

# DEEP CREEK AND TALISKER CONSERVATION PARKS MANAGEMENT PLAN

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Fleurieu

SOUTH AUSTRALIA

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DEPARTMENT OF ENVIRONMENT  
AND NATURAL RESOURCES



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## FOREWORD

Deep Creek and Talisker Conservation Parks, situated on the southern edge of the Mount Lofty Ranges, represent the largest intact area of open forest, woodland and shrubland associations remaining on the Fleurieu Peninsula.

The creek systems that flow through the reserves support specialised vegetation types and habitat types not well represented elsewhere in South Australia.

The reserves provide the community with high quality recreational experiences, with camping, walking trails and the Talisker Mine site being popular with visitors. Provision for these and other outdoor activities are included in this management plan.

The plan of management was released in draft form for public review in April 1996. At the close of the public exhibition period five submissions had been received. These representations, and the draft plan, were subsequently presented to the Reserve Planning and Management Advisory Committee of the South Australian National Parks and Wildlife Council.

The review process resulted in a number of changes being made to the plan text, demonstrating that public involvement in the planning process encourages better park management. The contributors who took the time to make comment are thanked for their efforts.

The plan of management for Deep Creek and Talisker Conservation Parks is now formally adopted under the provisions of Section 38 of the National Parks and Wildlife Act, 1972.

A handwritten signature in black ink, appearing to read 'David Wotton', with a large, stylized initial 'D'.

Hon David Wotton, M.P.

**MINISTER FOR THE ENVIRONMENT AND NATURAL RESOURCES**



# 1. INTRODUCTION

## 1.1 Objectives of Management

Section 37 of the National Park and Wildlife Act lists ten objectives which the Minister, Chief Executive Officer and Director "shall have regard to" in managing reserves:

1. The preservation and management of wildlife.
2. The preservation of historic sites, objects and structures of historic or scientific interest within reserves.
3. The preservation of features of geographical, natural or scenic interest.
4. The destruction of dangerous weeds and the eradication or control of noxious weeds and exotic plants.
5. The control of vermin and exotic plants.
6. The control and eradication of disease of animals and vegetation.
7. The prevention and suppression of bushfires and other hazards.
8. The encouragement of public use and enjoyment of reserves and education in, and a proper understanding and recognition, of their purpose and significance.
9. In relation to managing a regional reserve - to permit the utilisation of natural resources while conserving wildlife and the natural or historic features of the land.
10. Generally the promotion of the public interest.

These objectives form the foundation for all management plans and have been duly considered in preparing this Management Plan for Deep Creek and Talisker Conservation Parks.

## 1.2 Purpose of the Plan

Deep Creek and Talisker are Conservation Parks of significant natural and cultural value.

The parks contain 4770 hectares of remnant Southern Mount Lofty Ranges vegetation which is poorly represented within the region. The remnant vegetation and river systems of the parks contain important habitat for wildlife. The reserves provide a range of recreational opportunities within 100 kilometers of the densely populated Adelaide area. The management plan provides for the protection of this significant resource from fire, weeds, vermin and uncontrolled access whilst managing for a range of quality recreational experiences within the parks

This plan outlines the more significant natural and cultural values of Deep Creek and Talisker Conservation Parks. It includes a philosophy of management, lists a series of management objectives and describes how these are to be achieved.

The reserves are seen as major conservation assets with significant landscape and recreational values. The plan promotes protection, rehabilitation and basic facilities and services.

## **2. PARK DESCRIPTION**

### **2.1 Location**

Deep Creek Conservation Park comprises a proclaimed area of 4,558 ha. The park is located on the south coast of Fleurieu Peninsula and overlooks Backstairs Passage. It is 13km east of Cape Jervis.

Talisker Conservation Park lies some 3km north west of Deep Creek Conservation Park and has a proclaimed area of 212 ha.

The parks boundaries are irregular in outline, a reflection of the attempt to include the maximum area of the native vegetation remaining within the region. The location of the parks 90km south west of Adelaide, their boundaries and cadastral composition are shown on figure 1.

