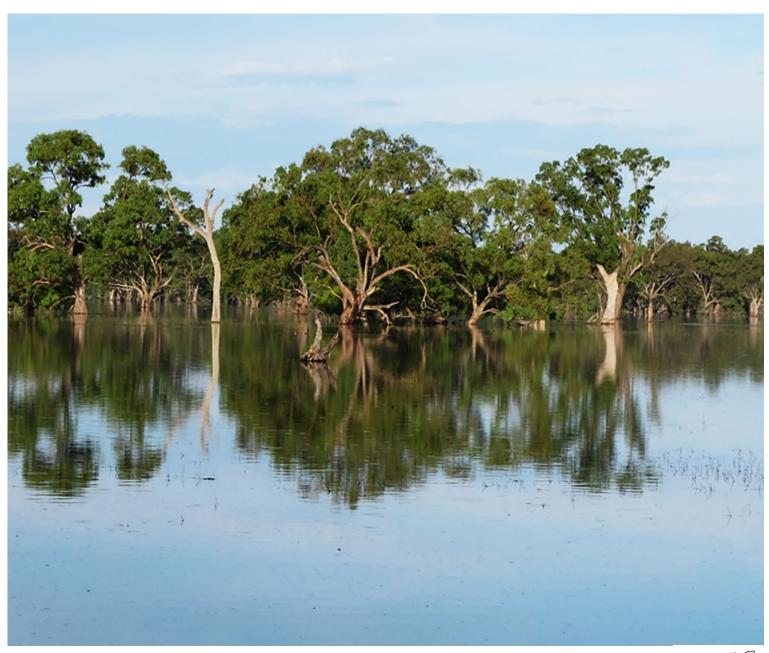




**NSW NATIONAL PARKS & WILDLIFE SERVICE** 

# Doodle Comer Swamp Nature Reserve

Plan of Management





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## How to use this plan

This plan of management directs the management of Doodle Comer Nature Reserve. This plan includes a scheme of operations consistent with section 72AA of the *National Parks and Wildlife Act 1974*. Once the plan is adopted, no management operations can be undertaken that are not consistent with the plan and its scheme of operations. This plan will also apply to any future additions to Doodle Comer Nature Reserve.

Sections 1 to 6 of the plan summarise the reserve's key values, management principles and management considerations. These matters are outlined thoroughly in the Doodle Comer Nature Reserve Planning Considerations document. It is recommended that readers of the plan refer to the planning considerations document for detailed explanations of the park's values and management considerations.

The scheme of operations, in Section 7, is the core part of this plan. It describes the desired outcomes for the reserve's values and actions that National Parks and Wildlife Service (NPWS) proposes to undertake to achieve these outcomes.

The park use regulations tables set out the recreational and commercial activities that are permitted in the reserve and any requirements to undertake these activities, including whether consent must be sought from the NPWS to undertake them.

#### **Acknowledgments**

Doodle Comer Swamp Nature Reserve is in the traditional Country of the Wiradjuri People. This plan of management was prepared by staff of NPWS.

#### **Contact us**

For more information about this plan of management or Doodle Comer Nature Reserve, contact the NPWS Riverina Highlands Area at <a href="mailto:riverinahighlands.npws@environment.nsw.gov.au">riverinahighlands.npws@environment.nsw.gov.au</a>, PO Box 472, Tumut NSW 2720 or by telephone on (02) 6947 7000.

## Our vision for the park

The significance of Doodle Comer Swamp Nature Reserve to Aboriginal people is acknowledged, and Aboriginal culture and enduring connections to Country are supported.

We protect the landscape, culture, native plants and animals and ensure the reserve is a place where people can visit to experience nature.

The reserve is managed as a nationally important wetland supporting native animals and plants, including threatened species and ecological communities.

The integrity of the reserve's natural and cultural values will be maintained and improved into the future.



