



NORF'K AILEN RIJENL KAUNSL

PLAN OF MANAGEMENT

WAN PLAEN 'MAENEJMENT



TWO CHIMNEYS RESERVE

TUU CHIMNI RESERW

2020 - 2030

Foreword

The Norfolk Island Council of Elders considers it important that any Plans of Management for Public Reserves take into account all of the following points in line with Norfolk Island's Cultural Heritage, both tangible and intangible:

1. The importance of the Public Reserves to Norfolk Islanders for recreational activities (fishing, swimming, walking, picnics etc.).
2. The importance of Public Reserves for cultural activities like picking hihis etc.
3. The importance of the natural environment on Norfolk Island to Norfolk Islanders.
4. The importance of endemic/native plants to Norfolk Islanders for traditional craft and other cultural activities, and the importance of these activities continuing.
5. The importance of native birds, including seabirds, to Norfolk Islanders.
6. The impact of noxious weeds and pest animals like rats, cats, swamp hens and feral chickens, and the importance of controlling these.
7. The use of licensed cattle on roads, commons and other designated grazing areas to assist in the control of grass.

The Pitcairn settlers arrived on Norfolk Island in 1856 as a distinct ethnic group, bringing with them a unique heritage, culture and language. They were the first people to settle Norfolk Island as a permanent homeland.

Norfolk Islanders have a very strong cultural connection with the unique environment on the Island, and they are aware of the impact pest animals and noxious weeds can have on the natural and cultural values of the Island.

Norfolk Islanders have maintained many traditional customs, including weaving of hats, baskets and other items from native flax, Moo-oo and Bulrush ('drain flax'). These plants are not as abundant as they once were due to modified land use, and it is important that the Plans of Management for Public Reserves contain management actions to protect or increase the abundance of these plants to ensure these traditional customs can continue.

Other cultural activities that are still very important to Norfolk Islanders today include picking hihis and collecting crabs and other traditional food from the sea. In the past, Norfolk Islanders have relied upon the fruits from a range of exotic plants (including yellow and red guava, lemon and taro), and it is pleasing to see that the picking of exotic fruits can continue in Norfolk Island Public Reserves.

The Public Reserves on Norfolk Island are important to Norfolk Islanders for recreational activities such as fishing, swimming, walking and picnics. It is important that the Norfolk Island people continue to have access to the Public Reserves on Norfolk Island and that these activities can continue.

The Norfolk Island people recognise the need to protect and conserve Norfolk Island's natural and cultural resources. The natural environment and cultural charm of Norfolk Island are increasingly valuable commodities that must be managed appropriately in the face of increasing tourism and development pressure.

Norfolk Island Council of Elders

Forwad

De Norf'k Ailen Kaunsl 'Eldas thort es importantan fe eni Plaen 'Maenejment fe dem Pablik Reserw tek intu akaunt orlii point in lain lorngfe Norf'k Ailens Kalcharl Heritej, dem yu el sii endem yu kaant:

1. De importens 'dem Pablik Reserw fe Norf'k Ailen salan yuuset (fishen, naawien, werken, haewen 'piknik endem kaina'thing)
2. De importens 'dem Pablik Reserw fe orlem kalcharl thing yuusa duu simmes piken 'hihi endem
3. De importens 'luken orn Norf'ks naetrl said fe Norf'k salan
4. De importens 'orl auwas plaants tu Norf'k salan fe auwas tradishenl werk ena taeda kalcharl thing fe duu, en hau important tu orl aklan fe kiip ii thing gwen
5. De importens 'orl auwas nietew berd, enem siiberd, tu Norf'k salan
6. Wieh 'nokshas wiids ena pest simmes 'raet, keht, taalaberd enem wail faul el efekt ieh ailen, en hau important fe kontroel dem
7. Yuusen em laisens kaetl orna roed, ornaa koeman enem taeda said fe dem griez fe haelp in kontroelen 'graas.

Dem Pitkern salan kam tu Norf'k in 1856 es wan distinct ethnic gruu, fetchen lorngfe dem, dems yuuniik heretij, kalcha ena laengwij. Dem es de fas salan fe yuus Norf'k aes dems hoem fe aewa.

Norf'k salan gata riel strorng kalcharl konekshan tu de yuuniik envairanment 'dems alien en dem noe wathen pest aeneml ena nokshas wiids gwen haew orn de naechrl en kalchrl vaelyu 'dieh alien.

Norf'k salan bin kiipap plenti dems tradishenl kastam, simmes wiiwen 'haet, basket ena taeda thing fromem nietew flaks, mu-uu ena bulrush (drienflaks). Nor gat mach 'dii plaants es bin yuus kos 'chienj in wieh yuusen a laen, en es importantan fe dem Plaen 'Maenejment 'dem Pablik Reserw fe haew ina wieh fe kiipap ala groe de namba 'dii plaants fe miek shua orlii tradishenl kastam el kiip gwen.

Taeda kalchrl thing Norf'k salan duu stil es importantan fe Norf'k salan des dieh simmes piken 'hihi, ketchen 'krarb ena taeda tradishenl wetls auta saf. Lorng taim 'goe Norf'k salan bin el depen orna fruu fram wan rienj 'eksotik plaants (simmes 'yaela ena red gorwa, leman ena taala), enes gudan fe si stil el pik 'eksotik fruu auta dem Pablik Reserw.

Es importantan fe haew 'Pablik Reserw orn Norf'k soe Norf'k salan el kiip duwen dem thing simmes fishen, naawien, werken en haewen 'piknik. Es importantan fe Norf'k salan el kiip yuusen ii Pablik Reserw soe orlii praektes el kiip gwen.

Norf'k salan noe haew 'lukaut for, protect en kiip Norf'ks naechrl ena kalchrl resors. De naechrl ena kalchrl chaam 'Norf'k kamen mor n mor vaelubl en haew 'luk aafta et proepli aes tuares ena dewelapment groe biga.

Norf'k Ailen Kaunsl 'Eldas

Norfolk Language translated by Gaye Evans

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1 Introduction

1.1 Reserve Description and location

Two Chimneys Reserve is located on the east coast of Norfolk Island and has a total area of 14.04 hectares (Figure 1). The Reserve has remnant coastal forest with mature Norfolk Island Pine (*Araucaria heterophylla*) and White Oak (*Lagunaria patersonia*), with significant recent regeneration of Pines since stock grazing was removed some years ago.

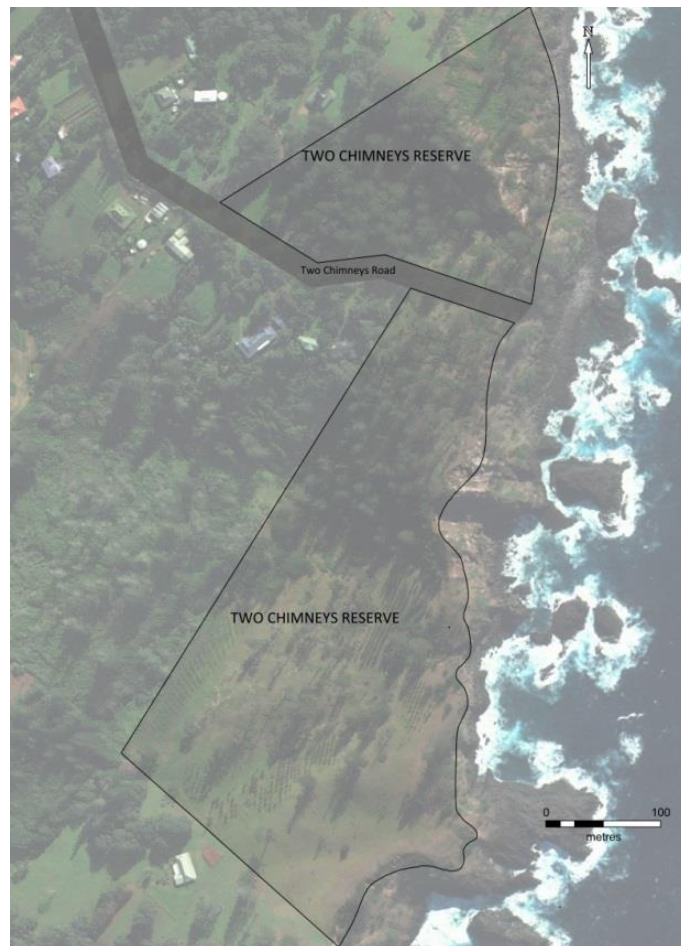


Figure 1. Two Chimneys Reserve Boundaries

1.2 Heritage listing, Public Consultation and Planning Framework

Two Chimneys Reserve was proclaimed a Reserve under the Commons and Public Reserves Act 1936 on 16 December 1960 for the purpose of a “common”. The Reserve was listed on the Register of the National Estate on 21 October 1980.

Two Chimneys Road Reserve extends 95.5m from the north-east corner of Portion 20h2 through the Reserve to the ‘top of cliff’. In reality, the land falls steeply to the sea from Portion 20h2 and Two Chimney Road does not go beyond that portion. That part of Two Chimney Road Reserve between the north-east corner of Portion 20h2 and the top of cliff should be incorporated into Two Chimneys Reserve.

The seaward boundary of the Reserve is presently 'top of cliff'. To be practical and also consistent with the seaward boundaries of other reserves, the seaward boundary of Two Chimneys Reserve should be changed to 'high water mark'.

The RNE was replaced on 1 January 2004 by a National Heritage List, which recognises and protects places of outstanding heritage to the nation, and the Commonwealth Heritage List, which includes Commonwealth owned or leased places of significant heritage value.

Two Chimneys Reserve was included on the Norfolk Island Heritage List in 2002 and the Commonwealth Heritage list on 22 June 2004.

The *Norfolk Island Plan 2002* states:

'The intent of the Conservation Zone is to:

(a) provide a very limited range of low intensity and low impact use or development opportunities in the areas under this zone that are considered to have very high natural and/or heritage conservation values;

(b) ensure that the areas within the Conservation Zone that have very high natural conservation values continue to provide the aesthetic backdrop for Norfolk Island and continue to provide the open space and wilderness habitat that is vital to life systems on the Island;

(c) include land between the Top of Cliff as shown on the Official Survey of Norfolk Island and the Mean High Water Mark. The areas under this zone are considered to have high natural conservation values; and

(d) ensure that the areas within the coastal portion of the Conservation Zone, to which the Coastal Environment Provisions apply in accordance with clause 9A, will be quarantined from built forms of use or development to ensure safety and to maintain cliff and foreshore stability.

The *Norfolk Island Plan 2002* also states:

'The intent of the Open Space Zone is to:

a) provide a limited range of low intensity and low impact use or development opportunities within areas that have natural, cultural and heritage values that should be maintained;

b) provide the open space and wilderness habitat that is vital to life systems on Norfolk Island; and

c) provide land that may buffer certain incompatible uses.'

The *Public Reserves Act 1997* states that each of the Norfolk Island Public Reserves will have a plan of management. The plans must promote the objects of the Act which are 'to protect and conserve public reserves so as to —

(a) promote the conservation of the natural environment and landscape beauty of Norfolk Island;

(b) promote the conservation of the heritage of Norfolk Island; and

(c) preserve the way of life and the quality of life of the people of Norfolk Island.'

The first plan of management for Two Chimneys Reserve was made in 2003. In 2017, the Plans of Management for all Norfolk Island Public Reserves were placed on public display. The following comments were received referring specifically to Two Chimneys Reserve:

- Keep traffic off the native tree roots in this Reserve. Perhaps close to traffic and make this a walking track. A parking area could be provided at the end of the asphalt, with appropriate signage to encourage visitors to walk through the area.

- A walkway is possible from end of Martins Rd through to Two Chimney Rd. In conjunction with a Ball Bay Trail, this would provide a great Norfolk Walk experience around the SE coastal quadrant of the Island virtually only traversing public land.
- Better creek management is needed
- Suggest landscape plantings in the southern section of reserve near Martins Rd. Further planting of seabird habitat is needed.

The following comments were received from multiple respondents with regard to the Reserves in general:

- No expansion of cattle grazing in the reserves.
- Protect current and proposed rehabilitated areas from cattle grazing.
- Native replanting is needed.
- Better management of waterways, including work to desilt the drainage channels in Kingston area to prevent coral deaths.