### **2.2 Landform and Geology**

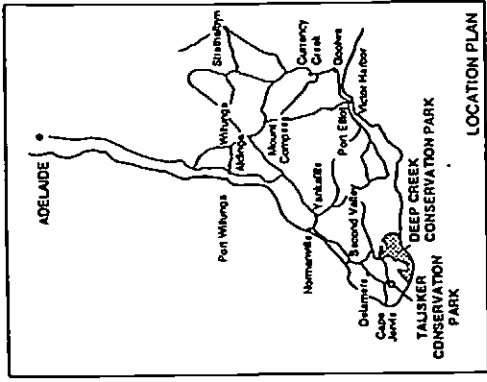
The South Mount Lofty Ranges form a spine to the Fleurieu Peninsula. A series of flat-topped ridges extend from this spine to the south coast. These ridges terminate in rugged cliffs, which provide panoramic views of Backstairs Passage and Kangaroo Island.

A number of southerly flowing streams dissect the uplands within the park and carve deep valleys along the strike of the steeply dipping rock strata. The major creeks are permanent, with springs and soaks in their upper regions. Small coves with beaches form where the creeks meet the Southern Ocean.

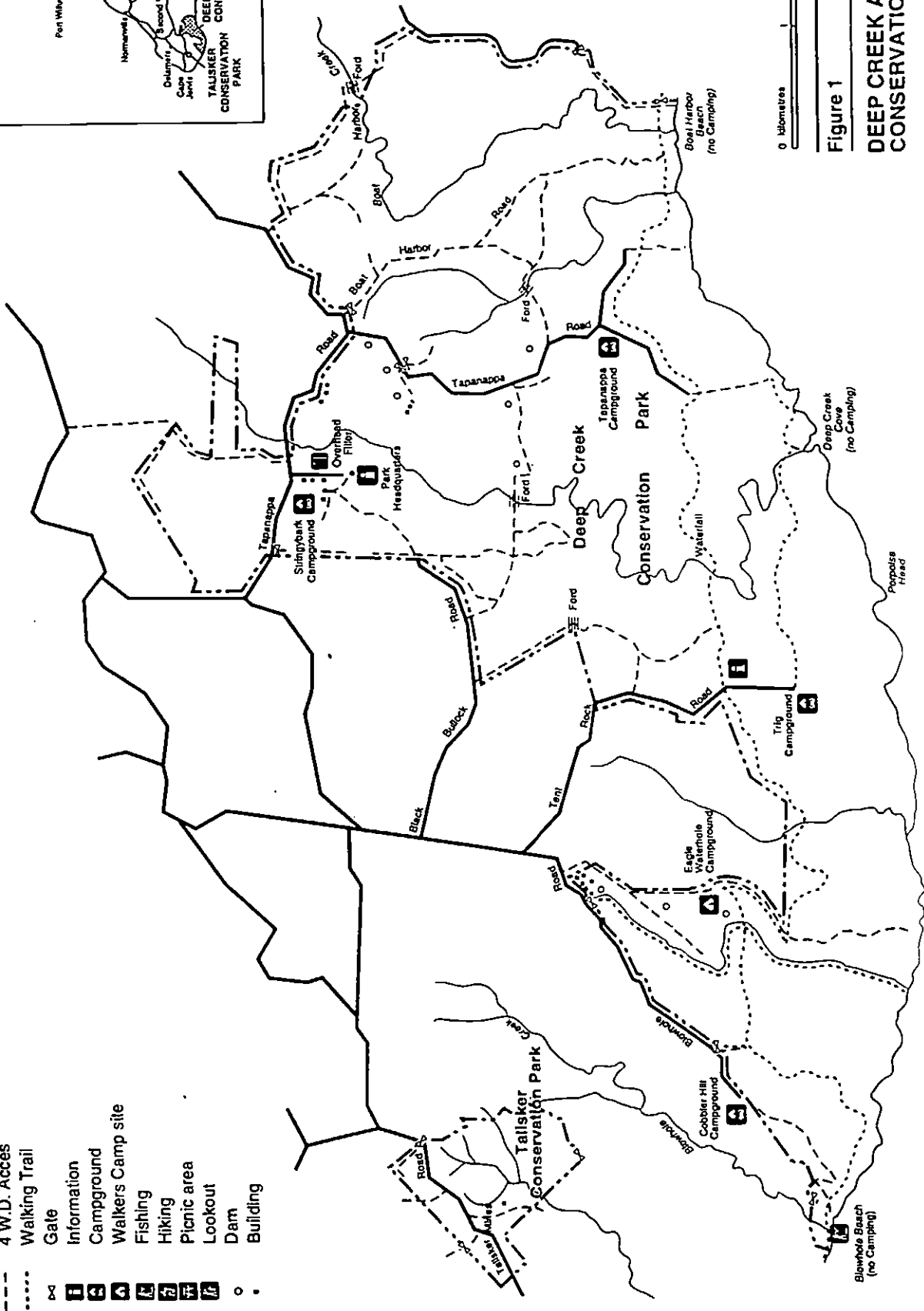
The present shape of the land surface reflects the underlying geology and recent erosion processes.