Photo 1 Flooded river red gum forest. Genevieve Wright/DPE

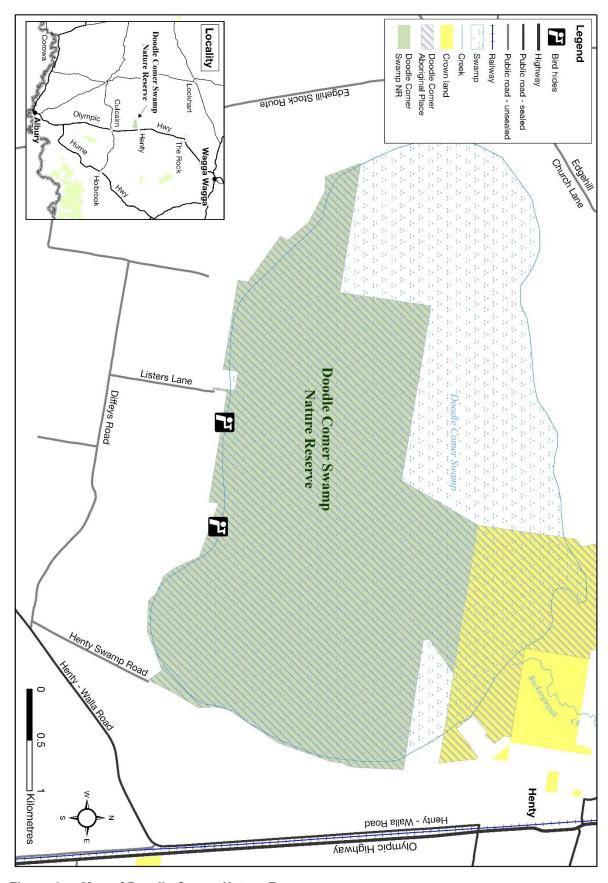


Figure 1 Map of Doodle Comer Nature Reserve

#### 1. Doodle Comer Nature Reserve

Doodle Comer Swamp Nature Reserve (the 'reserve') is located on the outskirts of Henty, midway between Albury and Wagga Wagga in southern NSW (see Figure 1). Doodle Comer Swamp Nature Reserve was reserved under the National Parks and Wildlife Act in 2011 and is approximately 1,099 hectares.

Table 1 The park and its regional setting

Features	Description
Area	1,099 hectares
Reservation date	21 January 2011
Previous tenure	Freehold
Biogeographic region	NSW South Western Slopes

#### Why this reserve is important

Doodle Comer Nature Reserve encompasses about half of the greater Doodle Comer Swamp, an ephemeral wetland. Doodle Comer Swamp is listed in the **National Directory of Important Wetlands**. It is the largest of many swamps and depressions scattered across the plains of the Billabong Creek Valley and is the largest wetland of its type in southern New South Wales. The reserve lies within the NSW South Western Slopes Bioregion.

Doodle Comer Swamp has a relatively unaltered water regime, being in an **unregulated catchment** of Buckargingah Creek from which little water extraction occurs. Natural flow regimes are now uncommon in New South Wales inland wetlands and are of high conservation value.

When inundated, Doodle Comer Swamp attracts large numbers of **waterbirds** that use the swamp for breeding and foraging. When dry, the wetland provides habitat for the threatened bush stone-curlew, listed as endangered in New South Wales. Other threatened animals found include brolga and superb parrot.

The reserve contains several **threatened ecological communities** such as Inland Grey Box Woodland and Sandhill Pine Woodland. A population of the endangered semi-aquatic fern, austral pillwort, was recently discovered in the reserve.

Doodle Comer Swamp is part of the **Country of the Wiradjuri** speaking nation and is part of a larger network of swamps and lagoons across the Riverina that formed a significant part of the cultural landscape, sustaining the Wiradjuri with an extensive range of resources for thousands of years.

A diverse range of **Aboriginal sites** exist in the reserve and surrounding area including burials, burial chambers, modified trees, artefact scatters, an ochre quarry and a stone quarry.

In 2016 Doodle Comer was declared an **Aboriginal place** recognising these values and the wetland's special significance to Aboriginal culture. A large proportion of the Aboriginal place lies within the reserve (see Figure 1).

#### **Management principles**

Development of the objectives, actions and regulations in this plan has been directed by the management principles outlined in the *National Parks and Wildlife Act 1974*.

The National Parks and Wildlife Act requires that a nature reserve be managed to:

- conserve biodiversity, maintain ecosystem function, protect geological and geomorphological features and natural phenomena
- conserve places, objects, features and landscapes of cultural value
- promote public appreciation, enjoyment and understanding of the nature reserve's natural and cultural values
- provide for appropriate research and monitoring.



