CATTAI NATIONAL PARK

PLAN OF MANAGEMENT

N S W National Parks and Wildlife Service,

November, 1997.

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FOREWORD

Cattai National Park is a small but important national park located in and serving Western Sydney. It is situated on the Hawkesbury River near Windsor and consists of three areas: Cattai Park at the junction of Cattai Creek and the Hawkesbury River, Hope Farm which adjoins Cattai Park to the north, and Mitchell Park approximately 2.5 kilometres upstream along Cattai Creek.

Part of the national park was an original First Fleet grant and the park contains important historic and archaeological resources, including a homestead built in the 1820s, ruins of a stone windmill which is thought to be the oldest industrial building in Australia, convict-built dry stone walls, and a range of other features which reflect changes in the place since the early nineteenth century. The national park also contains a number of Aboriginal sites which are of importance to our understanding of the Cattai area prior to European settlement. This plan of management places a high priority on the protection and interpretation of the cultural values of the park.

Important remnants of vegetation communities that were once common in the Sydney area also remain in Cattai National Park, including valuable wetland areas, tall forests and gallery rainforest. Priority is given in this plan of management to protecting these remnant areas and to the regeneration of the native vegetation in many other places within the park.

Cattai National Park provides facilities for recreational pursuits such as camping, picnicking, bushwalking and horse-riding. The three sections of the park will continue be managed to provide complementary recreational opportunities. In addition, the plan provides for extension of the walking track system, improved information on the natural and cultural heritage of the park, and an increased emphasis on environmental education.

This plan of management establishes the scheme of operations for Cattai National Park. In accordance with the provisions of Section 75 of the National Parks and Wildlife Act, 1974, this plan of management is hereby adopted.

PAM ALLAN, M.P.
Minister for the Environment

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1. INTRODUCTION

The National Parks and Wildlife Act, 1984, requires that a plan of management be prepared for each national park. A plan of management is a legal document that outlines how the area will be managed in the years ahead.

The procedures for the preparation of a plan of management are specified in the Act and involve five stages:

- * The Director gives notice that a plan of management has been prepared.
- * The plan is placed on public exhibition for at least one month and any person may comment on it.
- * The plan and copies of all representations are referred to the National Parks and Wildlife Advisory Council for consideration.
- * The Director submits the plan, together with the recommendations of the Advisory Council, to the Minister.
- * The Minister may adopt the plan after considering the recommendations of the Advisory Council or may refer the plan back to the Director and Council for further consideration.

Once a plan has been adopted by the Minister, no operations may be undertaken within Cattai National Park except in accordance with the plan.

A draft plan of management for Cattai National Park was placed on public exhibition from 10th December 1993 until 11th April 1994. Nine submissions were received on the plan which raised a total of seventeen issues.

All comments received were referred to the National Parks and Wildlife Advisory Council for its consideration and advice. In coming to its recommendations on the plan and the submissions, the Advisory Council also took into account the findings of a conservation plan for Cattai National Park which was prepared over 1995-96. The comments and suggestions of the Advisory Council were in turn considered by the Minister before adopting this plan.

For additional information or inquiries on any aspect of the management of Cattai National Park, please contact the Service's North Metropolitan District Hills Office at Scheyville National Park or by phone on (02) 4572 3100.

2. MANAGEMENT CONTEXT

2.1 NATIONAL PARKS IN NEW SOUTH WALES

The national park concept was introduced into Australia through the establishment of Royal National Park in 1879.

For the purposes of preparing plans of management, the NSW National Parks and Wildlife Service has adopted the International Union for the Conservation of Nature and Natural Resources (IUCN) Guidelines for Protected Area Management Categories which defines a national park as:

"a natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area, and (c) provide a foundation for spiritual, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible" (IUCN, 1994).

National parks are part of the regional pattern of land use. The management of a national park aims at minimising disturbance to natural and cultural resources; other land uses such as agriculture, forestry and mining are distinguished by an acceptance or encouragement of environmental modification. National parks therefore provide for only a limited part of the range of land uses in a region.

2.2 CATTAI NATIONAL PARK

2.2.1 Location and Regional Context

Cattai National Park is located approximately 45 kilometres north-west of Sydney, near Windsor. It covers 424 hectares of land: 224 hectares of land at the junction of the Hawkesbury River and Cattai Creek near Pitt Town (Cattai Park), together with the recent additions of the adjoining Hope Farm (60 hectares), and 140 hectares approximately 2.5 kilometres upstream along Cattai Creek known as Mitchell Park (see map, centre pages).

Cattai Park (then called "Caddie Park") was purchased jointly by the Department of Planning and Environment and the National Parks and Wildlife Service from Mr Tom Arndell in 1981 and opened to the public as Cattai State Recreation Area in 1983. It was renamed Cattai National Park in 1992.

Mitchell Park was notified as a Reserve for Public Recreation in 1958 and managed by the Department of Lands until added to what was then Cattai State Recreation Area in 1990.

Hope Farm, which together with Cattai Park made up the original "Caddie" property granted to Assistant Surgeon Thomas Arndell in 1804, was purchased by the Department of Planning in 1990 to provide additional regional open space in western Sydney. It was added to the national park in 1992.

Out of the four recreational parks operating in the Cattai area before 1985, Cattai Park and Mitchell Park are the only two still in operation today. They provide passive recreation opportunities which contrast with the more developed private amusement parks, waterski parks and resorts operating in the area.

2.2.2 Significance of Cattai National Park

Cattai National Park is historically very significant because it retains intact a land grant to a First Fleet settler, which may well be unique, especially as the grant remained in the original family's ownership until its transfer to NPWS almost 180 years later; the landscape has well-preserved evidence of European farming and changed land use over that period; and both the former Caddie Park and Hope Farm have a high potential for investigation of a profusion of archaeological remains.

The Cattai Homestead, which was constructed around 1820, and its curtilage is listed by the National Trust and the Australian Heritage Commission. The Hope Farm Mill on Hope Farm, which is also listed on the Register of the National Estate, was probably constructed around 1806 and is believed to be the oldest industrial site in Australia.