Rocks of the Cambrian Kanmantoo group are exposed in the cliffs of Deep Creek and the valleys of Talisker Conservation Parks. The strata of these meta-sediments have been up ended, creating spectacular cliffs, shore platforms and embayments on the coastline.

Metamorphism was of low to moderate grade, with many delicate sedimentary structures being preserved. These include crossbedding, fine scale lamination, scour channels and current-rippled surfaces.



- Park Boundary
- 2 W.D. Access
- - - 4 W.D. Access
- ⋯ Walking Trail
- ⌘ Gate
- ℹ Information
- ⛉ Campground
- ⛊ Walkers Camp site
- 🎣 Fishing
- 🥾 Hiking
- 🍃 Picnic area
- 👁️ Lookout
- 🏰 Dam
- 🏠 Building
- Building



**Figure 1**

**DEEP CREEK AND TALISKER CONSERVATION PARKS**

The metasediments exposed in the cliffs are progressively younger, west to east, within Deep Creek Conservation Park.

Above the Kanmantoo group and resting upon it are the Tertiary sediments with a lateritic crust. These form part of the summit etched plain.

The silver-lead ore mined at Talisker between 1862 and 1872 comprised argentiferous galena, arsenopyrite and sphalerite with native gold and silver. The ore horizon occupied a north south fault zone within the Cambrian rock. (Mesa 1990)

## 2.3 Climate

Annual rainfall varies from approximately 500mm near Blowhole Creek to over 900mm near Glenburn in the north of Deep Creek Conservation Park.

Sixty percent of the precipitation falls between April and November. The parks have cool wet winters and warm to hot dry summers. The coastal location moderates the temperature range, with the average summer maximum being 25 C and the winter maximum averaging 12-15 C.

## 2.4 Soils

The podzolic soils of Deep Creek are strongly influenced by the parent rock, topography and climate. Ironstone gravelly soils occur on the laterite etched surface in the northern and higher parts of the parks. Well drained grey brown skeletal soils occur above the Kanmantoo bedrock nearer the coast. Both soil types are deficient in plant nutrients.

## 2.5 Vegetation

Deep Creek and Talisker Conservation Parks, represent the largest uncleared area of sclerophyll open forest, and shrubland associations, remaining in the Mt. Lofty Ranges.

Two types of open forest formation exist within the parks. Messmate stringybark open forest (*Eucalyptus obliqua*) occurs on the high ridge tops and upper slopes in the northern part of Deep Creek Conservation Park, while pink gum (*E. fasciculosa*) is the dominant species in the forest formation found in the upper valley areas. Both formations grade to open shrubland formations in exposed coastal locations. Talisker Conservation Park differs in having areas of rough-barked manna gum (*E. viminalis* ssp. *cygnetensis*) as the dominant canopy species in some areas.

The creek systems within the parks, particularly those that flow all year round, support a specialised vegetation in the steep, moist gullies. Ferns and other shade plants occur here in specialised habitats. These habitats are not well represented elsewhere in South Australia. Within the various vegetation associations represented within the reserves 406 indigenous and 78 introduced plant species have been recorded, of those recorded 129 have been assigned conservation ratings (Lang, and Kraehenbuehl 1997.) These plants are listed below. The vegetation associations found within the two reserves are shown in figure 2.

Vascular plants recorded by D.Murfet & R. Taplin from 1988 to 1995.  
Conservation ratings as assigned by Lang & Kraehenbuehl (1997).  
(Explanation of ratings Appendix 1).