This is the first full revision of the Plan of Management for Two Chimneys Reserve

As part of the 2017 consultation process, the Public Reserves Advisory Committee also undertook a survey on Cats on Norfolk Island. The information gathered from this survey is outlined in the Pest Animals section of this Plan of Management (Section 3.2, Page 15).

The Draft Plan of Management for Two Chimneys Reserve was prepared in 2019 and released for comment and feedback from the community over a 56-day period, which closed in December 2019. Feedback received during the 56 day Public Exhibition Period has been taken into account as part of the preparation of the Two Chimneys Reserve Plan of Management for 2020-2030.

The Federal *Environmental Protection and Biodiversity Conservation Act 1999 (Cth)* applies to Norfolk Island and is relevant in a number of ways to the management of the public reserves. In particular however, the Act recognises a number of native and endemic plant and animals as threatened species. These species are afforded protection under the Act, and are the subject of the Norfolk Island Region Threatened Species Recovery Plan.

2 Significance of Two Chimneys Reserve

Two Chimneys Reserve has significant geological, biological conservation, and community values. It provides opportunities for recreation for Reserve visitors, and contains habitat for native coastal flora and fauna. The permanent stream and sheltered valleys behind the coastal cliffs would have once supported a range of diverse vegetation communities that are now rare on the Island.

Grazing over a long period of time severely impacted upon the diversity of native flora and fauna in the Reserve, however the recent exclusion of stock from the majority of the Reserve has resulted in significant natural forest regeneration.

The Reserve is an ideal location to observe White Terns (*Gygis alba royana*) nesting in the remnant forest. As the regenerating native forest matures, the area may again be used by colonies of White-capped Noddies (*Anous minutus*) and other birds.

2.1 Geology and Landform

Two Chimneys Reserve is characteristic of Norfolk Island with rolling hills and deep valleys. Cliffs up to 50m high occur along much of the coastline of the Reserve, but in part of the southern section of the Reserve a relatively wide valley slopes moderately gently to the sea.

A small meandering creek bisects the southern section of the Reserve, restricting vehicular access through the Reserve. Another deep gully dissects the northern section of the Reserve (Figure 2).

The basalt lava flows underlying Two Chimneys Reserve have been weathered to form deeply profiled ferrosols, or rich clay loams, which are porous, highly erodible and subject to mass movement. This natural fertility of the soil combined with high average annual rainfall originally supported a dense rainforest.

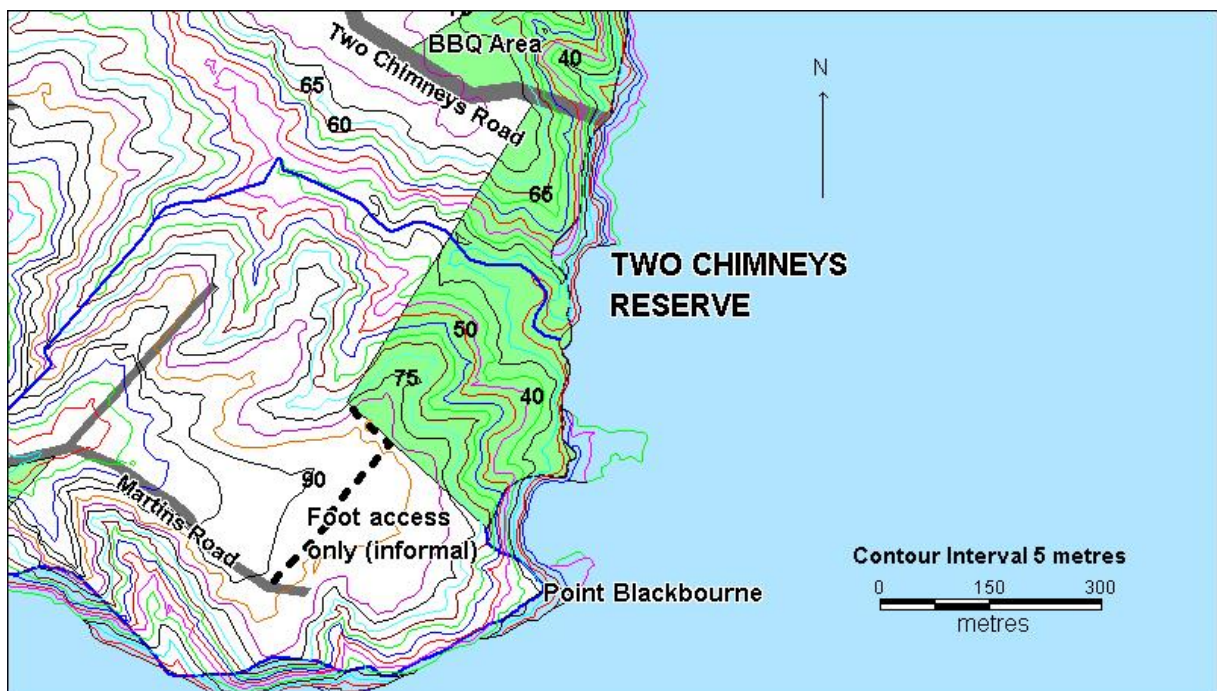


Figure 2. Two Chimneys Reserve landform

2.2 Flora

The Reserve contains many old Pines (*Araucaria heterophylla*) with much recent regeneration of Pines since stock grazing was removed some years ago. Remnant trees also occur in the picnic area, where six forest tree species occur. The northern valley supports much African Olive (*Olea europea subsp. cuspidata*), with some native hardwoods in the upper valley. Many natives have been planted in the vicinity of the picnic area, and this has greatly increased the diversity of plants in the Reserve (Mills 2017) (Figure 3).



Figure 3. Natives trees and shrubs been planted in the vicinity of the picnic area.

The cliffs support typical coastal vegetation, dominated by Salt Couch (*Sporobolus virginicus*), with Knobby Club-rush (*Ficinia nodosa*), Pigface (*Carpobrotus glaucescens*), Creeping Brookweed (*Samolus repens*), Lobelia (*Lobelia anceps*), Chaff-flower (*Achyranthes aspera*) and wind-sheared shrubs of White Oak (*Lagunaria patersonia*). The threatened herb Yellow Daisy (*Senecio australis*) grows in several places on the edges of the cliffs, as does the rare Onion Orchid (*Microtis unifolia*). A small population of Melky Tree (*Excoecaria agallocha*) occurs on the coast at the mouth of the northern valley. The edges of the creek in the middle valley supports a few native plants, including River club-rush (*Schoenoplectus tabernaemontani*), Common Spike-rush (*Eleocharis acuta*), Lobelia (*Lobelia anceps*), Isolepis (*Isolepis cernua*) and the Coastal Fern (*Asplenium difforme*) (Mills 2017).

Sections of cliff and sheltered valleys support remnant vegetation with groundcover mostly dominated by Pigface (*Carpobrotus glaucescens*) with pockets of Native Coastal Lily (*Dianella intermedia*), Native Flax (*Phormium tenax*), White Oak (*Lagunaria patersonia*), and Moo-oo (*Cyperus lucidus*), and

scattered individuals of species such as Chaff-Flower (*Achyranthes aspera*) and Coastal Coprosma (*Coprosma baueri*) (Figure 4).



Figure 4. The Endangered Coastal Coprosma is found within the Reserve.

2.2.1 Significant Plant Species

Norfolk Island Regional Council has a responsibility under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) to appropriately manage flora and fauna species listed under the EPBC Act within Norfolk Island Public Reserves and other areas of Council managed land.

In his 2017 targeted search of Two Chimneys Reserve for threatened species, Mills (2017) recorded a number of listed threatened and significant species (Tables 1 and 2). Notes on the most important species from Mills (2017) appear below the Tables 1 and 2.

Table 1. Threatened plant species recorded within Two Chimneys Reserve by Mills (2017) and their conservation status and abundance.

Name	Habit	Significant due to EPBC ¹ listing	Number of Plants (counted)
Coastal Coprosma (<i>Coprosma baueri</i>)	Shrub	Endangered	2
Ti (<i>Cordyline obtecta</i>) (P)	Tree	Vulnerable	26
Broad-leaved Meryta (<i>Meryta latifolia</i>) (P)	Tree	Critically endangered	13
Pop Wood (<i>Myoporum obscurum</i>) (P)	Tree	Critically endangered	3
Beech (<i>Myrsine ralstoniae</i>) (P+)	Tree	Vulnerable	16
Oleander (<i>Pittosporum bracteolatum</i>) (P+)	Tree	Endangered	1
Sharkwood (<i>Dysoxylum bijugum</i>) (P)	Tree	Vulnerable	1
Yellow Daisy (<i>Senecio australis</i>)	Herb	Vulnerable	497

P – planted; P+ - natural and planted

¹ Environmental Protection and Biodiversity Conservation Act 1999 (Cth)

Table 2. Other significant plant species recorded within Two Chimneys Reserve by Mills (2017) and their conservation status and abundance.

Name	Habit	Number of Plants (counted)	Number of Plants (estimated)
Dianella (<i>Dianella intermedia</i>) (P+)	Herb		100s
Melky Tree (<i>Excoecaria agallocha</i>) (P+)	Tree	1	
Onion Orchid (<i>Microtis unifolia</i>)	Orchid	7	

P – planted; P+ - natural and planted

Coprosma baueri

Two natural plants of this shrub species were found growing near the top of a coastal cliff in 2017 (Figure 5). These were the same plants seen in 2007 (Mills 2007). The species is very rare as wild plants on Norfolk Island, although it is relatively common on Phillip Island.

Senecio australis

This coastal species is quite common in the Reserve, growing on the cliff tops on sites with much exposed soil (Figure 6). Elsewhere, the dense grass growth does not allow the species to grow. A total of 291 plants were counted at five sites; no doubt further plants would be found if the areas not visited were searched. This species has increased since stock grazing was removed in 2007.



Figure 5. Two struggling *Coprosma baueri* plants in Two Chimneys Reserve (Image © Kevin Mills).



Figure 5. The largest plant of *Senecio australis* observed in Two Chimneys Reserve. (Image © Kevin Mills).

Microtis unifolia

This small ground orchid is rare on Norfolk; it also occurs on Phillip Island. Two sites containing seven flowering plants were found in the far northern part of the reserve (Figure 7).



Figure 7. The rare Onion Orchid (*Microtis unifolia*) is found within Two Chimneys Reserve (Image © Kevin Mills).

2.3 Fauna

White Terns (*Gygis alba*) and White-capped Noddies (*Anous minutus*) nest in the Reserve during the summer months along with Ghostbird (Wedge-tailed Shearwater) (*Ardenna pacifica*) and Red-tailed Tropicbird (*Phaethon rubricauda roseotincta*).

Remnant vegetation in the Reserve supports native forest birds and invertebrates. The value of this native forest habitat will increase as it matures and as native vegetation establishes over more of the Reserve.

The endemic Long-billed White-eye (Grinnel) (*Zosterops tenuirostris*), which is restricted to forest habitats, was recorded in the Reserve during the 1978 Royal Australasian Ornithologists Union Census.

There have been no comprehensive surveys of terrestrial vertebrates or invertebrates in Two Chimneys Reserve.

In 2019, Norfolk Island Regional Council and Norfolk Island National Park worked together to install nest boxes to increase nesting sites for the Norfolk Island Morepork in Two Chimneys, Ball Bay and Bumbora Reserves. These nest boxes will be monitored regularly to determine if they are being used for breeding by the Morepork, and to ensure they are not occupied by pest species such as Crimson Rosellas or Starlings.

2.4 Cultural Heritage

No evidence of early Polynesian activity has been found in this part of the Island. However it is likely that Polynesian people would have visited the area and probably fished from the rocks during the long period they inhabited Norfolk Island: archaeological excavations at Kingston have shown that Norfolk Island was occupied, perhaps continuously, by Polynesian people for about 500 years from perhaps as early as 1200AD.

The area that is now Two Chimneys Reserve was not settled during the First Colonial Settlement. The 'Arrowsmith map (Figure 8) shows that the majority of coastal forest in the Reserve still remained in 1840. That map shows tracks running through the forest in about the same position as the current Stockyard and Martins Roads, however there are no tracks shown in the vicinity of Two Chimneys Road or the Reserve.