Photo 2 Bird watching in Doodle Comer Swamp Nature Reserve. Genevieve Wright/DPE

## 2. Protecting the natural environment

Doodle Comer Swamp is an **ephemeral wetland** in a terminal lake. It has a small catchment size and relatively unaltered water regime which is of high conservation value. It is one of only five wetlands in the NSW South Western Slopes Bioregion listed in the *National Directory of Important Wetlands* and the only one included in the National Reserve System.

When flooded, it provides breeding and foraging habitat for waterbirds, amphibians, reptiles, fish and invertebrates. Waterbirds such as ducks, ibis, cormorants, spoonbills and terns have been observed in their thousands. A total of 37 species of native animal have been formally recorded in the reserve, however, anecdotal evidence suggests that many more species occur, particularly waterbirds during periods of inundation. A total of 8 threatened animal species listed under the *Biodiversity Conservation Act 2016* have been recorded in or close to the reserve

When dry, the lakebed provides habitat for the bush stone-curlew, a ground-dwelling bird found in the reserve. Bush stone-curlew numbers have drastically declined throughout south eastern Australia leading to it being listed as endangered in New South Wales. Bush stone-curlews favour areas with sparse ground cover and short grass. Excess build-up of exotic grasses and ground layer biomass reduces their habitat values. Bush stone-curlews are vulnerable to predation by introduced predators such as foxes and cats, and ongoing fox control programs are undertaken in the reserve.

The **woodlands** fringing the reserve contain small areas of several threatened ecological communities, including White Box – Yellow Box – Blakely's Red Gum Woodland and Inland Grey Box Woodland. The threatened plant, austral pillwort, is present in the reserve. Surveys have recorded 82 native plant species in the reserve.

Much of the lakebed is covered in a forested wetland community, dominated by **river red gum**. Extensive stands of river red gum regrowth have established at the high-water mark of the swamp following the removal of livestock grazing. Many of these stands are very dense and lack structural diversity. Competition for resources is often strong in such stands which can result in negligible growth rates and prevent recruitment of new plants, delaying the development of habitat features characteristic of healthy red gum forests such as spreading crowns, hollow-bearing trees, structural diversity and coarse woody debris.

Doodle Comer Swamp contains the New South Wales (Mitchell) landscape called Murrumbidgee-Tarcutta Lakes, Swamps and Lunettes. This landscape was not represented in the National Reserve System until acquisition of the reserve.

There are several **granite outcrops** in the swamp. Such outcrops are a feature of the Lachlan Fold Belt and are formed by sediment being layered down over time, but not long enough to cover some protruding rock formations. These geological features are considered unique where they extrude from the swamp floor and are a part of the reserve's Aboriginal cultural values.

**Threats** to the reserve's natural values include any significant alterations to the natural water flow regime, too-frequent burning, single-age river red gum regrowth stands, climate change, infestation by carp and other aquatic pests, terrestrial and aquatic weeds and feral predators.

## 3. Looking after our culture and heritage

Doodle Comer Swamp Nature Reserve is within traditional **Wiradjuri** Country. Wetlands such as Doodle Comer Swamp have always been a significant resource and cultural gathering place for Aboriginal people. In the reserve and surrounding area there are a diverse range of Aboriginal sites, including burials, modified trees, artefact scatters, an ochre quarry and stone guarry.

Given the availability of a large tract of still water and the natural resources that come with it, the area is likely to have experienced a high level of Aboriginal occupation. The swamp would have provided the Wiradjuri People with an extensive range of **resources**, including shellfish, fish, kangaroos, emus, fruit, nuts, yams, daisies, wattle seeds, tubers, ducks, swans, other waterbirds and their eggs.

Doodle Comer is an important link in a broader significant **cultural landscape** containing a series of swamps within southern Wiradjuri Country. In recognition of this, the swamp has been declared an Aboriginal place under the National Parks and Wildlife Act. The Aboriginal place encompasses the whole nature reserve and extends to the north (see Figure 1).

**Threats** to cultural values include management activities that can cause environmental disturbance, and the loss of connection between community and Country. Degradation of the natural resources of the area would also represent a loss of cultural values.



Photo 3 Rocky outcrops are an unusual feature of the reserve, and important to Aboriginal people. Genevieve Wright/DPE

## 4. Providing for visitor use and enjoyment

Before reservation, the swamp was freehold land with limited public access. When the swamp was inundated, landholders provided permission for it to be used for recreational water pursuits such as waterskiing.

When flooded, the swamp attracts significant birdlife and opportunities for **waterbird watching**. Furthermore, the site lends itself to this activity because of its proximity and accessibility to visitor accommodation in Henty.