	AUS	SA	SL
<i>Acacia melanoxydon</i>			
<i>Acacia myrtifolia</i> var. <i>myrtifolia</i>			
<i>Acacia paradoxa</i>			
* <i>Acacia pulchella</i>			
<i>Acacia pycnantha</i>			
<i>Acacia retinodes</i> var. <i>retinodes</i> (swamp form)			
<i>Acacia verticillata</i>			
<i>Acaena agnipila</i>		U	U
<i>Acaena echinata</i>			
<i>Acaena novae-zelandiae</i>			
* <i>Acetosella vulgaris</i>			
<i>Acianthus caudatus</i>			
<i>Acianthus pusillus</i>			
<i>Acrotriche affinis</i>			R
<i>Acrotriche serrulata</i>			
<i>Adiantum aethiopicum</i>			
<i>Agrostis aemula</i>			
<i>Agrostis avenacea</i>			
<i>Agrostis billardieri</i>			
* <i>Aira cupaniana</i>			
<i>Allocasuarina muelleriana</i> ssp. <i>muelleriana</i>			
<i>Allocasuarina pusilla</i>			R
<i>Allocasuarina striata</i>			
<i>Allocasuarina verticillata</i>			
<i>Amphipogon strictus</i> var. <i>setifer</i>			
<i>Amyema miquelii</i>			
* <i>Anagallis arvensis</i>			
<i>Anogramma leptophylla</i>		R	U
* <i>Anthoxanthum odoratum</i>			
<i>Aphelia pumilio</i>		U	U
<i>Apium prostratum</i> ssp. <i>prostratum</i>			
* <i>Arctotheca calendula</i>			

*Arthropodium fimbriatum**Arthropodium strictum*\**Asclepias rotundifolia*\**Asphodelus fistulosus**Asplenium flabellifolium*\**Aster subulatus**Astroloma conostephioides**Astroloma humifusum**Atriplex cinerea*\**Atriplex prostrata*\**Avena barbata**Baeckea ramosissima* ssp. *ramosissima**Banksia marginata**Baumea acuta*

R R

*Baumea articulata*

R R

*Baumea juncea**Baumea laxa*

R R

*Baumea rubiginosa*

U U

*Baumea tetragona*

U U

\**Berula erecta**Beyeria lechenaultii**Billardiera bignoniacea*

U U

*Billardiera cymosa**Billardiera uniflora*

R

*Blechnum minus*

U U

*Blechnum nudum*

R R

*Blechnum wattsii*

R R

*Boronia coerulescens* ssp. *coerulescens**Bossiaea prostrata**Bracteantha bracteata*

R

\**Briza maxima*\**Briza minor*\**Bromus diandrus*\**Bromus hordeaceus* ssp. *hordeaceus*\**Bromus madritensis**Brunonia australis**Burchardia umbellata**Burnettia nigricans**Bursaria spinosa**Caesia calliantha*\**Cakile maritima* ssp. *maritima**Caladenia carnea* var. *carnea**Caladenia leptochila**Caladenia minor*

R R

*Caladenia ovata*

3VCa V V

*Caladenia patersonii* complex*Caladenia reticulata*

U U

*Caladenia tentaculata*

<i>Calochilus robertsonii</i>	U	U
<i>Calytrix tetragona</i>		
<i>Carex appressa</i>		
<i>Carex breviculmis</i>		
<i>Carex fascicularis</i>	U	U
<i>Carpobrotus rossii</i>		
<i>Cassinia uncata</i>		
<i>Cassytha glabella</i> forma <i>dispar</i>		
<i>Cassytha melantha</i>		
<i>Cassytha pubescens</i>		
* <i>Centaurium erythraea</i>		
* <i>Centaurium tenuiflorum</i>		
<i>Centella asiatica</i>	Q	R
<i>Centella cordifolia</i>		
<i>Centipeda cunninghamii</i>		
<i>Centrolepis aristata</i>		
<i>Centrolepis fascicularis</i>	U	U
<i>Centrolepis polygyna</i>		
<i>Centrolepis strigosa</i>		
* <i>Cerastium glomeratum</i>		
<i>Chamaescilla corymbosa</i> var. <i>corymbosa</i>		
<i>Cheilanthes austrotenuifolia</i>		
<i>Cheiranthra alternifolia</i>		
<i>Choretrum glomeratum</i>		
<i>Chorizandra enodis</i>		
<i>Chrysocephalum baxteri</i>		
* <i>Cicendia filiformis</i>		
* <i>Cirsium vulgare</i>		
<i>Cladium mariscus</i>	R	R
<i>Comesperma calymega</i>		
<i>Comesperma volubile</i>		
<i>Conospermum patens</i>		U
<i>Convolvulus erubescens</i>		
* <i>Conyza bonariensis</i>		
* <i>Coronopus didymus</i>		
<i>Correa reflexa</i> var. <i>reflexa</i>		
<i>Correa sp. nov</i>		
<i>Corybas dilatatus</i>		
<i>Cotula australis</i>		
* <i>Cotula coronopifolia</i>		
<i>Craspedia glauca</i>		
<i>Crassula closiana</i>		
<i>Crassula decumbens</i> var. <i>decumbens</i>		
<i>Cryptandra hispidula</i>	U	U
<i>Cryptandra tomentosa</i>		
<i>Cyanicula deformis</i>		
* <i>Cynosurus echinatus</i>		
<i>Cyperus tenellus</i>		