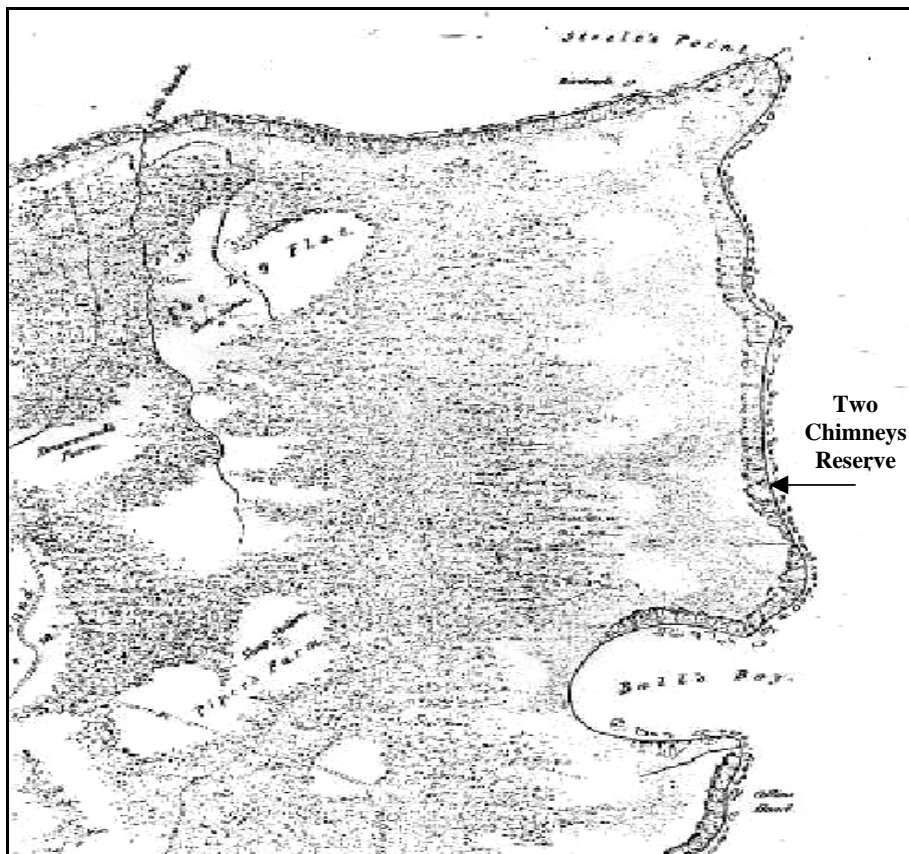


Figure 8. 1840 Survey Plan of Norfolk Island showing the Two Chimneys Reserve area.

In 1858 and 1859 Norfolk Island was surveyed and divided into lots of approximately fifty acres many of which were granted to the Pitcairner families. The new settlers found the ruins of two chimneys apparently constructed late in the Second Colonial Settlement and named the existing track Two Chimney Road. The 1860 map shows Two Chimney Road and in the area that is now the Reserve,

with vacant Crown land Portion 11 (47 acres 2 roods 27 perches) on the northern side of the road and Portion 20 (53 acres 3 roods 30 perches) on the southern. Cornelius Quintal owned Portion 34 (53 acres 3 roods), which comprised all of the land between the southern boundary of Portion 20 and Ball Bay.

By 1887, Portion 11 had been subdivided, with Portion 11a granted to Thomas Buffett and Portion 11b (7 acres 1 rood 17 perches), now the section of the Reserve north of Two Chimney Road, remaining vacant. South of Two Chimney Road, Portion 20 remained vacant, but later was subdivided: Portion 20a (now that part of the southern section of the Reserve) was still vacant, but the rest of Portion 20 was granted to Lindsay Buffett. By that time, Cornelius Quintal's land along the southern boundary of the present Reserve had been subdivided and is shown in the names of Jonathon Adams, Charles Christian, Joseph Quintall (sic) and Cornelius Quintall (sic).

During World War II, the Reserve was used as a site for one of a number of gun/observation posts set up around the coast of Norfolk Island to defend against possible landings by enemy forces. Built by N Force, these posts were part of a network of gun/observation posts around the Island, which was strategically important in the Pacific theatre for ferrying newly constructed aircraft to be deployed in the islands to the north. The gun pit in Two Chimneys Reserve can still be seen today but the extensive barbed wire barriers constructed along the coast have long since rusted away.

For many years the Reserve was leased by a neighbouring land owner, Bernard Campbell Buffett. Following the surrender of that lease the area was declared a common. Up until 1960, the lookout area was also used as a local refuse tip.

3 Management Issues

3.1 Weeds

Development of native forest habitat in the northern section of the Reserve would be enhanced by removal of the moderate infestation of African Olive (*Olea europea subsp. cuspidata*) and other woody weeds. Some wind-pruned woody weeds on the more exposed slopes shelter native species, enabling young Norfolk Island Pine (*Araucaria heterophylla*) and White Oak (*Lagunaria patersonia*) to become established, but otherwise the small number of woody weeds on the south-facing hillside above the southern creek and on the coastal slopes should be removed.

Follow up basal bark spraying of woody weeds on the west-facing hillsides in the southern section of the Reserve formerly grazed by cattle would facilitate rehabilitation of that part of the Reserve and reduce weed seed sources in the Reserve.

If not eradicated, exotic garden species that have escaped or have been dumped from nearby gardens in the Reserve would be likely to spread significantly and become a source for further infestation.

Woody weeds are most prolific in the northern valley and in the northern central part of the Reserve, most notably Olive (*Olea europea subsp. cuspidata*) and Holly (*Schinus terebinthifolius*). Brazilian Cherry (*Eugenia unifolia*) is present as saplings in the northern central part of the Reserve; this weed seems not to yet be very common as a naturalised plant. It may have the potential to become yet another serious woody weed (Mills 2017).

3.2 Pest Animals

Feral cats (*Felis domesticus*) and two species of rat are the main pest species in Two Chimneys Reserve, and they present significant threats to the native flora and fauna within the Reserve.

Cats mainly feed on vertebrate prey, making nesting birds and their chicks particularly vulnerable, with adult and young Ghostbirds (*Puffinus pacificus*), White Terns (*Gygis alba royana*), Black Noddies (*Anous minutus minutus*) and other seabirds found killed by cats common during the breeding season.

A voluntary public survey was undertaken on Norfolk Island in 2017 to determine which of the following three options members of the community supported with regard to cats on Norfolk Island: (1) Do nothing; (2) Ban cats from Norfolk Island; or (3) Allow continued cat ownership under controlled conditions. Of the 182 voluntary respondents, 69% supported continued ownership under controlled conditions. The vast majority of respondents also made written comments and one of the most common comments was that private people were actively trapping cats, and that feral cats were a big problem on Norfolk. This shows the high level of community support for feral cat control.

Both the Polynesian Rat (*Rattus exulans*) and the Black Rat (*Rattus rattus*) occur in the Reserve. Both species of rat feed on the seed and fruit of a variety of native and introduced plants; and predate a variety of terrestrial fauna, including snails, land crabs, bird eggs and nestlings. The recovery of native flora and fauna following the eradication of the Black Rat from a number of New Zealand off-shore islands and other islands around the world has demonstrated that this introduced species has a devastating effect on biodiversity. The Black Rat has had and continues to have a significant impact on the biota of Norfolk Island. The Black Rat contributed to the post-war extinction of bird species such as the Black and White Sparrow (*Lalage leucopyga*), White-breasted Silvereye (*Zosterops albogularis*) and Grey-headed Blackbird (Guava Bird) (*Turdus poliocephalus poliocephalus*), and has led to the

serious decline in others such as the Pacific Robin (*Petroica multicolor multicolor*). The Black Rat is also thought to be responsible for the extinction of both species of bat (Gould's Wattled Bat (*Chalinolobus gouldii*) and the Norfolk Island Free-tail Bat (*Mormopterus [Tadarida] norfolkensis*)).

Feral chickens (*Gallus gallus*) occur within Two Chimneys Reserve and can have a dramatic impact on the environment by scratching and displacing native seedlings and dispersing noxious weed seeds. Feral chickens also feed upon invertebrates such as endemic land snails and dung beetles, which play a vital role on Norfolk Island, and have a major impact in forest areas by removing the soil fauna required to breakdown leaf litter and other organic material. The culling of feral chickens in Norfolk Island Public Reserves does occur, although culling is currently prohibited for 3 months during December, January and February each year, and the feral chicken population increases during this time as a result.

The Crimson Rosella (Red Parrot) (*Platycercus elegans*) was introduced to Norfolk Island as a cage bird, and is now prolific on the Island. The Crimson Rosella is in direct competition with native bird species such as the Norfolk Island Green Parrot (*Cyanoramphus novaeseelandiae cookii*) for territory and nesting sites (tree hollows) across the Island.

The Argentine Ant (*Linepithema humile*) is one of the world's worst invasive species, having spread from its native habitat in South America to establish populations on six continents and many oceanic islands. The Argentine Ant was first identified on Norfolk Island in 2005, and an eradication program commenced in 2008. This aggressive ant actively displaces other species of ants, and with its need for protein based food sources, it poses a threat to the majority of Norfolk Island's fauna. Argentine Ants have not been detected within the Two Chimneys Reserve, although an infestation occurs near the western border of the Reserve.

3.3 Stock grazing

Two Chimneys Reserve has benefited from the removal of grazing stock, with Pine and native vegetation regeneration increasing greatly in the valley to the west of the picnic area. Mills (2017) notes that an increase in woody weeds in that valley, which has not been dramatic, is out-weighted by the value of the native vegetation regeneration.

Cattle have been excluded from the northern section of the Reserve and the south-facing hillside above the southern creek for over 25 years; the stock access lane, much of the southern hillsides for about a decade; and the balance of the southern section of the Reserve since 2010, resulting in significant native forest regeneration and enabling restoration of eroded areas.

The flatter part of the Reserve, between the Two Chimney Road entrance and the new picnic area continues to be used as a common for grazing cattle.

3.4 Recreation, Access and facilities

Two Chimneys Reserve is used for picnicking and sightseeing, although it is not subject to the same visitor pressure as some other reserves. It is also a popular fishing location.

Public access to the Reserve is via Two Chimney Road (Figure 10). The road divides into an unsealed circuit through the picnic area, with its southern arm providing access to the adjacent properties. A number of informal vehicle tracks have developed in the eastern end of the picnic area, damaging grass and tree roots. During prolonged wet weather, the unsealed road deteriorates and multiple tracks evolve.

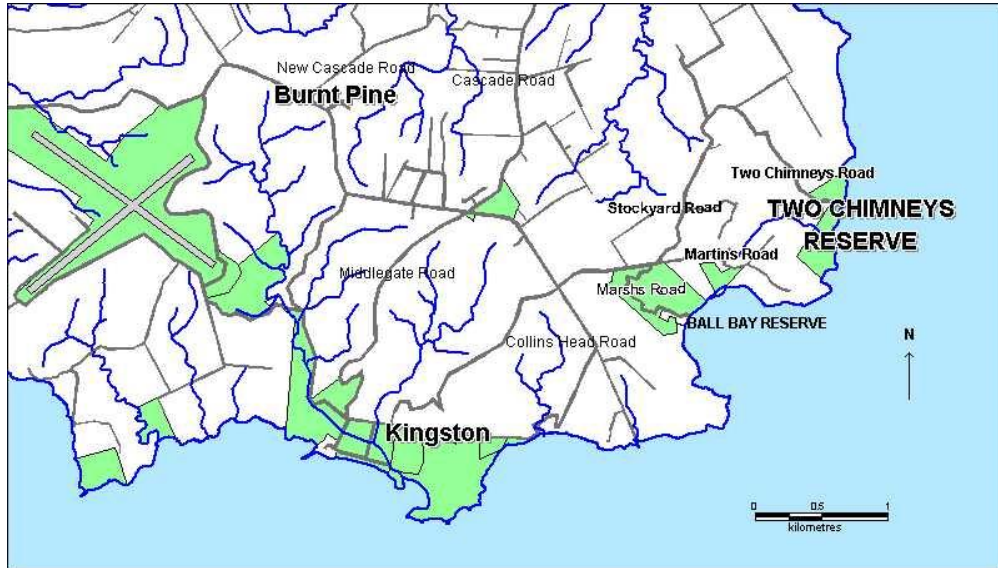


Figure 9. Access to Two Chimneys Reserve is via Two Chimney Road.