Wiradjuri People have many stories about birds from their connection and use of such wetlands within this landscape. Celebration and connection with this culture will be offered as an important component of the visitor experience at Doodle Comer Swamp Nature Reserve. There are other **passive nature-based opportunities** in the reserve consistent with its reservation as a nature reserve, such as bushwalking and use of non-motorised watercraft, such as canoes.

**Public vehicle access** is provided by two roads to the south of the reserve: Henty Swamp Road and Listers Lane (see Figure 1). Bird hides are located near these access points. Non-motorised watercraft can access the swamp from these locations.

Directional and interpretative signage has also been installed and the reserve is promoted within the Henty community and more broadly via the National Parks and Wildlife Service visitor website and other channels.

**Threats** to the reserve's recreational values include incursion of weeds, domination of carp in the waterway, domination of woody regrowth, and any changes to water inflows due to climate change or upstream water management.

The park use regulations tables in Section 8 set out the recreational and commercial activities that are permitted in the reserve and any requirements to undertake these activities.

#### 5. Park infrastructure and services

NPWS infrastructure for the reserve includes bird hides, signage, boundary fences, internal fences, boundary gates and access roads.

## 6. Non-park infrastructure and services

There are no non-NPWS infrastructure or services within the reserve.

### 7. Scheme of operations

The scheme of operations in Table 2 is consistent with section 72AA of the National Parks and Wildlife Act. It generally details the desired outcomes for the park's values and actions that NPWS proposes to undertake to achieve these outcomes. Actions in the scheme of operations may contribute to more than one desired outcome (such as threat mitigation) but are only listed once against the most significant outcome to avoid replication.

A management priority has been assigned to each action to guide the allocation of resources.

- Very high Loss or significant decline in the condition of the park value is likely if action
  is not taken or significant improvement in the condition of the value is likely if action is
  taken.
- High Decline in the condition of the park value is likely if action is not taken or improvement in the condition of the value is likely if action is taken.
- **Medium** Some decline in the condition of the park value is possible if action is not taken **or** some improvement in the condition of the value is possible if action is taken.
- **Low** While decline in the condition of the park value is not likely in the short term, the action would help build the long-term resilience of the park value.

NPWS' performance in meeting the **desired outcomes** in the scheme of operations will be measured through the periodic assessments. Performance in delivering the **actions** in the scheme of operations will be measured through regular audits of plans of management.

The scheme of operations sets strategic objectives and actions that may include the development and delivery of subsidiary plans. Subsidiary plans enable adaptive responses to new information or changed circumstances, such as for pests, weeds, fire and recreational activities, as required by NPWS policy. Assessments of performance and review will be used to inform adaptive management in these subsidiary plans as well as any required adjustments and improvements to future plans of management for the park.

The implementation of actions set out below may be subject to statutory responsibilities under the National Parks and Wildlife Act and other relevant state and Commonwealth legislation, including environmental impact assessments and approvals. Further community consultation on the proposed actions may be undertaken as part of these processes.

Information on popular recreational or commercial activities that are permitted in the park is provided in the park use regulations tables in Section 8. More detailed information on other activities is available on the NPWS website.

Table 2 Scheme of operations

Desired outcome	Action	Priority			
Protecting the natural environment					
The condition of priority     habitats and communities is     improved	<ul> <li>Implement relevant actions in the Biodiversity Conservation Program, threat abatement plans and recovery plans for threatened plant species and ecological communities.</li> </ul>	High			
	<ul> <li>Seek external funding for woodland and wetland rehabilitation activities.</li> </ul>	High			
	<ul> <li>Plan and deliver woodland and wetland rehabilitation projects as per external funding arrangements.</li> </ul>	High			
	<ul> <li>d. Undertake ecological thinning of selected stands of river red gum regrowth to enable more rapid establishment of large habitat trees.</li> </ul>	Medium			
	<ul> <li>e. Trial an introduction of common reed into the wetland ecosystem.</li> </ul>	Medium			
	<ol> <li>Monitor salinity and sodicity in the reserve.</li> </ol>	Low			
The populations and diversity of native animals and plants are maintained	<ul> <li>a. Implement relevant actions in the Biodiversity Conservation Program, threat abatement plans and recovery plans for bush stone-curlew and other threatened animal species.</li> </ul>	High			
	b. Manage excess build-up of ground layer biomass and exotic grasses to maintain habitat conditions for bush stone-curlew. Livestock grazing may be utilised as a tool to reduce ground layer biomass when soil conditions are dry, with appropriate approvals and monitoring by NPWS.	Medium			
	<ul> <li>c. Encourage and support monitoring and research into bush stone-curlew and other threatened species and their habitat.</li> </ul>	Low			
	<ul> <li>d. Support and/or undertake fauna surveys in the reserves.</li> </ul>	Low			
	e. Implement pest programs in accordance with pest management strategies relevant to the reserve. Primarily target species whose removal will provide the greatest benefit to threatened and other native species and the protection of cultural heritage values.	High			
	f. Seek out, contribute to and participate in any external projects aimed at removing carp from the swamp and its catchment.	Low			

