.
Undertake appropriate community education.
Establish a co-operative relationship with the traditional custodians of the area and implement appropriate cultural interpretation as desired by the Aboriginal community.
Continue to allow field activities for educational purposes relating to geology, history and the plant and animal communities.
Trial an extension program in the North Coast District which will include a neighbour survey to assess neighbours' views on living next to a park; their perception of the park values and expectations of DoE Rangers.

Neighbourhood issues
Issues linked to Mt Coolum's close proximity to urban development include the impact of domestic animals and exotic plant species, dumping of garden refuse, informal access routes into the park, and trail ride riding.
Continuing problems exist with boundary definition, fire hazards and the high level of mosquito Aedes fungus infestations in the Mt Coolum area.

Adjoining neighbours and the local community are aware of, and support, DoE management.
Continue liaising with Maroochy Shire Council on mosquito control in breeding sites and standards relating to maintaining the natural amenity of new developments near the park.
Maintain and further develop co-operation from neighbours in managing the park with respect to wildfires, domestic animals and weed invasion.
Liaise with the Maroochy Shire Council and local residents associations to promote the importance of retaining greenbelts and wildlife corridors.
Survey the boundary of the park.

Plan implementation and monitoring
The park is managed from the DoE office located at Noosa National Park.
Managerial and support staff are located respectively at Maroochydore and Moggill offices. Noosa National Park staff are responsible for wildfire suppression, fire management, feral animal and weed control, public contact and liaison, research and monitoring, and infrastructure maintenance. Search and rescue is performed in conjunction with the State Emergency Service.

Mt Coolum National Park has staff and resources to implement the management plan.
Draw up a staff schedule to implement the plan and list priorities for park management.
Balance staff time on duties related to natural resource management relative to recreation management.