Picnic facilities, including a barbecue and toilet block, are located on the flat area between the entrance to the Reserve and the end of Two Chimney Road (Figure 10 and 11). As with other Public Reserves on Norfolk Island, the old wood fired BBQs are in disrepair and it would be beneficial to replace these with LP gas units as soon as possible if funding allows (Figure 12). The area is sheltered from strong easterly winds by remnant native coastal forest.

Much of the signage within the Reserve is in disrepair (Figure 13) and needs replacing, and further signage warning Reserve visitors of the steep cliffs should be installed.

After cattle were excluded from the southern section of the Reserve, a second picnic area was created in 2009 on top of the flat ridge overlooking the ocean, approximately 40m south-east of the end of Two Chimney Road. This picnic area has one barbecue and a 4-seat square timber picnic table with pedestrian access through a timber gate (Figure 13). Because this new picnic area is not accessible to cattle it has become much more popular than the original picnic area.



Figure 10. One of the picnic tables, with a BBQ and bins in the background.



Figure 11. The toilet block is suitable for Reserve visitors.

A stile facilitates access from the picnic area into the forest in the northern valley. This informal foot track is steep and suitable only for persons who are reasonably mobile.

There is no public vehicular access to the southern section of the Reserve, which may be reached by a foot track from the new picnic area. While generally in good condition, in places this track is steep and eroded. This track leads down a moderate slope to a viewing point with a bench seat and timber rail fence on the cliff edge 45m above the sea, 150m south of the new picnic area.

The fence along the western boundary of the Reserve, especially south of the creek, has fallen into disrepair and needs to be replaced.



Figure 12. The old woodfired BBQs should be replaced with LP gas BBQs



Figure 13. Pedestrian access to a second picnic area is through a timber gate. Note the condition of the sign.

3.5 Breeding Seabird Habitat

The decline in the number of large trees, especially in the southern section of the Reserve, has reduced the nesting habitat available to breeding White Terns (*Gygis alba*) and White-capped Noddies (*Anous minutus*). Kikuyu chokes nesting burrows along the cliff tops and can entangle breeding seabirds.

It is hoped that the regeneration of native forest and coastal cliff vegetation, and a decrease in Kikuyu, will increase seabird breeding habitat in the Reserve.

3.6 Past habitat rehabilitation

In 1985, fences were erected to prevent cattle grazing in the northern section of the Reserve. Cattle were also restricted to a fenced stock track providing access to the creek. Later, internal fencing was erected to manage cattle in the southern section of the Reserve, however with continuing damage to the Reserve and especially severe erosion on hillsides and near the creek, stock were excluded from south of the creek in the mid-2000's and from all of the southern section of the Reserve in 2010.

The natural recovery of severely over-grazed coastal hillsides following the removal of cattle from the northern section of Two Chimneys Reserve in 1985 and later from southern parts of the Reserve, demonstrates that removing stock from areas of remnant native coastal forest results in spectacular natural forest regeneration with minimal woody weed invasion.

In some areas, natural regeneration may be assisted by removing grass cover in selected areas at the beginning of periods of expected natural seed fall, to maximise native tree seed germination and initial growth by reducing competition from aggressive introduced grasses. Natural regeneration may also be assisted by spreading Flax and Moo-oo seed on exposed coastal hillsides.

On the coastal slopes, the survival and growth rate of young plants is severely restricted by exposure to strong easterly winds: even in the relatively sheltered southern creek valley, there has been a high loss of planted native trees.

A small area previously infested with woody weeds close to the new picnic area has been planted with a diversity of native species. Individual native trees planted in area grazed by stock between the entrance to the Reserve and the new picnic area are protected by cattle-proof enclosures.

3.7 Erosion

The most severely eroded areas in the Reserve are two sections of the former stock lane and the coastal hillside close to the southern boundary of the Reserve.

Years of stock use of the former stock lane between the picnic area and the creek in the southern section of the Reserve resulted in severe erosion of steeper sections, with significant damage to tree roots and gullying above the creek.

Removing stock from the southern section of the Reserve and the former stock access lane has resulted in natural re-generation of some areas, and has enabled soil erosion rehabilitation work to be carried out.

In late 2010, topsoil was spread over upper section of the former stock track, near the new picnic area, which filled eroded areas and covered damaged roots. The eroded area closer to the cliff top viewing point and the gullying above the creek have not yet been filled with top soil.

Removing stock from the southern section of the Reserve has enabled the 0.5ha of severe sheet erosion caused by overgrazing on the steep hillside close to the coastal cliff near the southern boundary to largely recover naturally.

4 Management Strategy

Management Vision: To conserve and enhance the scenic quality and biodiversity of Two Chimneys Reserve for the enjoyment of current and future generations of Norfolk Islanders and visitors, and for the ongoing survival of its flora and fauna.

4.1 Ecological Restoration

Strategic Objective: To strategically protect, enhance and restore native forest habitat in Two Chimneys Reserve and to re-establish, enhance and protect native coastal cliff vegetation.

Two Chimneys Reserve contains some significant plant species, good coastal vegetation (primarily grassland) and some native forest species, although the extent of native forest is fairly limited. Many plantings around the picnic area have increased the diversity of native plant species in the Reserve.

The best locations for further plantings are between the central valley and the northern end of the Reserve, and these areas should be targeted for habitat restoration as a priority.

Habitat rehabilitation on cliff areas will rely on natural regeneration, enhanced by removing competing weeds. It may be appropriate to allow weeds that are sheltering native trees and shrubs to remain until the native plants are well established. If necessary, appropriate native species will be planted to increase the density and diversity of the native forest.

Coastal cliff vegetation, which provides breeding habitat for seabirds, will be enhanced by the selective removal of exotic species to promote the establishment of native species, in particular Native Flax (*Phormium tenax*) and White Oak (*Lagunaria patersonia*). Native coastal species such as Native Flax (*Phormium tenax*) and Moo-oo (*Cyperus lucidus*) will be planted within eroded areas.

Woody weeds in the northern valley and along the coastal slopes will be controlled to allow regeneration of the many native trees that are present there, and the scattered woody weeds in the southern section of the Reserve will also be removed.

Targeted woody weed removal along the creek in the middle valley (south of picnic area) will be undertaken to assist natural regeneration. Planting to supplement natural recruitment will be carried out along the creek as there is almost no seed source there for hardwood trees, although the Pines are regenerating well.

Garden escapes, such as Nasturtium and Fishbone Fern in the valley north of the picnic area, will be removed. Woody weed regrowth on the slope between the western boundary and the former stock lane will be controlled with basal bark spraying and slashing.

The Brazilian Cherry (*Eugenia unifolia*) should be removed as it is naturalised in the upper middle valley but is not yet widespread across Norfolk Island.

The strategic use of electric fences will be used in the south of the Reserve to reduce weed growth, while maintaining the regenerating Pines and the sites containing the vulnerable Yellow Daisy (*Senecio australis*).

Coastal Coprosma (*Coprosma bauera*) and Norfolk Island Euphorbia (*Euphorbia norfolkiana*) will be planted in the lower valleys amongst the Norfolk Island Pine (*Araucaria heterophylla*) to expand the distribution of these endangered species across the Island.

4.1.1 Management Actions: Ecological Restoration

- (a) Continue to expand the revegetation around the picnic area to further increase the diversity of native plants within the Reserve (High Priority).
- (b) Undertake habitat restoration and enhancement in the central valley and the northern end of the Reserve (High Priority).
- (c) Manage the removal of woody weeds on cliff areas to ensure native plants remain sheltered until they are established (High Priority).
- (d) Plant appropriate native species (in particular Native Flax (*Phormium tenax*), White Oak (*Lagunaria patersonia* and Moo-oo (*Cyperus lucidus*)) in accessible cliff areas to increase the density and diversity of native species within these areas, and to protect and enhance seabird breeding habitat (High Priority).
- (e) Plant appropriate native species in eroded areas where safe access is possible (High Priority).
- (f) Undertake woody weed control in the northern valley and along the coastal slopes to allow regeneration of native species (High Priority).
- (g) Undertake woody weed control in the southern section of the Reserve (High Priority).
- (h) Undertake woody weed control along the creek in the middle valley (south of the picnic area) to assist with the natural regeneration of native species (High Priority).
- (i) Plant appropriate native species along the creek to rehabilitate the area and to create a source of seed for native species (High Priority).
- (j) Remove Brazilian Cherry (*Eugenia unifolia*) and other garden escapes from the Reserve as part of other weed control programs (High Priority).
- (k) Undertake woody weed control on the slope between the western boundary and the former stock lane using basal bark spraying and slashing (High Priority).
- (l) Use electric fencing strategically in the south of the Reserve to reduce weed growth, while maintaining the regenerating Pines and the sites containing the vulnerable Yellow Daisy (*Senecio australis*) (High Priority).
- (m) Plant Coastal Coprosma (*Coprosma bauera*), Norfolk Island Euphorbia (*Euphorbia norfolkiana*) and other suitable threatened or significant species in the lower valleys amongst the Norfolk Island Pine (*Araucaria heterophylla*).

4.2 Cultural Heritage Management

Strategic Objective: To maintain the scenic quality and character of Two Chimneys Reserve and protect important cultural heritage values.

Maintaining and enhancing coastal views is an important component in planting designs and vegetation management, and will be considered when planning any revegetation or site rehabilitation within Two Chimneys Reserve.

Coastal scenery and access to forest habitat and the seashore are the Reserve's primary cultural attributes. Improving access to the lookout, forest habitat and the seashore will be an important component of Reserve management.

A depression in the ground is all that remains of the World War II gun pit/observation post near the lookout. It is impractical to undertake any works to reconstruct or protect this site, but interpretive signage in the area should be considered.

4.2.1 Management Actions: Cultural Heritage Management

- (a) Consider and plan for the ongoing maintenance of coastal views when planning revegetation and habitat restoration activities (High Priority).
- (b) Manage the Reserve to promote visitor access to the lookout, forest habitat and the seashore (High Priority).
- (c) Consider the installation of interpretive signage in the area of the World War II gun pit/observation post (Medium Priority).

4.3 Pest Animal Management

Strategic Objective: To reduce the negative impacts of pest animal species on flora and fauna within the Reserve and other Reserve values.

An ongoing rat-baiting program will be implemented within the Reserve to protect vulnerable flora species. Annual rat baiting will also reduce predation pressure on breeding seabird colonies and other native birds that may occur in and around the Reserve.

Live trapping will be used to control cats in the Reserve when required, particularly during bird breeding seasons.

A feral chicken control program will be implemented within Norfolk Island Public Reserves to reduce the feral chicken population and protect native plants and invertebrates such as endemic land snails and dung beetles.

Argentine Ants have not been found within Two Chimneys Reserve but a known infestation is nearby. Precautions will be taken to ensure Argentine Ants do not infest the Reserve.

4.3.1 Management Actions: Pest Animal Management

- (a) Establish an ongoing Rat control program across Norfolk Island Public Reserves with a target of reducing rat numbers in areas with vulnerable flora and fauna, and reducing predation pressure on birds (High Priority).
- (b) Carry out targeted Cat trapping and humane euthanasia, with a focus on reducing Cat numbers prior to and during the seabird breeding season (High priority).
- (c) Carry out feral chicken control within Norfolk Island Public Reserves and encourage neighboring landholders to control feral chickens on their properties (High Priority).
- (d) Ensure appropriate precautions are taken to ensure Argentine Ants do not establish within the Reserve (High Priority).

4.4 Stock Management

Strategic Objective: To manage stock within Two Chimneys Reserve so that grazing is sustainable and native plants are protected, ecosystems are restored and erosion is managed.

The impact of stock grazing will be monitored in the first picnic area and options to limit or control stock access will be considered if stock are found to be having a negative impact on the values of the Reserve.