The former "Caddie" property is also of cultural significance in that it demonstrates the long continuity of human occupation of the area with evidence of Aboriginal habitation and Aboriginal/European contact.

The national park also contains important natural resources, including rainforest, tall forest and wetland communities which were once more common on the Cumberland Plain and are now limited in extent. It is an important wildlife refuge.

Recreational use of Cattai Park dates from 1952, when the Arndell family opened their property to the public for camping, water-skiing and other activities. Mitchell Park has a long history as a popular picnic and passive recreation area in western Sydney.

The significance of Cattai National Park can be summarised as:

Landscape

- * Cattai National Park contains contrasts between a rural landscape with historic evidence and significant natural areas.
- * The river corridor sections of the park have been identified as being of regional scenic significance in the Hawkesbury-Nepean Scenic Quality Study.

Historic Places

- * Cattai National Park retains intact a land grant to a First Fleet settler.
- * The park contains sites of national significance in that they are evidence of the earliest period of European settlement in Australia. They include the remains of the Hope Farm Mill, which is believed to be the oldest industrial building in Australia, a granary, a convict-built road, and dry stone walls enclosing a natural amphitheatre.
- * The Cattai Homestead is an excellent example of an early colonial dwelling built around 1820, adapted and enhanced in the 1930s by Bruce Dellit, an important architect in the Colonial revival style of the early twentieth century.
- * The park, and particularly the areas around the Cattai Homestead and Hope Farm Mill, contains sites of high archaeological potential.
- * The Cattai Homestead and its curtilage are listed by the National Trust and the Australian Heritage Commission. The Hope Farm Mill on Hope Farm is also listed by the Australian Heritage Commission. In addition, Cattai Park and the Hope Farm Hope Farm Mill ruins are listed as heritage items in the Hawkesbury-Nepean River Regional Environmental Plan.

Aboriginal Sites

- * Cattai National Park contains a range of evidence of past Aboriginal occupation.
- * The park contains rare evidence of Aboriginal/European contact.
- * The Aboriginal sites in the park have high research potential and may reveal evidence of changes in occupation over time.

Vegetation

- * The park contains a wide range of vegetation types, which is unusual within such a small area.
- * Two vegetation communities found in the national park are of regional botanical importance.
- * The park contains one plant species of national conservation significance and other species vulnerable in western Sydney.

Wildlife

- * The wetlands and forest areas provide important wildlife habitat within western Sydney due to their restricted distribution.
- * The park provides habitat for a number of species listed in the Threatened Species Conservation Act.

Recreation

- * The park has been a popular recreational resource for western Sydney since the 1950s.
- * The river and creek foreshores provide visitors with a range of recreational opportunities including bushwalking, picnicking and low-key camping which are not readily available to the public elsewhere in the Hawkesbury Valley.
- * The national park contains a variety of recreational settings, ranging from historic parklands to dense natural bushland.

Environmental Education

- * The range of vegetation types, historic places and Aboriginal sites found within the national park offer outstanding opportunities for field studies and environmental education.
- * A field studies centre building is located within Mitchell Park and this is available for use by university, school and community environmental groups.

3. OBJECTIVES OF MANAGEMENT

3.1 GENERAL OBJECTIVES FOR NATIONAL PARKS

The following general objectives relate to the management of national parks in New South Wales:

- * the protection and preservation of scenic and natural features;
- * the conservation of wildlife;
- * the maintenance of natural processes as far as is possible;
- * the preservation of Aboriginal sites and historic features;
- * the provision of appropriate recreation opportunities; and
- * the encouragement of scientific and educational enquiry into environmental features and processes, prehistoric and historic features and park use patterns.

3.2 SPECIFIC OBJECTIVES FOR CATTAI NATIONAL PARK

In addition to these general objectives, the management of Cattai National Park will be subject to the following specific objectives:

- Protection and enhancement of the remnant vegetation communities and wetlands of Cattai National Park.
- * Promotion of Cattai National Park to demonstrate the long continuity of Aboriginal history and Aboriginal occupation of the area.
- * Promotion of Cattai National Park to demonstrate the earliest period of European settlement in Australia.
- * Provision of a range of recreational settings in Cattai National Park, from the historic rural settings of Cattai Park to the natural bushland of Mitchell Park.
- * Consistent with the protection of the natural and cultural features of the park, provision of facilities and interpretation in the national park to promote understanding of the natural environment and cultural heritage of the area.

3.3 OVERALL STRATEGY

The three sections of Cattai National Park will be managed to provide a range of opportunities for visitors:

- * Cattai Park will be managed to provide passive recreation and environmental education related to its historic setting. Emphasis will be placed on protection and interpretation of the historic values of the area and consolidation of the important remnant native vegetation.
- * Mitchell Park will be managed to provide for low intensity recreation and environmental education in a bushland setting. Priority will be placed on the protection and interpretation of the natural environment.
- * Hope Farm has not previously been open to the public and basic infrastructure will have to be supplied before this can occur. The area will be gradually developed for public use and to complete the interpretation of the original Cattai property.

4. POLICIES AND FRAMEWORK FOR MANAGEMENT

4.1 CATTAI NATIONAL PARK: ITS NATURAL AND CULTURAL HERITAGE

4.1.1 Geology, Soils and Hydrology

Cattai National Park rises from flat alluvial floodplains to a plateau about 40 metres above the water level of the Hawkesbury River. The floodplains are associated with tertiary alluvial deposits of sand, silt and clays which are fertile and reasonably stable. Much of the park consists of Hawkesbury sandstone which gives rise to relatively acidic soils of low fertility. These soils are highly erodible and are associated with mass movement problems. Small outcrops of finely textured Wianamatta Shale occur in the north-east and south-east of Cattai Park and in Mitchell Park. The area around Reedy Swamp in Mitchell Park is the only area of Burralow Swamp soils in western Sydney and contains large amounts of organic material and peat.