Desired outcome	Action	Priority			
The natural hydrological flows into the wetland are protected	a. Observe activities in the wider catchment and consult Greater Hume Council and natural resource management agencies regarding the protection of the catchment's natural hydrology.	Medium			
Fire is managed as a natural part of the reserve to	<ul> <li>a. Implement the reserve fire management strategy.</li> </ul>	High			
conserve and maintain its wetland and woodland ecosystems while also protecting park infrastructure and neighbouring assets	<ul> <li>Revise and adjust the fire management strategy as required to take account of new information and emerging threats over time.</li> </ul>	High			
	<ul> <li>c. Participate in strategic fire planning for the region through the Bush Fire Management Committee.</li> </ul>	Medium			
5. The resilience of the reserves to climate change is enhanced	<ul> <li>a. Undertake ongoing reviews of the reserve's fire, pest and weed management programs to increase the reserve's capacity to cope with the additional stresses of climate change.</li> </ul>	Medium			
Looking after our culture and he	ritage				
There is increased involvement of Aboriginal people in park management	<ul> <li>a. Establish an ongoing and regular forum or partnership arrangement for Aboriginal involvement in park management in consultation with the Aboriginal community.</li> </ul>	High			
7. The local Aboriginal community has access to Country to maintain, renew or develop cultural connections and practices,	<ul> <li>Support Aboriginal community access to Country to maintain, renew or develop cultural connections and practices. where consistent with maintenance of the natural values of the reserves.</li> </ul>	High			
The condition of Aboriginal heritage sites, places and cultural values is maintained	<ul> <li>Contribute to the development and revision of planning requirements for Doodle Comer Aboriginal Place.</li> </ul>	High			
	<ul> <li>b. Undertake protection and enhancement measures consistent with the Plan of Management for Doodle Comer Aboriginal Place, to the extent enabled by funding.</li> </ul>	Medium			
Cultural values and community aspirations are not compromised by other plan actions	<ul> <li>Ensure that implementation of other plan actions does not compromise cultural values and community aspirations for the reserve.</li> </ul>	Medium			
Providing for visitor use and enjoyment					
10. Public access allows for nature-based activities which complement appreciation and	<ul> <li>Develop and maintain an unmarked walking track along the wetland as per Class 6 (AS 2156) standards.</li> </ul>	Medium			
understanding of reserve values	<ul> <li>Allow low-key, nature-based recreational activities in the reserves</li> </ul>	Medium			

Desired outcome	Action	Priority
	consistent with park use regulations in Table 3.	
11.There is increased awareness among visitors and the community about the reserve's Aboriginal culture and heritage	<ul> <li>Integrate Wiradjuri language, cultural history and knowledge of local wetlands into the visitor experience materials, as appropriate and agreed with the local Aboriginal community.</li> </ul>	High
12. There is increased awareness among visitors and the community about the reserve's historic and shared heritage	<ul> <li>In consultation with Henty community, add shared cultural history and knowledge of the local wetlands into visitor experience materials.</li> </ul>	Medium
Park infrastructure and services		
maintained to required standards to support protection of park values and assets	<ul> <li>Do not create any new trails within the reserves.</li> </ul>	High
	<ul> <li>Manage access to the reserves in consultation with neighbouring landholders to prevent unauthorised entry.</li> </ul>	Medium
	<ul> <li>c. Identify and remove internal fences that are no longer required.</li> </ul>	High

## 8. Park use regulations

#### **Recreational activities**

Some recreational activities can be undertaken in the reserve without consent from park managers. Other activities can occur if consent is provided by NPWS. All activities that occur in the reserve are subject to relevant policies and legislation.