Grazing will continue to be excluded from current designated areas within the Reserve to ensure the ongoing regeneration of native plants in these areas.

4.4.1 Management Actions: Stock Management

- (a) The impact of grazing on the first picnic area will be monitored and options to control stock access will be considered if they are found to be having a negative impact on the values of the Reserve (Medium Priority).
- (b) Current grazing regimes/restrictions will be maintained across the Reserve (High Priority).
- (c) Current boundary fencing and gates will be maintained to ensure cattle are excluded from designated areas to allow for the natural regeneration of native plant species and the rehabilitation of seabird habitat and erosion (High Priority).

4.5 Recreation, access and facilities

Strategic Objective: To provide for appropriate and safe public recreation and commercial use, and to meet the requirements for access and infrastructure in Two Chimneys Reserve without compromising the values of the Reserve.

Timber vehicle guide barriers, rocks, planted areas and timber seats will be used to define vehicle access and parking.

At the eastern end of the picnic area the access road will be relocated and better defined to prevent damage to tree roots and provide vehicle separation from barbecue areas. The track will be graveled and if necessary sealed to provide all-weather access and reduce dust pollution to nearby residences.

The former stock lane is the only defined walking track in the Reserve. This track leads to the lookout and continues down to the creek. The track has been improved between the new picnic area and the cliff lookout; some sections will be filled with topsoil to cover exposed roots and arrest erosion. The section between the lookout and the creek will be rehabilitated and made suitable for pedestrians.

A walking trail through the remnant forest adjoining the picnic area will be developed to improve the recreational opportunities available in the Reserve.

Informal pedestrian access for rock fishing will be retained.

Seating and appropriately-sized lookout platforms may be provided at viewing points if funding is available.

A timber viewing platform will be constructed to the east of the new picnic area to enable the public safe access to the spectacular coastal views.

A timber post and rail fence will be constructed as a safety barrier at the cliff lookout above the creek.

The fence along the western boundary of the Reserve will be replaced.

The barbecue and timber seating near the eastern end of Two Chimney Road will be re-located to increase separation from the vehicle access track. A second barbecue will be installed near the northern edge of this picnic area and timber seating and or picnic tables will be provided at both barbecue sites. Scattered native trees will be planted to maintain the picnic area's park landscape.

A second picnic table will be provided on the southern side of the former stock access lane, immediately south of the new picnic area.

The number and location of picnic and barbecue facilities will be reviewed periodically by the Conservator of Public Reserves.

A public toilet facility is provided in the northern section of Two Chimneys Reserve. This is in good condition and is adequate for current use. The toilet will be screened by suitable landscaping and the surrounding fence relocated to enable the screen plantings to link to the nearby native forest.

The number, type, and location of rubbish bins in the Reserve will be reviewed periodically by the Conservator of Public Reserves.

Signs will be designed and erected in appropriate locations to provide visitors with information about significant natural and cultural features of the Reserve.

A safety audit will be undertaken and safety signage will be installed at areas where Reserve visitors can access dangerous areas along the cliff line, constructed or natural vegetated barriers will be installed in these areas and identified dangerous trees will be trimmed or removed.

The number, type, and location of rubbish bins in the Reserve will be reviewed periodically by the Conservator of Public Reserves.

School visits to the Reserve that are designed to provide an understanding of Norfolk Island's natural and cultural heritage and aimed to encourage students to participate in environmental protection, management, research and rehabilitation will be encouraged.

Two Chimneys Reserve provides access to spectacular coastal views and native forest habitats. Interpretation of the role of coastal forests in modifying climate and providing habitat for flora and fauna will be important themes.

Community involvement in the development and delivery of the Interpretation Strategy will be encouraged.

Appropriate walking tours in the Reserve that are designed to provide visitors with an understanding of Norfolk's natural and cultural heritage will be encouraged.

Community groups will be encouraged to assist in the development and implementation of management programs in Two Chimneys Reserve.

4.5.1 Management Actions: Recreation, access and facilities

- (a) Continue to use vehicle guide barriers, planted areas and rocks to define vehicle access and parking (High Priority).
- (b) Maintain or upgrade current vehicle tracks to prevent damage to tree roots, keep vehicles away from picnic areas and reduce dust pollution (Medium Priority).
- (c) Rehabilitate the section of the walking track (former Stock Lane) between the lookout and the creek to make it suitable for pedestrians (Medium Priority).
- (d) Establish a walking trail through the remnant forest adjoining the picnic area to improve the recreational opportunities available in the Reserve (Medium Priority).
- (e) Retain informal pedestrian access for rock fishing (High Priority).
- (f) Undertake an audit of existing signage within the Reserve and replace or repair signage in disrepair, and install additional signage (especially safety signage) where the need is identified (High Priority).

- (g) Install appropriate timber or natural vegetated barriers in areas to restrict access to dangerous areas along the cliff line (High Priority)
- (h) Trim or remove dangerous trees within the Reserve (High Priority).
- (i) Consider the provision of seating and appropriately sized lookout platforms at viewing points if funding allows (Medium Priority).
- (j) Consider the construction of a timber viewing platform to the east of the most recently established picnic area to enable the public safe access to the spectacular coastal views (Medium Priority).
- (k) The Conservator of Public Reserves will review the number, type, and location of rubbish bins in the Reserve periodically (Ongoing).
- (l) The Conservator of Public Reserves will review the number and location of picnic facilities periodically (High Priority).
- (m) Replace the current wood-fired barbeques within the picnic area with a gas barbeque and a barbeque shelter and ensure this is well maintained (High Priority).
- (n) The toilet will be screened by suitable native plants and the surrounding fence will be relocated to enable the screen plantings to link to the nearby native forest (Medium Priority).
- (o) School visits to the Reserve will be encouraged to allow students the opportunity to participate in environmental protection, management, research and rehabilitation (Medium Priority).
- (p) Appropriate walking tours in the Reserve will be encouraged to provide visitors with an understanding of Norfolk's natural and cultural heritage (Medium Priority).
- (q) Encourage community group participation to assist with the development and implementation of management programs in Two Chimneys Reserve (High Priority).
- (r) A walking track between Two Chimneys and Ball Bay Reserve will be explored and costed out (High Priority).

4.6 Research and Monitoring

Strategic Objective: To improve scientific knowledge about the natural and cultural assets within Two Chimneys Reserve by encouraging research activities that inform and improve management.

The Conservator of Public Reserves and Norfolk Island Regional Council will work with Norfolk Island National Park and other partners to promote and encourage appropriate and relevant scientific research, particularly around threatened species conservation, in Two Chimneys Reserve. This scientific knowledge can then be used to improve the management of Two Chimneys Reserve and other Norfolk Island Reserves.

4.6.1 Management Actions: Research and Monitoring

- (a) Promote and encourage appropriate and relevant scientific research in Two Chimneys Reserve and all Norfolk Island Reserves (High Priority).

4.7 Erosion Control

Strategic Objective: To stabilise and rehabilitate eroded areas within Two Chimneys Reserve, other than naturally eroding sea cliffs and slopes.

The eroded sections of the former stock track between the new picnic area and the creek will be filled and stabilised. Good quality soil will be placed over the exposed roots and the former stock lane will be grassed.

Runoff from the eastern end of the picnic area will be controlled to reduce scouring.

Boundary realignment will be considered to allow for important erosion control and habitat restoration work to be carried out along the boundary of the Reserve.

4.7.1 Management Actions: Erosion Control

- (a) Fill and stabilise the eroded sections of the former stock track and good quality soil will be placed over exposed roots to promote the growth of grass (Medium Priority).
- (b) Investigate methods to control runoff from the eastern end of the picnic area to reduce scouring, and implement works if funding allows (Medium Priority).
- (c) Change the seaward boundary of Two Chimneys Reserve to 'high water mark' (High Priority).

4.8 Planning for Efficient Reserve Management

Strategic Objective: To deliver the best possible outcomes by efficiently allocating management resources across the Norfolk Island Public Reserves

The Norfolk Island Public Reserves network currently consists of 12 reserves², each of which has a Plan of Management. Within each plan there are a many actions, and Council needs a method to determine which actions are funded first. These management actions have been prioritised as high, medium or low (or ongoing), which will help in determining which actions to fund first. However, there are many reserves and Council must determine which actions from which reserves are to be funded in each successive annual budget. To do this, the high, medium and low priority actions for one reserve need to then be compared against the high, medium and low value actions for all other reserves.

To enable management actions to be compared against one another across the entire reserve network, the reserves themselves need to be prioritised. All of the reserves are intrinsically valuable, for many different reasons including conservation, recreation and heritage values. Spatial prioritisation of land for conservation and land management is a well-established science that allows land managers to direct funding to where it is most needed (Moilanen *et. al.* 2009). It is recognised that this is a complex process, and one which is generally performed by computer modelling software. Therefore, a full prioritisation project is recommended. In the interim, a draft prioritisation of the reserves has been prepared during the management planning process, and is presented in Appendix 2.

It is recommended that all actions from all management plans be pooled, and sorted into high, medium, low or ongoing status. This list of actions then needs to be further filtered using the priority assigned to each reserve. High priority actions in high priority reserves would generally be considered for funding before low priority actions in lower priority reserves. The highest priority actions would then be considered for funding in the annual Council operational plan. Obviously, this is only a starting point as Council's annual budget will need to consider a broad range of other factors and other projects competing for funding.

4.8.1 Management Actions: Planning for Efficient Reserve Management

- (a) Determine the priority of each reserve in the Public Reserves network for budget and resource allocation purposes. Amongst other things, this prioritisation should consider the objects of the *Public Reserves Act 1997 (NI)*, the zoning and gazetted purpose of the reserve and on ground observations. Priorities will change over time, so this is a dynamic process. In the interim, draft priorities have been assigned to each reserve in Appendix 2 of this Plan of Management (High priority).

² Potentially subject to change, as per Appendix 3

- (b) Combine the management action priority (e.g. high, medium or low) with the reserve priority to determine which actions across the entire reserve network are funded in each successive Council annual Operational Plan (High priority).
- (c) Track the progress of each of the actions in the annual Operational Plan as a measure of the success of the Plan of Management (Medium priority).

SUMMARY TABLE OF MANAGEMENT ACTIONS FOR TWO CHIMNEYS RESERVE 2020 - 2030

Management Vision: To conserve and enhance the scenic quality and biodiversity of Two Chimneys Reserve for the enjoyment of current and future generations of Norfolk Islanders and visitors, and to ensure the ongoing protection and survival of its flora and fauna.