The alluvial soils have been formed through the continual flooding of the Hawkesbury River and Cattai Creek. Such floods have had a significant effect on the nature and usage of the adjacent lowlands. Since 1881, there have been 69 floods which have extended beyond the river banks. Of these 13 have been major floods with considerable overflow and extensive inundation. Moderate flooding in 1978 reached a height of 14.2 metres above sea level which resulted in the Cattai Homestead being totally surrounded by water. Due to the nature of the landforms within the national park, there is a high probability (1 in 20) of inundation up to the 12.4 metre mark which includes those areas most frequented by the public. During floods, sand and debris is deposited on the national park and the waters can cause extensive damage to vegetation and structures.

In the past, some rock quarrying was undertaken on Cattai Park and Hope Farm to provide sandstone for fencing and building purposes. Commercial sand extraction was also undertaken near the junction of Cattai Creek and the Hawkesbury River in Cattai Park and along the Hawkesbury River foreshores of Hope Farm. Some sites are in need of rehabilitation while others are of historical significance and should be left untouched.

- * All buildings on the foreshores will be designed to be flood tolerant.
- * During flood and rehabilitation periods all or part of the national park may be closed to the public.

No quarrying or sand extraction will be undertaken on the national park, however excess sediment brought down by flood waters may be removed for the purposes of maintaining access to and protecting existing facilities.

Action

Old quarries and sand extraction areas that are not of historic significance will be rehabilitated.

4.1.2 Native Plants, Native Animals and Fire

Thirteen vegetation types have been identified in Cattai National Park, which is an unusual variety of vegetation types given its restricted size and reflects local changes in geology, aspect and drainage. Cattai Park and Hope Farm are characterised by a dry sclerophyll woodland of ironbark (*Eucalyptus paniculata*), grey gum (*E. punctata*), forest red gum (*E. tereticornis*) and turpentine (*Syncarpia glomulifera*), with much of it being located on the higher areas of the park. Important remnant pockets of red cedar (*Toona australis*) and Port Jackson fig (*Ficus rubiginosa*) are also found on Cattai Park. The lowland areas tend to be dominated by the river oak (*Casuarina cunninghamiana*) and forest red gum (*E. tereticornis*). Along the banks of Cattai Creek are remnant pockets of gallery rainforest which have significant conservation value. Dominant species include *Backhousia myrtifolia* and *Ficus coronata* along with numerous species of twiners.

Mitchell Park has ten vegetation associations, ranging from a low open forest dominated by *Banksia serrata* to a woodland of yellow bloodwood (*Eucalyptus eximia*), stringy bark (*E. oblonga*), grey gum (*E. punctata*) and scribbly gum (*E. sclerophylla*) on the slopes. Paper bark forests (*Melaleuca stypheloides* and *M. linearifolia*) and tall open forests of red gums (*E. tereticornis*) and cabbage gums (*E. amplifolia*) occur on the lowlands. This last association is limited in distribution in the Sydney area and of important conservation value.

There are three major wetland areas on Cattai Park and one on Mitchell Park which are home to a variety of aquatic bird and plant life. They are dominated by knotweeds (*Persicaria lapathifolium* and *P. decipiens*), rushes and sedges.

The Cattai National Park Conservation Plan (1996) identified two communities as being of particular importance: the gallery rainforest in which are many species vulnerable in western Sydney including the whalebone tree (*Streblus brunonianus*) which is of regional conservation significance; and the wetlands, which support a range of regionally significant plant species including the aquatic plant *Brasenia schreberi*, and provide important habitat for a wide range of bird species which is otherwise scarce within Sydney.

Cattai National Park lies within the Cumberland Plain, an important land system near Sydney which has largely been cleared for agricultural and urban purposes. Remnant areas of native vegetation such as are found within Cattai National Park are therefore comparatively rare in the Cumberland Plain area. Within Cattai National Park, Mitchell Park retains much of its original vegetation and a number of areas within Cattai Park also have not been cleared.

Other parts of Cattai National Park are revegetating with native plants. It is an important management strategy within Cattai National Park to promote the revegetation of those cleared and regenerating areas which do not have cultural significance with plants endemic to the Cumberland Plain.

Most of the plant communities within the national park are adapted to a particular fire frequency. A fire frequency greater or less than that to which the plants are adapted will cause a loss of species diversity. It appears that in the past fire was an infrequent occurrence on the area which now comprises Cattai National Park, and in the last 15 years only two significant fires have occurred in the national park. The gallery rainforest area is not adapted to fire and therefore should be protected from fire. There is also a danger of fire on Cattai Park and Hope Farm damaging the important historic resources, while neighbours adjoining Mitchell Park need to be protected from possible wildfires by the establishment of a hazard reduced buffer zone close to the park boundary.

While only limited surveys have been undertaken of animals within the national park, over 150 bird species have been observed including the black bittern (*Dupetor flavicollis*), powerful owl (*Ninox strenua*) and rufous night heron (*Nycticorax caledonicus*). A number of native mammals also remain on the national park, despite predation by foxes and feral cats. These include eastern grey kangaroos (*Macropus giganteus*), swamp wallabies (*Wallabia bicolor*), echidna (*Tachyglossus aculeatus*), brush-tailed possums (*Trichosurus vulpecula*), ringtailed possums (*Pseudocheirus peregrinus*), sugar gliders (*Petaurus breviceps*), feathertail gliders (*Acrobates pygmaeus*), yellow-bellied gliders (*Petaurus australis*) and marsupial mice (*Antechinus* spp). The black bittern, powerful owl and yellow-bellied glider are listed as vulnerable species in the Threatened Species Conservation Act 1995.

Policies

* The gallery rainforest, tall open forest and wetland areas will be protected. The construction of vehicle access tracks, utilities and other developments not of an educational or scientific purpose will not be permitted.