*Cyperus vaginatus*

<i>Cyrtostylis reniformis</i>			
<i>Cyrtostylis robusta</i>			
* <i>Dactylis glomerata</i>			
<i>Danthonia caespitosa</i>			
<i>Danthonia geniculata</i>			
<i>Danthonia pilosa</i>			
<i>Danthonia racemosa</i> var. <i>racemosa</i>			
<i>Danthonia setacea</i> var. <i>setacea</i>			
<i>Daucus glochidiatus</i>			
<i>Daviesia brevifolia</i>			
<i>Daviesia leptophylla</i>			
<i>Daviesia ulicifolia</i>			
<i>Derwentia derwentiana</i>			
* <i>Desmazeria rigida</i>			
<i>Deyeuxia densa</i>		R	R
<i>Deyeuxia quadriseta</i>			
<i>Dianella revoluta</i> var. <i>brevicaulis</i>			
<i>Dianella revoluta</i> var. <i>revoluta</i>			
<i>Dichelachne crinita</i>			
<i>Dichelachne micrantha</i>			
<i>Dichondra repens</i>			
<i>Dillwynia hispida</i>			
<i>Dillwynia sericea</i>			
<i>Dipodium roseum</i>			
<i>Disphyma crassifolium</i> ssp. <i>clavellatum</i>			
<i>Distichlis distichophylla</i>			
<i>Diuris</i> aff. <i>corymbosa</i>			
<i>Diuris brevifolia</i>	3RCa	R	R
<i>Diuris pardina</i>			
<i>Dodonaea viscosa</i> ssp. <i>spatulata</i>			
<i>Drosera auriculata</i>			
<i>Drosera binata</i>		R	R
<i>Drosera glanduligera</i>			
<i>Drosera macrantha</i> ssp. <i>planchonii</i>			
<i>Drosera peltata</i>			
<i>Drosera praefolia</i>		R	V
<i>Drosera pygmaea</i>			
<i>Drosera whittakeri</i>			
* <i>Echium plantagineum</i>			
* <i>Ehrharta longiflora</i>			
<i>Eleocharis acuta</i>			
<i>Eleocharis gracilis</i>		U	U
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>			
<i>Epacris impressa</i>			
<i>Epilobium billardierianum</i> ssp. x <i>intermedium</i>			
<i>Epilobium hirtigerum</i>			
<i>Epilobium pallidiflorum</i>		U	U



*Eriochilus cucullatus*

* <i>Erodium botrys</i>		
* <i>Erodium cicutarium</i>		
<i>Erodium crinitum</i>		R
<i>Eryngium vesiculosum</i>	R	K
<i>Eucalyptus baxteri</i>		
<i>Eucalyptus cneorifolia</i>		V
<i>Eucalyptus cosmophylla</i>		
<i>Eucalyptus fasciculosa</i>		
<i>Eucalyptus leucoxylon</i>		
<i>Eucalyptus obliqua</i>		
<i>Eucalyptus ovata</i>	U	R
<i>Eucalyptus viminalis</i> ssp. <i>cygnetensis</i>		
<i>Euchiton gymnocephalus</i>		
<i>Euchiton involucratus</i>		
* <i>Euphorbia paralias</i>		
<i>Eutaxia microphylla</i> var. <i>microphylla</i>		
<i>Exocarpos cupressiformis</i>		
<i>Gahnia sieberiana</i>	U	U
<i>Gahnia trifida</i>		U
* <i>Galium divaricatum</i>		
<i>Galium migrans</i>		
<i>Gastrodia sesamoides</i>	R	R
* <i>Genista monspessulana</i>		
<i>Genoplesium rufum</i>		U
<i>Geranium retrorsum</i>		
<i>Gleichenia microphylla</i>	R	R
<i>Glossodia major</i>		
<i>Glyceria australis</i>		R
<i>Glycine clandestina</i> var. <i>sericea</i>		
<i>Gompholobium ecostatum</i>		
<i>Gonocarpus mezianus</i>		
<i>Gonocarpus micranthus</i> ssp. <i>micranthus</i>	R	R
<i>Gonocarpus tetragynus</i>		
<i>Goodenia amplexans</i>	U	U
<i>Goodenia blackiana</i>		
<i>Goodenia geniculata</i>		
<i>Goodenia ovata</i>		
<i>Gratiola peruviana</i>		
<i>Grevillea lavandulacea</i>		
<i>Hakea carinata</i>		
<i>Hakea rostrata</i>		
<i>Haloragis brownii</i>	R	V
<i>Hardenbergia violacea</i>		
<i>Helichrysum scorpioides</i>		
<i>Hibbertia exutiacies</i>		
<i>Hibbertia riparia</i>		
<i>Hibbertia sericea</i> var. <i>sericea</i>		