Theme	Strategic Objectives	Actions (How will we get there?)	Priority
4.1 Ecological Restoration	<i>To strategically protect, enhance and restore native forest habitat in Two Chimneys Reserve and to re-establish, enhance and protect native coastal cliff vegetation.</i>	4.1.1 (a) Continue to expand the revegetation around the picnic area to further increase the diversity of native plants within the Reserve	High
		4.1.1 (b) Undertake habitat restoration and enhancement in the central valley and the northern end of the Reserve	High
		4.1.1 (c) Manage the removal of woody weeds on cliff areas to ensure native plants remain sheltered until they are established	High
		4.1.1 (d) Plant appropriate native species (in particular Native Flax (<i>Phormium tenax</i>), White Oak (<i>Lagunaria patersonia</i> and Moo-oo (<i>Cyperus lucidus</i>)) in accessible cliff areas to increase the density and diversity of native species within these areas, and to protect and enhance seabird breeding habitat	High
		4.1.1 (e) Plant appropriate native species in eroded areas where safe access is possible	High
		4.1.1 (f) Undertake woody weed control in the northern valley and along the coastal slopes to allow regeneration of native species	High
		4.1.1 (g) Undertake woody weed control in the southern section of the Reserve	High
		4.1.1 (h) Undertake woody weed control along the creek in the middle valley (south of the picnic area) to assist with the natural regeneration of native species	High
		4.1.1 (i) Plant appropriate native species along the creek to rehabilitate the area and to create a source of seed for native species	High
		4.1.1 (j) Remove Brazilian Cherry (<i>Eugenia unifolia</i>) and other garden escapes from the Reserve as part of other weed control programs	High
		4.1.1 (k) Undertake woody weed control on the slope between the western boundary and the former stock lane using basal bark spraying and slashing	High
		4.1.1 (l) Use electric fencing strategically in the south of the Reserve to reduce weed growth, while maintaining the regenerating Pines and the sites containing the vulnerable Yellow Daisy (<i>Senecio australis</i>)	High
		4.1.1 (m) Plant Coastal Coprosma (<i>Coprosma bauera</i>), Norfolk Island Euphorbia (<i>Euphorbia norfolkiana</i>) and other suitable threatened or significant species in the lower valleys amongst the Norfolk Island Pine (<i>Araucaria heterophylla</i>)	High

Theme	Strategic Objectives	Actions (How will we get there?)	Priority
4.2 Cultural Heritage Management	<i>To maintain the scenic quality and character of Two Chimneys Reserve and protect important cultural heritage values.</i>	4.2.1 (a) Consider and plan for the ongoing maintenance of coastal views when planning revegetation and habitat restoration activities	High
		4.2.1 (b) Manage the Reserve to promote visitor access to the lookout, forest habitat and the seashore	High
		4.2.1 (c) Consider the installation of interpretive signage in the area of the World War II gun pit/observation post	Medium
4.3 Pest Animal Management	<i>To reduce the negative impacts of pest animal species on flora and fauna within the Reserve and other Reserve values</i>	4.3.1 (a) Establish a seasonal coordinated Rat control program across Norfolk Island Public Reserves with a target of reducing rat numbers in areas with vulnerable flora and fauna, and reducing predation pressure on birds	High
		4.3.1 (b) Carry out targeted Cat trapping and humane euthanasia, with a focus on reducing Cat numbers prior to and during the seabird breeding season	High
		4.3.1 (c) Carry out feral chicken control within Norfolk Island Public Reserves and encourage neighboring landholders to control feral chickens on their properties	High
		4.3.1 (d) Ensure appropriate precautions are taken to ensure Argentine Ants do not establish within the Reserve	High
4.4 Stock Management	<i>To manage stock within Two Chimneys Reserve so that grazing is sustainable and native plants are protected, ecosystems are restored and erosion is managed</i>	4.4.1 (a) The impact of grazing on the first picnic area will be monitored and options to control stock access will be considered if they are found to be having a negative impact on the values of the Reserve	Medium
		4.4.1 (b) Current grazing regimes/restrictions will be maintained across the Reserve	High
		4.4.1 (c) Current boundary fencing and gates will be maintained to ensure cattle are excluded from designated areas to allow for the natural regeneration of native plant species and the rehabilitation of seabird habitat and erosion	High
4.5 Recreation, access and facilities	To provide for appropriate and safe public recreation and commercial use, and	4.5.1 (a) Continue to use vehicle guide barriers, planted areas and rocks to define vehicle access and parking	High
		4.5.1 (b) Maintain or upgrade current vehicle tracks to prevent damage to tree roots, keep vehicles away from picnic areas and reduce dust pollution	Medium

Theme	Strategic Objectives	Actions (How will we get there?)	Priority
	to meet the requirements for access and infrastructure in Two Chimneys Reserve without compromising the values of the Reserve.	4.5.1 (c) Rehabilitate the section of the walking track (former Stock Lane) between the lookout and the creek to make it suitable for pedestrians	Medium
		4.5.1 (d) Establish a walking trail through the remnant forest adjoining the picnic area to improve the recreational opportunities available in the Reserve	Medium
		4.5.1 (e) Retain informal pedestrian access for rock fishing	High
		4.5.1 (f) Undertake an audit of existing signage and safety within the Reserve and replace or repair signage in disrepair, and install additional signage (especially safety signage) and safety barriers where the need is identified	High
		4.5.1 (g) Install appropriate timber or natural vegetated barriers in areas to restrict access to dangerous areas along the cliff line	High
		4.5.1 (h) Trim or remove dangerous trees within the Reserve	High
		4.5.1 (i) Consider the provision of seating and appropriately sized lookout platforms at viewing points if funding allows	Medium
		4.5.1 (j) Consider the construction of a timber viewing platform to the east of the most recently established picnic area to enable the public safe access to the spectacular coastal views	Medium
		4.5.1 (k) The Conservator of Public Reserves will review the number, type, and location of rubbish bins in the Reserve periodically	Ongoing
		4.5.1 (l) The Conservator of Public Reserves will review the number and location of picnic and barbecue facilities periodically	High
		4.5.1 (m) Replace the current wood-fired barbeques within the picnic area with a gas barbeque and a barbeque shelter and ensure this is well maintained	High
		4.5.1 (n) The toilet will be screened by suitable native plants and the surrounding fence will be relocated to enable the screen plantings to link to the nearby native forest	Medium
		4.5.1 (o) School visits to the Reserve will be encouraged to allow students the opportunity to participate in environmental protection, management, research and rehabilitation	Medium
4.5.1 (p) Appropriate walking tours in the Reserve will be encouraged to provide visitors with an understanding of Norfolk's natural and cultural heritage	Medium		

Theme	Strategic Objectives	Actions (How will we get there?)	Priority
		4.5.1 (q) Encourage community group participation to assist with the development and implementation of management programs in Two Chimneys Reserve	High
		4.5.1 (r) A walking track between Two Chimneys and Ball Bay Reserve will be explored and costed out	High
4.6 Research and Monitoring	<i>To improve scientific knowledge about the natural and cultural assets within Two Chimneys Reserve by encouraging research activities that inform and improve management</i>	4.5.1 (a) Promote and encourage appropriate and relevant scientific research in Two Chimneys Reserve and all Norfolk Island Reserves	High
4.7 Erosion Control	<i>To stabilise and rehabilitate eroded areas within Two Chimneys Reserve, other than naturally eroding sea cliffs and slopes.</i>	4.7.1 (a) Fill and stabilise the eroded sections of the former stock track and good quality soil will be placed over exposed roots to promote the growth of grass	Medium
		4.7.1 (b) Investigate methods to control runoff from the eastern end of the picnic area to reduce scouring, and implement works if funding allows	Medium
		4.7.1 (c) Change the seaward boundary of Two Chimneys Reserve to 'high water mark' (High Priority).	High
4.8 Planning for Efficient Reserve Management	<i>To deliver the best possible outcomes by efficiently allocating management</i>	4.7.1 (a) Determine the priority of each reserve in the Public Reserves network for budget and resource allocation purposes. Amongst other things, this prioritisation should consider the objects of the Public Reserves Act 1997 (NI), the zoning and gazetted purpose of the reserve and on ground observations. Priorities will change over time, so this is a dynamic process. In the interim, draft priorities have been assigned to each reserve in Appendix 2 of this Plan of Management.	High

Theme	Strategic Objectives	Actions (How will we get there?)	Priority
	<i>resources across the Norfolk Island Public Reserves</i>	4.7.1 (b) Combine the management action priority (e.g. high, medium or low) with the reserve priority to determine which actions across the entire reserve network are funded in each successive Council annual Operational Plan.	High
		4.7.1 (c) Track the progress of each of the actions in the annual Operational Plan as a measure of the success of the Plan of Management.	Medium

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Appendix 1: Controlled Activities

Some activities are only permitted in the public reserves by obtaining a permit as per Part V of the *Public Reserves Act 1997*. These activities are known as controlled activities, and the permit must be either:

- specified by a plan of management; or
- by notice published in the Gazette by the Conservator of Public Reserves; or
- by a permit granted to an individual by the Conservator of Public Reserves.

Should a proposed activity be inconsistent with a plan of management, a permit is required. All activities undertaken in a reserve must be consistent with the objects of the *Public Reserves Act 1997*, regardless of whether a permit is required or not. The objects of the *Public Reserves Act 1997* are 'to protect and conserve public reserves so as to –

- (a) promote the conservation of the natural environment and landscape beauty of Norfolk Island;
- (b) promote the conservation of the heritage of Norfolk Island; and
- (c) preserve the way of life and the quality of life of the people of Norfolk Island'

Table 3 details controlled activities in all public reserves on Norfolk Island, outlining what activities do not require formal approval, and providing guidance where a permit is required. Should activities inconsistent with those outlined in Table 3 be undertaken in Two Chimneys Reserve, (i) they must be consistent with the objects of the *Public Reserves Act 1997*; and (ii) they must be undertaken as per the conditions of a permit from the Conservator of Public Reserves.

Table 3. *Controlled Activities in all Norfolk Island Public Reserves*

Activity Type	Details of Controlled Activity and Permit Requirements for ALL Public reserves
1. Hazardous Activities	<p>No person shall undertake any activity within a Reserve that may reasonably be expected to expose them or any other person to injury or death. Any other activity that may reasonably be expected to pose some hazard or nuisance to any person or to nuisance to the Reserve or adjoining land or sea may not be undertaken in a Reserve without a permit.</p> <p>The Conservator of Public Reserves may only grant such a permit if he or she is satisfied that reasonable measures can and will be taken by the person proposing the activity to ensure that the hazard or nuisance is minimised and likely to be reduced to an acceptable level.</p>
2. Firearms, other Weapons, Traps and Snares	<p>No member of the public shall possess, carry or use within a Reserve any form of:</p> <ul style="list-style-type: none"> • firearm, hunting bow, spear, slingshot, or any other weapon; • any type of trap, net, or snare, other than would reasonably be used and is intended to be used in rock fishing without a permit. <p>The Conservator of Public Reserves may only grant such a permit if it is in the interests of the conservation and management of the Reserve to do so.</p>
3. Explosive Devices	<p>No person shall possess, carry or use within a Reserve any form of explosive device, including pyrotechnic devices such as fireworks of any kind, without a permit.</p> <p>The Conservator of Public Reserves may only grant such a permit if it is in the interests of the conservation and management of the Reserve to do so. A permit can only be granted if the proposed activity:</p> <ul style="list-style-type: none"> • is an integral and important part of a community celebration that has been agreed by the Norfolk Island Regional Council; • is to be conducted by a properly licensed person; and • meets the safety standards for that activity that would have to be met in an Australian State or Territory. <p>Any person proposing to possess, carry or use any explosive device within a Reserve when applying for a permit shall provide the Conservator of Public Reserves with written details and plans of the proposed activity, proof of licences, a copy of appropriate standards and any other relevant technical details. A permit to conduct these activities shall not be granted unless the applicant holds a valid public risk liability insurance policy for at least \$20 million and meets the requirements in relation to certificates of currency and indemnity forms set out in this table at 20. Commercial Activities.</p>
4. Artefacts	<p>A person shall not interfere with any artefact in a Reserve without a permit. An 'artefact' is any man-made object, thing or item and includes but is not restricted to any object, thing or item that in some way has been protected or that may be capable of being protected under any other legislation. 'Artefact' includes any man-made object, thing or item that can reasonably be construed to be or to have been the property of a person or persons unknown.</p>

Activity Type	Details of Controlled Activity and Permit Requirements for ALL Public reserves
	The Conservator of Public Reserves may only grant such a permit if it is in the interests of the conservation and management of the Reserve to do so.
5. Metal Detecting	<p>No person shall use a metal detecting device in any public Reserve without a permit.</p> <p>The Conservator of Public Reserves may only grant such a permit if it is in the interests of the conservation and management of the Reserve to do so.</p>
6. Native and Other Animals	<p>No member of the public shall:</p> <ul style="list-style-type: none"> • have in their possession, interfere with, damage, injure or destroy an animal whether alive or dead in a Reserve; • feed any animal in a Reserve; or • take an animal into, leave an animal in or knowingly permit an animal to enter a Reserve without a permit. <p>The Conservator of Public Reserves may only grant such a permit if it is in the interests of the conservation and management of the Reserve to do so, or essential to the interpretive and education aims of the plan of management.</p>
7. Protection of Individuals of All Species	<p>No member of the public shall:</p> <ul style="list-style-type: none"> • take an individual of any species in a Reserve; or • remove an individual of any species from a Reserve without a permit. <p>The Conservator of Public Reserves may only grant such a permit if it is in the interests of the conservation and management of the Reserve to do so, or essential to the interpretive and education aims of the plan of management.</p> <p>Despite anything in this paragraph, plants or parts of plants may be picked or removed in accordance with Sections 10 (Exotic Fruit), 11 (Traditional Craft Materials), 12 (Pine Seed Collection), and 13 (Firewood) of this table.</p>
8. Dogs	<p>Except as otherwise provided here, or provided in the <i>Dogs Registration Act 1936</i> and the <i>Dogs Registration Regulations 1994</i>, a person shall not take a dog into a Reserve unless that dog is under the control of and is in the company of that person.</p> <p>A dog must be kept on a leash <u>at all times</u> within Hundred Acres, Bumbora and Point Ross Reserves, and within other areas of Reserves that are not grazed by cattle to avoid death or injury to seabirds and other birds.</p> <p>A dog that is accompanied by and is under the control of a person is permitted in:</p> <ul style="list-style-type: none"> • those areas in public Reserves to which cattle normally have access for grazing; • all of Point Hunter, Kingston Common and Kingston Recreation Reserves except for those parts of those Reserves between the seaward side of Bay Street and high water mark and between the seaward side of the road around Emily Bay and high water mark; and