- * Regeneration of the native vegetation will be encouraged in accordance with a revegetation strategy except where clearings or exotic plantings are part of the historic landscape.
- * Priority will be given to weed control, regeneration and extension of the rainforest and wetland areas, and planting to bind river foreshores.
- * Fire in Cattai National Park will be managed in accordance with a Cattai National Park Fire Management Plan.
- * Annual fire management works programs and fire emergency action plans will be prepared and fire history records will be maintained.
- * The Service will participate in the preparation of District Fire Management Plans in accordance with the Bush Fires Act, 1949.
- * The management of fire in the park will be based on the following guidelines:
 - a) A high priority will be given to the safety of visitors and neighbours;
 - b) The gallery rainforest will be protected from fire;
 - c) A fire regime that maximises conservation of biodiversity will be maintained:
 - Wildfires will be contained and controlled as quickly as possible.
 Continued liaison will be maintained with adjacent landholders to ensure that unscheduled fires are quickly controlled;
 - e) Fuel reduction, including prescribed burning, will be used to achieve management objectives and responsibilities, subject to a review of environmental factors;
 - All practical steps will be undertaken to prevent the escape of fires from the park;
 - g) Camp and cooking fires will only be permitted in authorised fire places;
 - h) Park fire bans, area closures or the cancellation of park activities will be implemented whenever the conditions warrant that action to ensure visitors and park resources are not put at risk; and

- Any construction of emergency fire trails will take into account the protection of natural and cultural heritage and these trails will be rehabilitated as soon as possible after the fire.
- * Native animals will not be released on Cattai National Park unless in accordance with an approved species management plan.

Actions

- A survey of the park for native animals, particularly endangered species, will be undertaken.
- * A fire management plan will be prepared for Cattai National Park as soon as possible.
- * The retention of adjoining natural bushland to enhance the natural heritage values of the national park will be encouraged through liaison with neighbours and local councils.

4.1.3 Introduced Plants and Animals

For the past 170 years the land within Cattai Park and Hope Farm has been used for agricultural activities including grazing of sheep and cattle, logging, orcharding and cash cropping. The fertile alluvial flood plains were intensively used for cash cropping and pasture improvement. Exotic trees, such as willows and poplars, were also planted along the foreshores of Cattai Park in the 1950s. The ridge areas were left primarily untouched as they were too rough to be utilised for cropping, however some clearing and grazing did occur. As a result of these activities, a diverse array of introduced plant species have established in a number of locations within the park, especially along the ridges facing the Hawkesbury River.

Lantana camara is the most abundant of the introduced plants in the national park. Originally, lantana was planted in the Arndell's house garden and used as a hedge species but has since spread across many hectares of the park. In some locations it completely dominates, allowing few other plants to regenerate.

The second most prolific weed and greatest threat to the rainforest areas is wandering jew (*Commelina cyanea*). It thrives in low light conditions and thus is a threat to the understorey of the rainforest. In many parts of the rainforest it has seriously affected the diversity of native plant species making up the understorey. It was originally introduced through the flooding of Cattai Creek bringing down seeds and plant propagules from higher up in the catchment.

Fire weed (Senecio lautus) is rapidly becoming a major problem as it colonises previously disturbed areas, and prickly pear (Opuntia stricta), tiger pear (Opuntia aurantiaca) and African love grass (Eragrostis curvula) are also of concern.

In the past, high numbers of rabbits and pigs on Cattai Park and Hope Farm caused severe damage to native plant regeneration, however an ongoing control program has significantly reduced their numbers. Methods to control rabbits on the park are being investigated in conjunction with the University of Western Sydney. Cats and foxes are also a problem and subject to on-going control.

The horse-riding concessionaire presently has agistment rights to keep up to 40 horses on Cattai Park and Hope Farm at any one time under the present licence. Fencing has been erected to keep horses out of the rainforest and wetland areas and away from the main visitor use areas, however damage has occurred in some areas. The Cattai National Park Conservation Plan (1996) recommends the removal of grazing from the park.

Domestic animals representative of those kept on the property by the Arndell family were until recently displayed in yards adjoining the silo complex, or allowed to graze on parts of Cattai Park and Hope Farm. The high cost and problems associated with keeping the animals resulted in a reduction of the number and type of animals and eventually their complete removal from the park.

- Introduced plants identified in conservation plans as being of historic importance will be retained and replaced with the same species when they become senescent or die. Introduced plants protecting historic sites will be retained until alternative protection measures can be put in place.
- * All other introduced plants (including ornamental plantings which have spread from their original site) and pest animals will be controlled, and where possible eliminated from the park.
- * The horse-riding concessionaire will be required to find off-park agistment for the horses.
- * Apart from horses permitted under the horse-riding licence and registered guide dogs, no other introduced animals will be permitted on the park.

Actions

- * A weed control and revegetation program will be prepared and progressively implemented, with priority given to the control of lantana, fire weed, African love grass, prickly pear, tiger pear and wandering jew.
- * A program for the control of rabbits, pigs, cats and foxes will be prepared and implemented. This will be undertaken in consultation with neighbouring landowners, researchers and relevant government agencies.
- * The boundaries of Cattai Park and Mitchell Park will be fenced to prevent stock entering the park.

4.1.4 Aboriginal Heritage

The original occupants of the area were the Daruk people, whose area covered most of north-western Sydney. First interactions between the Daruk and European settlers were cordial, but soon deteriorated as the Daruk were denied access to their traditional hunting, fishing and gathering areas along the Hawkesbury River by European settlers. In 1795 soldiers were sent to the district and several clashes are recorded in the district which resulted in massacres of Aboriginal people. By 1820 all resistance by the Daruk had been broken and there are few reports of Aboriginal people in the area after this time.

The long history of European occupation and use of the area has heavily disturbed some areas and is likely to have destroyed sites, however a total of 27 sites have been recorded on the park. The highest number of sites are found on the ridge and slopes at the northern end of Hope Farm, the central ridge and lower slopes of the amphitheatre in Cattai Park, and on the lower slopes to the east of the lagoon in Mitchell Park.