<i>Hibbertia</i> sp. B		R
* <i>Holcus lanatus</i>		
<i>Hyalosperma demissum</i>		
<i>Hydrocotyle callicarpa</i>		
<i>Hydrocotyle foveolata</i>		
<i>Hydrocotyle hirta</i>	R	R
<i>Hydrocotyle pterocarpa</i>		R
<i>Hypericum gramineum</i>		
* <i>Hypochaeris radicata</i>		
<i>Hypoxis vaginata</i> var. <i>vaginata</i>	U	U
<i>Indigofera australis</i> var. <i>australis</i>		U
<i>Isolepis cernua</i>		
<i>Isolepis inundata</i>		
<i>Isolepis marginata</i>		
<i>Isolepis nodosa</i>		
<i>Isolepis platycarpa</i>		
<i>Isopogon ceratophyllus</i>		
<i>Ixiolaena supina</i>		U
<i>Ixodia achillaeoides</i> ssp. <i>alata</i>		
* <i>Juncus acutus</i>		
<i>Juncus bufonius</i>		
<i>Juncus caespiticius</i>		
<i>Juncus kraussii</i>		
<i>Juncus pallidus</i>		
<i>Juncus pauciflorus</i>		
<i>Juncus planifolius</i>		
<i>Juncus sarophorus</i>		
<i>Juncus subsecundus</i>		
<i>Kennedia prostrata</i>		
<i>Lagenifera stipitata</i> var. <i>stipitata</i>		R
<i>Lasiopetalum baueri</i>		U
<i>Lavatera plebeia</i>		U
<i>Laxmannia orientalis</i>		
* <i>Leontodon taraxacoides</i> ssp. <i>taraxacoides</i>		
<i>Lepidosperma carphoides</i>		
<i>Lepidosperma curtisiae</i>		
<i>Lepidosperma gladiatum</i>		U
<i>Lepidosperma laterale</i>		Q
<i>Lepidosperma longitudinale</i>		
<i>Lepidosperma semiteres</i>		
<i>Lepidosperma viscidum</i>		
<i>Leporella fimbriata</i>		
<i>Leptoceras menziesii</i>		
<i>Leptorhynchos squamatus</i>		
<i>Leptospermum continentale</i>		
<i>Leptospermum lanigerum</i>		U
<i>Leptospermum myrsinoides</i>		
<i>Leucophyta brownii</i>		