Activity Type	Details of Controlled Activity and Permit Requirements for ALL Public reserves
	<ul style="list-style-type: none"> • those parts of Government House Domain Reserve generally to the south of the wall on the south and south east of Government House grounds and driveway to which the public normally have access; <p>A person shall not permit any dog over which they could reasonably be expected to exercise control to go onto a tee, green or bunker that is part of Government House Domain Reserve or Point Hunter Reserve that is maintained and used by the Norfolk Island Golf Club as part of the golf course.</p> <p>A person shall not permit any dog over which they could reasonably be expected to exercise control to enter the graveyard in Cemetery Reserve.</p> <p>A person shall not permit any dog over which they could reasonably be expected to exercise control to interfere with any native animal or the habitat of any native animal.</p> <p>A person who could reasonably be expected to be responsible for exercising control over a dog in a Reserve must carry means for removing and disposing of dog faeces. If a dog over which a person could reasonably be expected to exercise control defecates in a Reserve that person must remove the faeces from the Reserve. A person shall not feed a dog in a Reserve.</p>
9. Plants	<p>No member of the public shall:</p> <ul style="list-style-type: none"> • have in their possession, interfere with, damage, injure or destroy any plant whether alive or dead in a Reserve; or • take a plant into or leave a plant in a Reserve without a permit. <p>Despite anything in this paragraph, plants or parts of plants may be picked or removed in accordance with Sections 10 (Exotic Fruit), 11 (Traditional Craft Materials), 12 (Pine Seed Collection), and 13 (Firewood) of this table.</p>
10. Exotic Fruit	Hand picking of fruits from exotic plants, such as peach, guava and lemon, for personal consumption is permitted in all public Reserves.
11. Traditional Craft Materials	Picking and removing by hand of foliage of <i>Typha orientalis</i> (Flags, Drain Flax, Bulrush) within Headstone Reserve, Kingston Recreation Reserve, Kingston Common Reserve and Bumbora Reserve for making traditional handicrafts is permitted. Picking and removing by hand of foliage of <i>Cyperus lucidus</i> (Moo-oo) and <i>Phormium tenax</i> (Flax) within all public Reserves for making traditional handicrafts is permitted. 'Traditional handicrafts' does not include items made for sale. Persons must ensure that they do not cause damage to any other plants when picking and removing the foliage of <i>Typha orientalis</i> (Flags, Drain Flags, Bulrush), <i>Cyperus lucidus</i> (Moo-oo) and <i>Phormium tenax</i> (Flax).
12. Pine Seed Collection	<p>Pine seed collection is not permitted in the Reserves without a permit</p> <p>The Conservator of Public Reserves may grant a permit for the collection of pine seed or cones from:</p> <ul style="list-style-type: none"> • unfenced areas in public Reserves to which cattle normally have access; and • picnic areas in public Reserves; <p>only if it is in the interests of the conservation and management of a public Reserve to do so.</p>

Activity Type	Details of Controlled Activity and Permit Requirements for ALL Public reserves
13. Firewood Collection	<p>Firewood collection is not permitted in the Reserves without a permit.</p> <p>The Conservator of Public Reserves may permit the collection of firewood only if it is in the interests of the conservation and management of a public Reserve to do so.</p>
14. Monuments and Memorials	<p>A person shall not erect or place a monument, memorial or commemorative marker of any kind in a public Reserve without approval from the Conservator of Public Reserves.</p> <p>The Conservator of Public Reserves may grant approval for a person to erect or place a monument, memorial or commemorative marker only if the proposed monument, memorial or commemorative marker:</p> <ul style="list-style-type: none"> • is of a style and structure appropriate to the local setting in the Reserve; • is a reminder of a person who, or a group or organisation which, made a major contribution to conserving the area or its biodiversity; • reflects cultural associations with the area by individuals or groups; and • marks a significant event in the history of the Reserve. <p>A proposal to erect or place a monument, memorial or commemorative marker in memory of a deceased person may only be approved if the deceased had a strong, long-standing involvement with conserving the area or its biodiversity. In considering a proposal to erect or place a monument, memorial or commemorative marker, the Conservator of Public Reserves shall also have regard to:</p> <ul style="list-style-type: none"> • potential impacts on the amenity of the Reserve including but not limited to visual obtrusiveness taking into account materials, size, design and content; and • satisfactory maintenance arrangements or commitments, including costs, by the proponent. <p>The Conservator of Public Reserves may only grant such a permit if it is in the interests of the conservation and management of the Reserve to do so.</p>
15. Research	<p>A person shall not undertake any research for an archaeological, scientific or any other purpose or take, measure or in any other way mark or tag any samples of air, water, soil, rock or take, measure or in any other way mark or tag any biological item, organism or material within a Reserve without a permit.</p> <p>The Conservator of Public Reserves may only grant such a permit if it is in the interests of the conservation and management of the Reserve to do so, or essential to the interpretive and education aims of the plan of management. Unless a formal agreement has been reached that ensures that the Norfolk Island community will share appropriately in any profits or other benefits from the proposed access to biological resources, permits granted for scientific research purposes will not convey to the permit holder or any other person, institution or corporation any rights whatsoever to any benefits that may flow from intellectual property obtained by the permit holder as a result of the permit holder's activities. In such cases, every permit granted for scientific research purposes shall include the following condition:</p> <p><i>This permit is issued for scientific research and educational purposes only and does not convey to the permit holder or any other person, institution or corporation any rights whatsoever to any benefits that may flow from intellectual property obtained by the permit holder as a result of the permit holder's</i></p>

Activity Type	Details of Controlled Activity and Permit Requirements for ALL Public reserves
	<i>activities pursuant to this permit, such intellectual property and benefits remaining vested in the Norfolk Island Regional Council and or the Commonwealth of Australia as the case may be.</i>
16. Horse-riding	<p>Horses may be ridden without a permit in those areas in public Reserves to which cattle normally have access for grazing.</p> <p>A permit may be granted for occasional horse riding within other Reserves if the Conservator of Public Reserves is satisfied that such activity will not adversely affect the amenity of the Reserve for other users and will not damage the natural and cultural features of the Reserve.</p>
17. Motor Vehicles	<p>A person shall not use or leave a motor vehicle in a Reserve except in or on an area approved for the purpose. Motorised wheelchairs or mobility aids may be used to convey disabled persons in public Reserves. Motor vehicles required for emergency services response purposes, or for conservation and management will be permitted in a Reserve. Conservator of Public Reserves must be informed by the responding emergency service coordinator as soon as practicable of any entry of an emergency service response vehicle to a Reserve.</p> <p>The Conservator of Public Reserves may permit commercial plant and equipment in the Reserve only if it is in the interests of the conservation and management of the Reserve.</p>
18. Lighting Fires	<p>As per the <i>Public Reserves Act 1997</i>, a person shall not light, use or maintain a fire in a Reserve except in –</p> <ul style="list-style-type: none"> (a) a fireplace approved for the purpose; or (b) a portable barbeque, or portable stove in which heat is provided by the burning of liquefied petroleum gas <p>The Conservator of Public Reserves may approve the lighting of a fire or fires in a Reserve if it is in the interests of the conservation and management of the Reserve to do so.</p>
19. Non-commercial Sporting and Other Community Events	<p>Unless otherwise specifically approved in a plan of management, non-commercial sporting and other community events shall not occur in a Reserve without a permit.</p> <p>A permit shall not be granted for any non-commercial sporting or other community events unless the Conservator of Public Reserves is satisfied that such event will not adversely affect the amenity of the Reserve for other users and will not damage the Reserve.</p>
20. Commercial Activities	<p>As per the <i>Public Reserves Act 1997</i>, a person shall not undertake a commercial activity in a Reserve except in accordance with an approval for the activity. A permit to conduct a commercial activity in a Reserve shall not be granted unless the applicant provides a certificate of currency showing that he or she holds a valid public risk liability insurance policy for at least \$20 million. The certificate shall have endorsed upon it the Norfolk Island Regional Council's interest in granting the permit and shall specifically refer to the activities intended to be conducted pursuant to the permit. It will be presumed that in issuing the certificate of currency the insurer has been advised of the activities to be conducted and that those activities are not the subject of any exclusion under the policy held. The permit to conduct these activities will cease to be valid immediately if the permit holder's public risk liability insurance lapses for any reason during the period for which the permit has been issued or if a certificate of currency appears to be defective in any manner.</p>

Activity Type	Details of Controlled Activity and Permit Requirements for ALL Public reserves
	<p>A permit shall not be granted for any commercial activity unless the Conservator of Public Reserves is satisfied that such activity will not adversely affect the amenity of the Reserve for other users and will not damage the Reserve. Filming and photography of any kind other than for private purposes and the use of any part of a public Reserve for promotions of any kind are considered to be commercial activities. Wedding ceremonies are detailed in part 21 of this table. A permit shall not be granted for commercial activities, other than bus tours, off-road vehicle tours, walking tours, horse rides or picnics in a Reserve unless the Conservator of Public Reserves is satisfied that such activities are in the interests of the conservation and management of the Reserve, or are essential to the interpretive and education aims outlined in a plan of management. Commercial tour operators shall in all cases:</p> <ul style="list-style-type: none"> • provide sufficient cooking equipment, tables and seating to cater for all of the persons on their tour; and • remove all rubbish and other wastes, including used cooking oil, generated by their activities.
21. Weddings	<p>Weddings are not permitted in Cemetery Reserve, Government House Domain Reserve and War Memorial Reserve without a permit.</p> <p>A wedding ceremony may be conducted, including by a wedding celebrant in the course of a business, trade, profession or calling, without a permit in a public Reserve other than Cemetery Reserve, Government House Domain Reserve and War Memorial Reserve, provided</p> <ul style="list-style-type: none"> • confetti or rice is not thrown; • hire equipment of any description is not used; • wedding parties use their own catering supplies: no commercial catering; • catering supplies are limited finger food and to non-alcoholic drinks; • no gazebos, marquees or other structures are erected; • there are no 'lanterns' and/or candles (or similar paraphernalia) with naked flames and no lighting of fires outside of a designated fireplace, or during a fire danger period declared under s21 of the Fire Control Act 2000; • no balloons or other non-biodegradable materials or paraphernalia are released into or left in the environment; • generators, electrical lighting and public broadcast equipment is not used; • the site and any facilities used are left clean and rubbish is removed prior to leaving the site; • the event does not conflict with the use or enjoyment of the Reserve by others; and • if the ceremony is conducted by a wedding celebrant in the course of a business, trade, profession or calling, that celebrant holds a valid public risk liability insurance policy in accordance with section 20 of this table
22. Camping	<p>As per the <i>Public Reserves Act 1997</i>, a person shall not camp overnight in a Reserve except in an area approved for the purpose. Camping will not be permitted in any Reserve except Government House Domain Reserve other than on or in the immediate vicinity of the Polynesian settlement site and Point Hunter Reserve in the pines between Emily Bay and the golf course.</p> <p>Camping shall be permitted in Government House Domain Reserve and Point Hunter Reserve at times between 1 December and 1 March as specified in the Gazette. Camping in Government House Domain Reserve and Point Hunter Reserve at other times may be permitted only if the Conservator of Public</p>