Aboriginal sites found within the national park include engravings, hand stencils, grinding grooves, food deposits and artefact scatters. One shelter in the park contains a deposit which has the potential to date commencement of occupation in the area and a range of economic activity. An engraving of a sailing ship and oral history records provide evidence of the continuing occupation of the area by both Aboriginal and European people during the nineteenth and early twentieth century.

- * No works will be undertaken which might impact on Aboriginal sites.
- * On-going consultation will be undertaken with relevant Aboriginal groups in regard to the management of the park's Aboriginal heritage.

* Sites will be regularly monitored to ensure no damage is occurring and that engravings and grooves are not covered by soil or vegetation.

Action

* The Daruk Local Aboriginal Land Council will be consulted on the management of Aboriginal sites within Cattai National Park and the appropriate interpretation of Aboriginal heritage.

4.1.5 Historic Heritage

Cattai Park and Hope Farm are unusual properties in that they remained in the hands of the same family for some 180 years until their acquisition by the NSW Government in 1981 and 1990 respectively. During its ownership by the Arndell family the land was developed and modified, the Cattai Homestead and other buildings were constructed and altered, and in some cases demolished according to the tastes and fortunes of the family. The original grant was to Thomas Arndell, who was an assistant surgeon with the First Fleet which arrived in Australia in 1788. The current Cattai Homestead is believed to have been built just prior to or after Dr. Arndell's death in 1821, with major extensions undertaken in 1939 in accordance with the architect Bruce Dellit's plans. Archaeological surveys have identified footings of other buildings possibly dating from as early as 1799. The property also contains dry stone walls probably built by convict labour to enclose a natural amphitheatre, wooden drain pipes and the remains of a horse whim and other agricultural structures.

The Hope Farm Mill and associated granaries and convict-built road on Hope Farm were probably constructed in 1806. The ruined Hope Farm Mill is believed to be the oldest industrial building remaining in Australia. It is a reminder of the early dependence of the colony on grain grown along the Hawkesbury River. Grain diseases such as rust heavily impacted on the wheat production in 1863 and the mill and granary are likely to have been abandoned about this time. Hope Farm was divided off from Caddie as a separate property in 1865.

In the second half of the nineteenth century, the Caddie property was used mainly for grazing of sheep and later cattle. Grazing and some agriculture continued to be the main uses until 1912 when part of the property was sub-let to sharefarmers who established orchards. The dairy and silo complex was built in the 1930s just prior to a succession of floods that wiped out the orchards and led the family to open the property as a pleasure ground in 1952.

Mitchell Park was originally part of Pitt Town Common, one of six commons announced by Governor King in 1804 to provide grazing land for settlers with small

holdings. Thomas Arndell was one of the trustees of the common. In 1958 the remaining Crown land at Mitchell Park was formally notified as a Reserve for Public Recreation.

The Cattai Homestead and its historic precinct are classified by the National Trust of Australia and the Australian Heritage Commission. The conservation plan prepared by Pike *et al* (1985) identified the "Caddie" property as a symbolic landscape of cultural significance because it demonstrated:

- the long continuity of human occupation of the site with evidence of Aboriginal habitation, Aboriginal/European contact and the continuity of ownership by a modest, rather than prosperous, Australian grazing and farming family,
- remains from the earliest period of European settlement in Australia,
- an early colonial dwelling, adapted and enhanced by a later architect in the early 20th century Colonial Revival style,
- the influence of the Hawkesbury River as a link, mainstay and menace for early settlers, and
- an evocative rural landscape with historic overtones.

The conservation plan prepared by Clouston (1996) identified the park as being of significance because it preserves intact an original first fleet grant and a substantial portion of an early Common; contains a rare example of a mill and granary from the one-time "granary of the colony"; and is "a place of complexity and diversity that reflects the evolution of occupation, ownership and land management from Aboriginal occupation, through the contacts and subsequent conflicts with European settlement of the earliest years of the nineteenth century to the late twentieth century recreational, environmental and educational values placed on this landscape." The plan also recommended the retention of certain viewscapes within the park so as to retain its scenic and cultural landscape value.

Both conservation plans set out certain guidelines and priorities for the management of Cattai National Park and for the management of the Cattai Homestead, the historic precinct around Cattai Homestead, the Hope Farm Mill and associated sites, and other historic buildings, cultural plantings, landscape features, Aboriginal sites and European archaeological sites located throughout the area and artefacts found in the buildings and around the property. These plans have been taken into account in preparing this plan of management.

Many historic items which are believed to be associated with the history of the property are displayed in the park. Artefacts of past use of the property include log

drains found in the amphitheatre which are now on view in the old garage and blacksmithy. Photographs from the Arndell family's collection and a few pieces of furniture and crockery from different periods of Arndell history, which were found in the Cattai Homestead or acquired more recently, are now displayed in the Cattai Homestead. Machinery similar to that used by the Arndell family is displayed in and around the silo complex.

An interpretive plan for the historic Cattai Homestead and precinct was prepared in accordance with the 1985 conservation plan. It sets out guidelines to be taken in presenting the cultural history of Cattai Park to the public. This plan also provided the basis for the interpretive panels located within and around the Cattai Homestead and the silo complex.

Recent archaeological investigations in the vicinity of the Hope Farm Mill (Gojak, 1995) have revealed important information about the construction of the mill and the nearby granary and cottage. Conservation work has been undertaken on the mill ruins and they have been fenced to prevent further damage to the structure by rabbits.

- * The management of the cultural heritage of Cattai National Park will be in accordance with the Cattai Conservation Plan and the Burra Charter prepared by the Australia International Committee on Monuments and Sites (ICOMOS).
- * A review of environmental factors will be prepared and incorporated into any development proposals. No excavation work on or near the historic precinct will be undertaken without an excavation permit from the Heritage Council.
- * The historic character and landscape of Cattai Park will be maintained. Historic plantings will be conserved and maintained in accordance with the conservation plans.
- * The Cattai Homestead will be maintained as the interpretive centre of Cattai Park. It may also be used for other public purposes.
- * No new building construction will be undertaken in the historic precinct around the Cattai Homestead, on the ridge between the Cattai Homestead and the silo complex, or on the river and creek foreshores below the Cattai Homestead.
- * The historic heritage of the park will be selectively included in the interpretation on walking tracks.