Conditions may be applied to ensure an activity is undertaken safely and to minimise environmental risks and risks to other users. Consent may be refused after consideration of the proposed activity and it's likely environmental, visitor safety and park management impacts.

Activities may be subject to operating conditions or limits from time to time. For example, access to parts of the reserve may be closed during periods of bushfire risk, bad weather or maintenance or improvement works.

Activities not shown in 0may also be regulated by signage within the reserve or by consent.

Information regarding activities that require consent and obtaining consent is available on the NSW national parks visitor website or by contacting the relevant NPWS office (contact details at the front of this plan).

Table 3 Park use regulations and recreational activities

	Type of activity	Allowed	Notes and exceptions
BBQ	Barbecues – portable	Yes	Portable gas and liquid stoves are allowed, except during total fire bans. Solid fuel fires are prohibited.
<b>A</b> .	Camping	No	Camping is prohibited due to risks to conservation values and limited facilities and access opportunities. Accommodation, including camping, is available in nearby Henty.
<b>₽</b>	Cycling	No	No park roads or formal management trails exist within reserve. Cycling is not allowed on walking tracks or off-trail.
M	Dog walking	No	Dogs that are not assistance animals are not permitted in nature reserves in New South Wales. Assistance animals are allowed in all sections of the reserve, provided they are kept under effective control at all times with a leash or harness.
<b>&gt;</b>	Fossicking	No	Fossicking is not permitted in nature reserves or Aboriginal places in New South Wales due to potential environmental and cultural heritage impacts.
	Four-wheel driving	No	No park or public roads exist within the reserve.

	Type of activity	Allowed	Notes and exceptions
	Group gatherings – non-commercial (e.g. family or social gatherings, school groups)	Yes	Consent is required for groups of more than 40 people, as per the National Parks and Wildlife Regulation.  Consent is required for larger groups to ensure limited available space can be managed.
in	Horse riding	No	Horses are not permitted in nature reserves in New South Wales, except on park or public roads of which there are none in the reserve.
181	Drones	Yes	Consent required.  Not permitted to be launched where there are potential risks to fauna values, such as waterbird breeding events, or impacts to other reserve users.  Drones may be used for park management purposes and may be authorised as part of a commercial filming consent.  The use of drones is subject to relevant civil aviation regulations.
o <del>r</del> o	Motorcycling and trail bike riding	No	No park or public roads exist within the reserve.
**	Walking	Yes	
منو	Water-based recreation – non-motorised (e.g. fishing and canoeing)	Yes	Other legislative requirements may apply to these activities such as fish catch limits and use of certain types of recreational or safety equipment.
<b>ﷺ</b>	Water-based recreation - motorised (e.g. boats equipped with outboards, and jet-skis)	No	Motorised water-based recreation is prohibited due to conservation risks and potential risks to other users.
	Wood fires	No	Not allowed due to the risk of bushfires and the potential damage caused by collection of timber from within the reserve.

#### **Events, function and commercial activities**

The following table lists some common event, function and commercial activities that may be permitted in the reserve with consent from NPWS or under a licence or lease. It is not a definitive or exhaustive list of permitted commercial or other activities. Information on relevant policies, required approvals and fees is available on the NPWS website.

Approval to use supporting equipment, such as marquees, amplified sound or drones, will be determined on a case-by-case basis subject to an assessment of potential impacts on park values and other park users. Use of any supporting equipment will be subject to consent conditions.

Under NPWS policy, commercial operators may be required to support understanding of cultural heritage conservation and management and promote respect for Aboriginal culture and sites. This may include requirements to consult with Aboriginal communities to develop appropriate material and information for participants.

Table 4 Park use regulations – Events, function and commercial activities

Type of activity	Group size	Type of approval required
Public events (e.g. fun runs, commemorative ceremonies open to public participation)	All groups irrespective of size	Consent
Commercial activities including tours, filming and photography	All groups irrespective of size	Licence or lease
Non-commercial, organised (e.g. club-based) events	All groups irrespective of size. Generally limited to a maximum size of 16 unless special conditions apply	Consent
All other private functions involving groups of more than 40 people	All groups of 40 or more	Consent
Research (scientific and educational, and related to conservation or park management)	All groups irrespective of size	Consent or licence

## 9. More information

- Doodle Comer Swamp Nature Reserve Planning Considerations
- Host an event
- National Parks and Wildlife Service