*Leucopogon concurvus*

<i>Leucopogon hirsutus</i>	R	R
<i>Leucopogon lanceolatus</i>	U	R
<i>Leucopogon parviflorus</i>		
<i>Leucopogon virgatus</i>		
<i>Levenhookia dubia</i>		
<i>Levenhookia pusilla</i>		
<i>Lindsaea linearis</i>	U	U
<i>Lissanthe strigosa</i>		
<i>Lobelia alata</i>		
<i>Lobelia gibbosa</i>		
<i>Lobelia rhombifolia</i>	U	U
<i>Logania linifolia</i>		R
<i>Logania recurva</i>	U	U
* <i>Lolium rigidum</i>		
<i>Lomandra collina</i>		R
<i>Lomandra densiflora</i>		
<i>Lomandra fibrata</i>		
<i>Lomandra micrantha</i> ssp. <i>tuberculata</i>		
<i>Lomandra multiflora</i> ssp. <i>dura</i>		
<i>Lomandra sororia</i>	U	U
* <i>Lotus uliginosus</i>		
<i>Luzula densiflora</i>	U	R
<i>Luzula meridionalis</i>		
* <i>Lycium ferocissimum</i>		
<i>Lycopodiella lateralis</i>	R	V
<i>Lycopus australis</i>	R	R
<i>Lythrum hyssopifolia</i>		
* <i>Malus sylvestris</i>		
* <i>Marrubium vulgare</i>		
<i>Melaleuca brevifolia</i>		R
<i>Melaleuca decussata</i>		
* <i>Mentha pulegium</i>		
<i>Micrantheum demissum</i>		U
<i>Microlaena stipoides</i> var. <i>stipoides</i>		
<i>Microtis atrata</i>	R	R
<i>Microtis parviflora</i>	U	U
<i>Microtis rara</i>	R	R
<i>Microtis unifolia</i>		
<i>Millotia tenuifolia</i> var. <i>tenuifolia</i>		
<i>Muehlenbeckia adpressa</i>		
<i>Muehlenbeckia gunnii</i>		
<i>Myoporum insulare</i>		
<i>Myoporum viscosum</i>	U	U
<i>Myriophyllum amphibium</i>	R	R
<i>Neurachne alopecuroidea</i>		
<i>Nicotiana maritima</i>		R
<i>Olearia axillaris</i>		

*Olearia ciliata* var. *ciliata*

<i>Olearia grandiflora</i>	U	U
<i>Olearia ramulosa</i>		
<i>Olearia teretifolia</i>	U	U
<i>Opercularia ovata</i>	U	U
<i>Opercularia turpis</i>		
<i>Opercularia varia</i>		
<i>Orthoceras strictum</i>	U	R
<i>Oxalis perennans</i>		
* <i>Oxalis pes-caprae</i>		
* <i>Parapholis incurva</i>		
* <i>Parentucellia latifolia</i>		
<i>Patersonia fragilis</i>	U	U
<i>Patersonia occidentalis</i>	U	U
<i>Pelargonium australe</i>		
<i>Pelargonium littorale</i>		
<i>Persicaria decipiens</i>		
<i>Persoonia juniperina</i>		U
* <i>Phalaris minor</i>		
<i>Phragmites australis</i>		
<i>Pimelea curviflora</i> var. <i>gracilis</i>		
<i>Pimelea glauca</i>		
<i>Pimelea humilis</i>		
<i>Pimelea linifolia</i> ssp. <i>linifolia</i>		
<i>Pimelea octophylla</i>		
<i>Pimelea phyllicoides</i>		
<i>Pimelea stricta</i>		
* <i>Pinus radiata</i>		
* <i>Plantago coronopus</i>		
* <i>Plantago lanceolata</i> var. <i>dubia</i>		
<i>Plantago varia</i>		
<i>Platylobium obtusangulum</i>		
<i>Platysace heterophylla</i> var. <i>heterophylla</i>		
<i>Pleurosorus rutifolius</i>		U
<i>Poa clelandii</i>		
<i>Poa poiformis</i>		
<i>Pomaderris paniculosa</i> ssp. <i>paniculosa</i>		U
<i>Poranthera ericoides</i>		R
<i>Poranthera microphylla</i>		
<i>Prasophyllum australe</i>	R	R
<i>Prasophyllum elatum</i>		
<i>Prasophyllum odoratum</i>		
<i>Pseudognaphalium luteoalbum</i>		
<i>Psoralea australasica</i>		
<i>Pteridium esculentum</i>		
<i>Pterostylis</i> aff. <i>obtusata</i>	E	E E
<i>Pterostylis alata</i>		U R
<i>Pterostylis curta</i>		R R