- No structural alterations or disturbance to the fabric of the Cattai Homestead will be undertaken, especially the 19th century painting scheme in the cupboard under the stairs
- * The Dellit designed kitchen interior will be preserved.
- * Care will be undertaken when mowing grass within the historic precinct around the Cattai Homestead to ensure that no sites are damaged.
- * Only historic works, painting, furnishings, landscaping, for which there is substantial documentary evidence will be reinstated.
- * The amphitheatre and area west of the mill to the river (see map, centre pages) will be retained as grasslands.
- * Views will be retained:
 - to and from the Cattai homestead, including views from the river to the Cattai Homestead;
 - from the millers cottage and lookout below the silos to the river;
 - from the Cattai Creek bridge into the park;
 - from the Mitchell Park entrance road to Cattai Creek; and
 - from the Hope Farm entrance road north across the paddocks.

Actions

- * The Hope Farm Mill will be interpreted to visitors through signs and/or brochures.
- * Advice will be sought from qualified specialists regarding the conservation of timber artefacts, including the log drains, yoke, timber boat and butterbox cupboard, and appropriate conservation work undertaken.
- * The establishment of a volunteer group to assist in maintenance of the Cattai Homestead garden and provide security for the homestead when open will be investigated. Such a volunteer group would be supervised by appropriately trained and experienced staff to ensure that their activities are in accordance with the conservation plan.
- * The modern barbecue within the historic precinct will be removed.
- * The former willows near the Cattai Homestead, shown on the Arndell photographs, will be replaced with less invasive but visually-related species.
- * Planting will be undertaken to screen the toilet block below Cattai Homestead from the homestead.

4.2 USE OF THE AREA

4.2.1 Visitor Use Patterns and Preferences

Cattai National Park's proximity to Wisemans Ferry Road (a major tourist thoroughfare) enables day visitors from Sydney to easily reach the park. The majority of recreational use is concentrated on the extensive picnic areas on the banks of the Hawkesbury River and Cattai Creek.

Data on visitor numbers is available from traffic counter records, entry ticket sales, group reservations and camping receipt books.

Based on this information and discussions with visitors it appears that:-

- a) Visitor growth increased at a rate of approximately 20-25% per year between 1983 and 1989 to a peak of 76,000. Since then use has declined, mainly due to extensive flooding and deterioration of water quality. Currently visitation is around 40,000 people a year.
- b) A majority of the visitors to the national park come from the outer western suburbs of Sydney, particularly the Baulkham Hills, Hawkesbury and Blacktown local government areas.
- c) The national park's natural and rural atmosphere coupled with its range of facilities are Cattai's most distinctive elements.
- d) Cattai National Park is one of the few places in the Hawkesbury valley to offer a range of passive recreational opportunities complemented by quality facilities. Coupled with the north west sector land release and associated urbanisation, future demand by the public for this area is likely to resume growth.

- * A range of passive recreational opportunities will be provided on the Cattai National Park to meet a broad spectrum of visitor leisure expectations.
- * All future developments will be designed to reflect the atmosphere of that section of the park in which they are located.
- * All new development proposals will consider their likely environmental impacts, and include a evaluation of their socio-economic costs and benefits to the park and local community.

- * Visitor surveys will be undertaken at regular intervals to assess visitor use patterns and preferences.
- * Consent will be required for all large group activities.

4.2.2 Visitor Facilities

Recreational use of Cattai Park is concentrated along the Hawkesbury River foreshores. Access to Cattai Park is along an unsealed gravel road off Wisemans Ferry Road/Cattai Road which runs between Pitt Town and Wisemans Ferry. It provides access along the ridge and down onto the foreshores of the Hawkesbury River. Parking is restricted to designated parking areas near the Cattai Homestead, office and old farm but is currently unrestricted along the Hawkesbury River foreshores. Vehicle access on the foreshores needs to be reviewed to ensure visitors are protected from moving vehicles.

Use of Mitchell Park is concentrated along the foreshores of the smaller Cattai Creek. Access to Mitchell Park is by a sealed road which enters through the new gates on Mitchell Park Road and ends at a turning circle above the foreshore picnic area.

At present there is no public access to Hope Farm, and no visitor facilities have yet been developed. When Hope Farm is opened to public vehicular access, the entrance station may need to be relocated onto the main park entry road before the junction of the Cattai Park and Hope Farm roads.

Large groups (which can number 1,000 people or more) often reserve picnic shelters on the Hawkesbury River foreshores at Cattai Park. During peak periods such groups make up the majority of the park's day visitors. As a result, barbecue and picnic facilities for small groups are often limited.

Mitchell Park will be promoted as an alternative to Cattai Park and will provide a different recreational experience, with the emphasis on smaller and family groups rather than the large groups common at Cattai Park. Mowing and weed control will be undertaken along the banks of the creek to improve views of and access to the water.

There are presently only three constructed walking tracks within Cattai National Park: a track which passes through the rainforest on Cattai Park, a track from the silos to a lookout on the Hawkesbury River, and an interpreted loop walking track on Mitchell Park. A number of informal routes follow existing bridle trails while other walks rely on visitors following maps on brochures. These informal tracks do not necessarily follow the most scenic route or commence from car parking areas and need to be incorporated in a formal walking track system for the national park.

The kiosk at Cattai Park is a caravan which is unsightly, heavy and difficult to move when flooding of the Hawkesbury threatens. The van is at the end of its operational life and it is proposed to replace it with a more appropriate, but still relocatable, kiosk facility to cater for visitors to the picnic areas.

The kiosk at Mitchell Park, which was in a poor state of repair and did not meet health standards, was demolished in 1990. It will not be replaced with a permanent structure due to problems with flooding, although it may be replaced with a mobile van.