Activity Type	Details of Controlled Activity and Permit Requirements for ALL Public reserves
	Reserves is satisfied that it is in the interests of the conservation and management of the Reserve, or essential to the interpretive and education aims of the plan of management to do so.
23. Structures	<p>A person shall not erect, place or leave a structure in a Reserve except in accordance with an approval.</p> <p>The Conservator of Public Reserves may only grant such a permit if it is in the interests of the conservation and management of the Reserve to do so.</p>
24. Chemicals	<p>No chemical pesticide, herbicide or toxic or noxious substance shall be used, left or deposited in a Reserve without a permit from the Conservator of Public Reserves.</p> <p>The Conservator of Public Reserves may only grant such a permit if it is in the interests of the conservation and management of the Reserve to do so.</p>
25. Quarrying and Mining	<p>The Conservator of Public Reserves <u>may</u> consider approving a permit for rock extraction/quarrying activities within Headstone Reserve providing:</p> <ul style="list-style-type: none"> • A thorough independent investigation is done to determine the suitability of Headstone Reserve as a rock extraction site in comparison to other potential sites on public and private land on Norfolk Island for rock extraction, and Headstone Reserve is identified as the best location for this activity. • All required permits and approvals (including permits from Marine Parks Australia and EPBC Act referrals where required) are obtained prior to any works commencing. • A detailed Environmental Impact Statement/Assessment is prepared by an independent party as part of the development. • The Environmental Impact Statement considers the impact of the rock extraction on the environment in Headstone Reserve (including flora, fauna) and details and costs appropriate mitigation measures and environmental offsets, including habitat restoration, revegetation, weed control, erosion control and improvements to drainage and runoff from Public Reserves into the Marine Park in Headstone Reserve and/or in other High Priority Public Reserves on Norfolk Island to ensure no net loss of environmental values on Norfolk Island. • The Conservator of Public Reserves is satisfied that the recommended environmental offsets and mitigation measures are appropriate to ensure there will be no long-term overall impact on the environment of Norfolk Island. • Funding for the recommended environmental offsets is provided following approval to proceed, and prior to the commencement of any activities associated with rock extraction. <p>Any other quarrying and or mining in any form, other than for sand from Cemetery Reserve in the short term, shall not be permitted in any other Reserve.</p> <p>Sand mining in Cemetery Reserve will be permitted by the Conservator of Public Reserves <u>only until an alternative source of sand is identified</u>, provided the sand is for an essential building or construction purpose, specifically;</p> <ul style="list-style-type: none"> • plastering; • block and brick laying; • installation of water storage tanks; and

Activity Type	Details of Controlled Activity and Permit Requirements for ALL Public reserves
	<ul style="list-style-type: none"> • tiling for bathrooms, toilets and kitchens; <p>Each removal of sand must be from within an area specified by the Conservator of Public Reserves, and in accordance with any conditions that the Conservator of Public Reserves may set from time to time; and an appropriate fee must be paid.</p> <p>In granting each permit for the removal of sand, the Conservator of Public Reserves shall have regard to archaeological advice, the advice of the KAVHA Site Manager, the KAVHA Conservation Plan of management and, in the case of requests for significant amounts of sand, any recommendation of the Norfolk Island Regional Council. A permit for the removal of sand for other than an essential building or construction purpose shall only be granted if it is in the overriding public interest to do so. Sand may not be removed elsewhere from within Cemetery Reserve or from within any other Public Reserve.</p>
26. Spoil Stockpiles	<p>The dumping and or stockpiling of soil, spoil or fill shall not be permitted in a Reserve unless that stockpile is in accordance with a plan of management, or in the opinion of the Conservator of Public Reserves, is essential to undertaking or completing works in a public Reserve to:</p> <ul style="list-style-type: none"> • ensure public safety; and or • conserve the environment.

Definitions for Controlled Activities

‘Animal’ means:

- (a) any invertebrate or vertebrate individual, organism or biological specimen alive or dead that is not a member of the plant kingdom or fungi kingdom, other than a domestic female bovine of the genus *Bos* to which a pasturage right³ applies or its dependent calf up to 6 months old; or a registered⁴ domestic dog of the genus *Canis*; or
- (b) any part of such an individual, organism or biological specimen; or
- (c) embryos, eggs or any other part of the reproductive cycle of such an individual, organism or biological specimen.

‘Commercial activity’ has the same meaning as ‘commercial activity’ in section 46 of the Public Reserves Act 1997, which states:

‘commercial activity’ means –

(a) supplying, or offering to supply, goods or services; or

(b) producing goods;

in the course of a business, trade, profession or calling.

‘Interfere’ has the same meaning as ‘interfere’ in section 42 of the *Public Reserves Act 1997*, which states ‘interfere’ includes remove, move, damage, deface, obscure and tamper.

³ In accordance with the *Pasturage and Enclosure Act 1949*.

⁴ In accordance with the *Dogs Registration Act 1936*.

'Nuisance' includes noise, or environmental harm to the Reserve or potentially to adjoining land or sea.

'Plant' means a member of a 'species' as defined here of the plant kingdom or the fungi kingdom.

'Species' means a group of biological entities that:

- (a) interbreed to produce fertile offspring; or
- (b) possess common characteristics derived from a common gene pool; and includes:
- (c) a sub-species.

'Take' means take, catch, capture or keep and includes, in relation to a live individual of any species, kill or injure (whether or not for the purpose of taking)

Permit Application and Standard Indemnity

A person seeking to undertake a controlled activity in a public reserve is required to use the permit application forms available from the Norfolk Island Regional Council. In signing the application form, the applicant is undertaking to indemnify the Commonwealth and the Norfolk Island Regional Council in the terms of the indemnity on the form. Every permit granted for a controlled activity shall include the following condition:

'The permit holder, in accordance with the indemnity provided on the application for the permit, fully and irrevocably indemnifies and saves harmless the Conservator of Public Reserves, all rangers, the Norfolk Island Regional Council together with all employees servants and agents thereof, the Administrator of Norfolk Island, the Crown and the Commonwealth of Australia jointly and severally from any and all liability and claims whatsoever arising in any way out of or in connection with or as a result of any activities carried out or conducted or proposed to be carried out or conducted under the permit or the involvement of any person firm or corporation in any way in regard to any activity carried out or to be carried out under the permit;

and the footnote:

The Norfolk Island Regional Council expressly denies any liability for any injury occurring to any person who may conduct any activity pursuant to this permit.'

The holder of a permit who has contravened a condition to which that permit is subject but who seeks to renew that permit or have a new permit granted will be required by the Conservator of Public Reserves to show cause why such permit should be renewed or granted.

In so showing cause, the permit holder will have to:

- provide evidence that fully explains the circumstances surrounding the contravention of the permit condition; and
- demonstrate the measures that the permit holder will take to ensure that the conditions to which a future permit would be subject will be complied with.

The Conservator of Public Reserves may, by notice in the Gazette, revoke or amend in any manner the approval or other regulation of any activity approved or otherwise controlled in a Plan of Management.

Appendix 2: Preliminary Reserve Prioritisation for Resource Allocation

Table 4 presents the draft prioritisation of the reserves. In prioritising the reserves against one another, the draft prioritisation considered the criteria in Table 4. Note that this is a preliminary prioritisation, and the highest priority management action from all plans is to formally prioritise the reserves using solid scientific methodology.

Table 4. Criteria for determining the priority of reserves for budget allocation

Criteria	Notes on Assessing the Reserves using Criteria
The objects of the <i>Public Reserves Act 1997 (NI)</i>	The objects of the Public Reserves Act 1997 (NI) are ‘to protect and conserve public reserves so as to- a. promote the conservation of the natural environment and landscape beauty of Norfolk Island; b. promote the conservation of the heritage of Norfolk Island; and c. preserve the way of life and the quality of life of the people of Norfolk Island.’ The reserves have been compared against the objects of the Act. Those reserves with greater environmental or heritage values have been assigned a higher priority than those with lower values.
On ground observations and survey results	Field values may include the presence of threatened species, amount of remnant vegetation cover, level of weed invasion, habitat for native fauna, presence of pest animals, etc. The reserve may also have heritage values such as evidence of Polynesian use, Pitcairn heritage use or European convict heritage.
Land zoning and overlay maps applicable under the NI Plan 2002; Reserve purpose when originally gazetted	Is the land in the open space, conservation or another zone? The more protected the land zoning, the higher the conservation potential of the land. Consideration should also be given to the Norfolk Island Strategic Plan Map (e.g. is the land in the High Rural/Conservation Value area?) and the Norfolk Island Heritage Overlay Map. The purpose of the reserve when it was first gazetted is also important. For example, was the reserve gazette for the conservation of flora and fauna, forestry, watering stock, common, or some other purpose?
Land use in adjoining allotments	Does the land adjoin areas with high conservation values, such as the National Park, or is it surrounded by small, heavily modified allotments? This will increase or reduce the conservation value of the land respectively.

Table 5. Draft prioritisation of Norfolk Island Public Reserves for allocation of management resources

Reserve Name	Priority (1 =Low to 10 = High priority)
Selwyn Reserve	9
Hundred Acres Reserve	9
Bumbora Reserve	8
Nepean Island Reserve	8
Two Chimneys Reserve	7.5
Anson Bay Reserve	6
Ball Bay Reserve	6
Cascade Reserve	5
Headstone Reserve	5
Point Ross Reserve	4
Middleridge Reserve	3
Stock Reserve	1

Appendix 3: Transitional Reserve Management Arrangements Following Changes to the *Norfolk Island Act 1979* in 2016

The first plans of management were prepared for most of the Reserves in 2003. At this time there were 18 reserves managed by the former Administration of Norfolk Island. Each reserve had a plan of management including the 6 reserves located in KAVHA (i.e. Cemetery Reserve, Government House Domain Reserve, Kingston Common Reserve, Kingston Recreation Reserve, Point Hunter Reserve and War Memorial Reserve). There was also a separate overarching KAVHA Conservation Plan of management, which took precedence over the Public Reserves Plan of managements in the case of any inconsistencies.

Between 1978 and 2016, Norfolk Island had a form of internal self-government under the *Norfolk Island Act 1979 (Cth)*. The Norfolk Island Legislative Assembly was responsible for governing the island and managing the reserves. In 2015 – 2016 however, changes were made under the Act to remove internal self-government and it was determined that many services would be delivered by a newly elected Regional Council, including management of the Public Reserves. There were also changes to the ownership of a number of the public reserves as shown in Table 6.

Table 6. Changes to ownership and management of Norfolk Island Public Reserves

1. Reserves transferred from the Commonwealth to the Norfolk Island Regional Council ⁵	2. Interests yet to be transferred from the Commonwealth of Australia to the Norfolk Island Regional Council	3. Interests to be retained by the Commonwealth of Australia ⁶
<ul style="list-style-type: none"> • Anson Bay Reserve • Ball Bay Reserve • Bumbora Reserve • The portion of Cascade Reserve previously known as the Quarantine Reserve • Headstone Reserve • Hundred Acres Reserve • Middleridge Reserve • Point Ross Reserve • Stock Reserve • Two Chimneys Reserve 	<ul style="list-style-type: none"> • Nepean Island • Selwyn Reserve • The remainder of Cascade Reserve not previously known as the Quarantine Reserve (includes Philipsburg Cemetery) 	<ul style="list-style-type: none"> • All KAVHA reserves including: Cemetery Reserve • Government House Domain Reserve • Kingston Common Reserve • Kingston Recreation Reserve • Point Hunter Reserve • War Memorial Reserve

During 2019-2020, updated Public Reserve Plan of managements were prepared for the 10 reserves in Column 1 (includes part of Cascade Reserve) plus the reserves in Column 2 (includes the remainder of Cascade Reserve). The KAVHA reserves in Column 3 will be managed under a new arrangement with the KAVHA Heritage Plan of management 2016 still guiding the overall heritage management of the area. Instead of having individual public reserve plan of managements for the KAVHA reserves, it is anticipated that a Memorandum of understanding or a similar will be used to specify the management of the significant natural values of the reserves. Day to day operational work including mowing, issuing of camping permits and dog restriction enforcement will also need to be captured in this arrangement, as it is assumed that such works will be the responsibility of Council.

⁵ As per the *Norfolk Island Land Transfer Ordinance 2016 (Cth)*

⁶ As per advice from the Commonwealth Department of Infrastructure and Regional Development, 2016