The 1985 conservation plan proposes the use of one room of the Cattai Homestead as a tea room to cater for lunches, morning and afternoon teas. The intention is that a tea room in the homestead will support the building being open for longer hours for public inspection. Currently the Cattai Homestead is open only on Sundays, where an important attraction is the Wildlife Shop, but may be opened on demand at other times. Pensioner groups in particular visit the Cattai Homestead on weekdays.

Other means of opening the homestead for longer hours, such as volunteer guides, will also be investigated. In addition, the Cattai Homestead may be made available for weddings or afternoon teas in accordance with Service regulations relating to group use and the policy in this plan relating to commercial use.

Access to Cattai National Park by water is available via a wharf which caters for tour boats. No other landing of boats along the foreshores is permitted. Water skiing from the banks of the national park has for many years been prohibited in order to decrease noise, increase safety for swimmers and to provide more foreshore for passive pursuits such as picnicking. Opportunities for swimming in the park are limited by concerns regarding water quality and the lack of safe swimming areas.

Due to the limited size of Cattai National Park and its important natural and cultural resources, a number of other activities that previously occurred on the park also have had to be prohibited, including trail bike riding and long-term camping. Horse-riding has been restricted to trail rides operated by a concessionaire on specified trails on Cattai Park. The location of bridle trails and maintenance requirements will be reviewed to ensure the protection of cultural sites, wildlife and plant communities within the national park and to minimise conflict with other users. The only other concession operation presently operating on the park is the hire of paddle boats on the lagoon immediately behind the Cattai Park foreshores. The 1996 Conservation Plan expressed concerns about the impact and appropriateness of both operations.

At present the public is only permitted to camp on the northern end of the Hawkesbury River foreshore on Cattai Park on school holidays and long weekends, although community and educational groups may be permitted to camp at other

times and in other sites. A new toilet block has been constructed within the foreshore camping area which services both day visitors and campers, however numbered sites are required to reduce the incidence of conflicts between day visitors and campers and to ensure that the facilities are not overcrowded. Vandalism caused by campers is of on-going concern. The option of providing for camping at Hope Farm, either as an addition or alternative to Cattai Park, will be investigated.

- * Cattai Park will provide facilities for large groups while Mitchell Park will cater for smaller groups.
- * The public road system within Cattai National Park will be upgraded and vehicles controlled where necessary by barriers and signs.
- * No public vehicles will be permitted on management tracks or bridle trails.
- * All facilities located on the foreshores will be designed to be flood tolerant.
- * Landing of vessels on the foreshores of the park other than at the wharf will be prohibited.
- * Commercial operations may be permitted on Cattai National Park where:
 - they are in accordance with this plan of management;
 - they will enhance public understanding and enjoyment of the park; and
 - they do not impact on the natural or cultural values of the park.
- * Refreshments may be provided in Cattai National Park:
 - from tea rooms within the Cattai Homestead;
 - from a relocatable kiosk in the Cattai Park picnic areas next to the Hawkesbury River; and
 - from a mobile kiosk in Mitchell Park.
- * Camping will only be permitted in designated camping areas on Cattai Park and Hope Farm.
- Camping at Mitchell Park will be restricted to approved community and educational groups.
- * Horse-riding will be restricted to concession operations on Cattai Park and Hope Farm. No horse-riding will be permitted at Mitchell Park.
- * The impact of horse-riding and other recreational activities on the natural and cultural resources of the national park and park users will be carefully

- monitored. Activities with an unacceptable level of impact will be required to be appropriately modified or cease.
- * To ensure protection of Aboriginal sites, no horse-riding will be permitted along the ridge between the park office and the Cattai Homestead in Cattai Park.
- * A walking track system will continue to be developed to enable visitors to Cattai Park to gain access to recreational sites, areas of scenic quality, cultural sites and a range of vegetation types.
- * Water-skiing from the park foreshores, off-road driving and other activities that cause or are likely to cause unacceptable impacts on the natural and cultural resources or other park users will be prohibited.

Actions

- * Vehicle barriers will be erected where necessary to prevent unauthorised vehicle access to service trails, areas where a hazard exists to people or sites of natural or cultural value, or to protect areas from erosion.
- * Numbered sites will be established in the Cattai Park camping area.
- * The information sheet given to campers staying on Cattai National Park will be reviewed, and regularly updated, to ensure that the conditions and restrictions are appropriate.
- * Hope Farm will be investigated for camping and picnicking. If feasible, an amenities block, tables and barbecues may be provided for visitors.
- * Tree planting will be undertaken at Mitchell Park to separate the foreshore area into small picnic areas.
- * A survey of all bridle trails within the national park will be undertaken to assess their recreational suitability, condition and safety. Those trails that are found to be sub-standard will be either upgraded or realigned by the concessionaire, or closed and allowed to revegetate. Signs will be erected on bridle trails requesting people to stay on walking trails to reduce the risk of horses being startled by hikers and possibly throwing their riders.
- * The gravel access road to Cattai Park will be sealed to provide an allweather road surface.
- * A new park entrance station may be constructed on to the main entrance road to service both Cattai Park and Hope Farm.

- * A tea room may be provided in the Cattai Homestead in accordance with the conservation plan.
- * The existing kiosk in Cattai National Park will be replaced with a more appropriate, but still relocatable, kiosk facility to cater for those visitors to the park using the picnic areas next to the Hawkesbury River.

4.2.3 Interpretation and Environmental Education

Cattai National Park offers a range of natural and cultural resources which could be effectively interpreted to visitors coming to the park. Information not only enhances the enjoyment of visitors but also encourages appropriate visitor behaviour and fosters awareness within the community.

Educational institutions, scouts and community groups with an interest in the natural and cultural resources currently visit the national park. At Cattai Park and Hope Farm emphasis will be placed on the interpretation of the cultural heritage of the area, while Mitchell Park will emphasise interpretation of the natural heritage.

The diversity of vegetation types at Mitchell Park (including 10 different vegetation communities, 5 plant species which are now uncommon in the Sydney region, and a variety of native animals) makes it particularly suitable for field studies by school and university groups. A 4 kilometre walking track system has been developed in Mitchell Park and the National Parks and Wildlife Service in conjunction with the University of Western Sydney (Hawkesbury) has recently constructed a field studies centre in Mitchell Park which will be available for use by university, school and community environmental groups. Groups using the education centre in Mitchell Park will be permitted to camp near the centre and use the amenities in the centre.

- A range of information will be made available to assist visitors to Cattai
 National Park to understand and appreciate its natural and cultural heritage.
- * Interpretive signs will be erected at selected sites within the park.
- * Facilities will be constructed to assist visitors to appreciate the vegetation of the park and view the wildlife in its natural setting.
- * Use of the park by educational groups for study of the natural and cultural environment will be encouraged.

* The field studies centre at Mitchell Park will be available for use by other educational and community groups when not required by the University of Western Sydney.

Actions

- * A walking track will be constructed to Kings Swamp and the Hope Farm mill. Interpretive signs will be erected along the walking track.
- * An interpretation plan will be prepared and implemented for the park.
- * Walking track brochures will be revised and reprinted as required.

4.2.4 Management Operations

Cattai National Park is within the Service's North Metropolitan District but quite remote from the District office at Ku-ring-gai Chase National Park. A visitors centre and office is located in the old cottage near the silos on Cattai Park. A workshop and ranger's residence are located nearby. Two more houses on Hope Farm are used for staff accommodation.

Access arrangements to Cattai National Park are complex and relate to the old titles governing the original properties. A right-of-way to Kilburnie Farm traverses Cattai Park. The access road from Wisemans Ferry Road to this section of the park is also a right-of-way over private property. In addition a number of old tracks remain from previous management of the area, easements for transmission lines go through all three sections of the national park and a gas pipeline traverses Mitchell Park.

Many of the services on the park, including the fibrolite water pipes and electrical wiring of the Cattai Homestead, is old and needs replacing. The water treatment systems on both Cattai Park and Mitchell Park also need upgrading.

Over the years rubbish has been burnt and buried on Cattai Park. Recycling is being introduced to the park and the remaining rubbish will be deposited at local rubbish tips off the park.

- * Cattai Park will continue to be the management centre of Cattai National Park.
- * The right-of-ways across the park will be maintained.

- * The system of management tracks will be reviewed and tracks not essential for management purposes will be closed and revegetated.
- * Each alien tenure will be formalised by way of an easement and licence.
- * Rubbish will be recycled as far possible and the remaining refuse disposed off the park.

Actions

- * The water treatment systems on the park will be upgraded.
- * The fibrolite pipes and wiring in the Cattai Homestead will be replaced.
- * Licences for the AGL pipeline in Mitchell Park and the Prospect County Council power lines will be renegotiated to ensure consistency with this plan.
- * The old rubbish disposal area will be stabilised and revegetated.

5. PRIORITIES FOR IMPLEMENTATION

To assist in implementing this plan of management, the management proposals outlined in the plan have been summarised in the following table.

The actions have been assigned to broad categories which reflect priorities. The allocation of an action to a particular category is based on urgency and strategic planning at corporate, regional and district levels. The orderly implementation of this plan will be undertaken within the annual programs of the Service's North Metropolitan District. The implementation of the program may be affected by the availability of staff and funds and to any special requirements of the Director-General or Minister.

The environmental impact of all development proposals will be assessed at all stages of the development and any necessary investigations undertaken in accordance with established environmental assessment procedures.

Under Section 81 of the National Parks and Wildlife Act, this plan shall be carried out and given effect to by the National Parks and Wildlife Service, and no operations shall be undertaken in relation to Cattai National Park unless they are in accordance with the plan. However, if after adequate investigation, operations not included in the plan are found to be justified, this plan may be amended in accordance with Section 75 of the Act.

HIGH PRIORITY		Plan Reference
*	Prepare fire management plan for the park	4.1.2
*	Prepare and implement weed control and revegetation prog	ıram 4.1.3
*	Prepare and implement feral animal control program	4.1.3
*	Undertake boundary fencing	4.1.3
*	Consult on management of Aboriginal sites	4.1.4
*	Obtain advice on timber artefacts	4.1.5
*	Plant bushes to screen toilet below Cattai Homestead	4.1.5
*	Establish barriers to restrict vehicle access where necessar	y 4.2.2
*	Establish a formalised numbered site system for camping a	rea 4.2.2

	Prepare interpretation plan for park	4.2.3			
*	Upgrade water treatment system	4.2.4			
MEDIUM PRIORITY Plan Referen					
*	Liaise with neighbours regarding retention of adjoining bush	4.1.2			
*	Interpret Hope Farm Mill	4.1.5			
*	Establish volunteer group for Cattai Homestead	4.1.5			
*	Plant trees to separate picnic areas at Mitchell Park	4.2.2			
*	Replace existing mobile kiosk at Cattai Park	4.2.2			
*	Review camping information brochure	4.2.2			
*	Investigate use of Hope Farm for camping and picnicking	4.2.2			
*	Investigate establishment of tea rooms in Cattai Homestead	4.2.2			
*	Examine and rationalise existing bridle trails, erect signs	4.2.2			
*	Revise walking track brochures and interpretive signs	4.2.3			
*	Replace water pipes and wiring on Cattai Homestead	4.2.4			
*	Stabilise and revegetate old tip area	4.2.4			
LOW PRIORITY					
*	Rehabilitate old quarry sites	4.1.1			
*	Undertake fauna survey	4.1.2			
*	Remove barbecue near Cattai Homestead	4.1.5			
*	Replace trees near Cattai Homestead as in photos	4.1.5			
*	Seal gravel access road to the park	4.2.2			

*	Construct new vehicle entry station	4.2.2
*	Construct walking track to Kings Swamp and mill	4.2.3
*	Licence pipelines and powerlines through park	4.2.4

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