<i>Pterostylis foliata</i>		R	R
<i>Pterostylis longifolia</i>			
<i>Pterostylis nana</i>			
<i>Pterostylis nutans</i>			
<i>Pterostylis pedunculata</i>			
<i>Pterostylis plumosa</i>			
<i>Pterostylis sanguinea</i>			
<i>Ptilotus erubescens</i>	Q	R	R
<i>Pultenaea acerosa</i>			U
<i>Pultenaea canaliculata</i>		U	U
<i>Pultenaea daphnoides</i>			
<i>Pultenaea involucrata</i>		U	U
<i>Pultenaea largiflorens</i>			
<i>Pultenaea pedunculata</i>			
<i>Pultenaea scabra</i>		R	R
<i>Pultenaea trinervis</i>	N		
* <i>Pyrus communis</i>			
<i>Ranunculus amphitrichus</i>		U	R
<i>Ranunculus lappaceus</i>			
<i>Ranunculus sessiliflorus</i> var. <i>sessiliflorus</i>			
<i>Rhagodia candolleana</i> ssp. <i>candolleana</i>			
* <i>Romulea rosea</i> var. <i>australis</i>			
* <i>Rorippa nasturtium-aquaticum</i>			
* <i>Rostraria cristata</i>			
<i>Rubus parvifolius</i>		U	U
* <i>Rubus ulmifolius</i> var. <i>ulmifolius</i>			
<i>Rutidosis multiflora</i>			
<i>Samolus repens</i>			U
* <i>Scabiosa atropurpurea</i>			
<i>Scaevola albida</i>			
<i>Schizaea bifida</i>		V	E
<i>Schoenoplectus validus</i>			
<i>Schoenus apogon</i>			
<i>Schoenus brachyphyllus</i>		R	R
<i>Schoenus breviculmis</i>			
<i>Schoenus carsei</i>		U	U
<i>Schoenus maschalinus</i>		U	U
<i>Sclerolaena diacantha</i>			
<i>Scutellaria humilis</i>		R	R
<i>Senecio glomeratus</i>			
<i>Senecio hispidulus</i> var. <i>hispidulus</i>		U	U
<i>Senecio hypoleucus</i>		U	U
<i>Senecio lautus</i>			
<i>Senecio odoratus</i> var. <i>obtusifolius</i>		V	V
<i>Senecio odoratus</i> var. <i>odoratus</i>			U
* <i>Senecio pterophorus</i> var. <i>pterophorus</i>			
<i>Senecio quadridentatus</i>			
* <i>Sherardia arvensis</i>			

<i>Sigesbeckia orientalis</i> ssp. <i>orientalis</i>	Q	R
* <i>Silybum marianum</i>		
* <i>Solanum elaeagnifolium</i>		
<i>Solanum laciniatum</i>		R
* <i>Solanum linnaeanum</i>		
* <i>Solanum nigrum</i>		
* <i>Sonchus asper</i>		
<i>Sonchus hydrophilus</i>		
* <i>Sonchus oleraceus</i>		
* <i>Spergularia media</i>		
<i>Sphaerolobium minus</i>	R	R
<i>Spinifex sericeus</i>		
<i>Sporobolus virginicus</i>		
<i>Sprengelia incarnata</i>		R R
<i>Spyridium spathulatum</i>	3RCa R	R
<i>Spyridium thymifolium</i>		
<i>Stackhousia aspericocca</i>		
ssp. "Cylindrical inflorescence"		
<i>Stackhousia aspericocca</i>		
ssp. "One-sided inflorescence"		
* <i>Stellaria media</i>		
* <i>Stellaria palustris</i> var. <i>palustris</i>		
<i>Stipa mollis</i>		
<i>Stipa muelleri</i>	R	R
<i>Stipa semibarbata</i>		
<i>Stuartina muelleri</i>		
<i>Stylidium beaugleholei</i>	R	R
<i>Stylidium graminifolium</i>		
<i>Stylidium inundatum</i>		
<i>Tetragonia implexicoma</i>		
<i>Tetradlea pilosa</i> ssp. <i>pilosa</i>		
<i>Thelymitra antennifera</i>		
<i>Thelymitra aristata</i>		
<i>Thelymitra benthamiana</i>	U	R
<i>Thelymitra canaliculata</i>	U	V
<i>Thelymitra flexuosa</i>	R	R
<i>Thelymitra luteocilium</i>		
<i>Thelymitra mucida</i>	R	R
<i>Thelymitra pauciflora</i>		
<i>Thelymitra rubra</i>		
<i>Themeda triandra</i>		
<i>Thysanotus juncifolius</i>		
<i>Thysanotus patersonii</i>		
<i>Tricoryne tenella</i>		
* <i>Trifolium campestre</i>		
* <i>Trifolium repens</i>		
* <i>Trifolium subterraneum</i>		
<i>Triglochin procerum</i> var. <i>procerum</i>		U

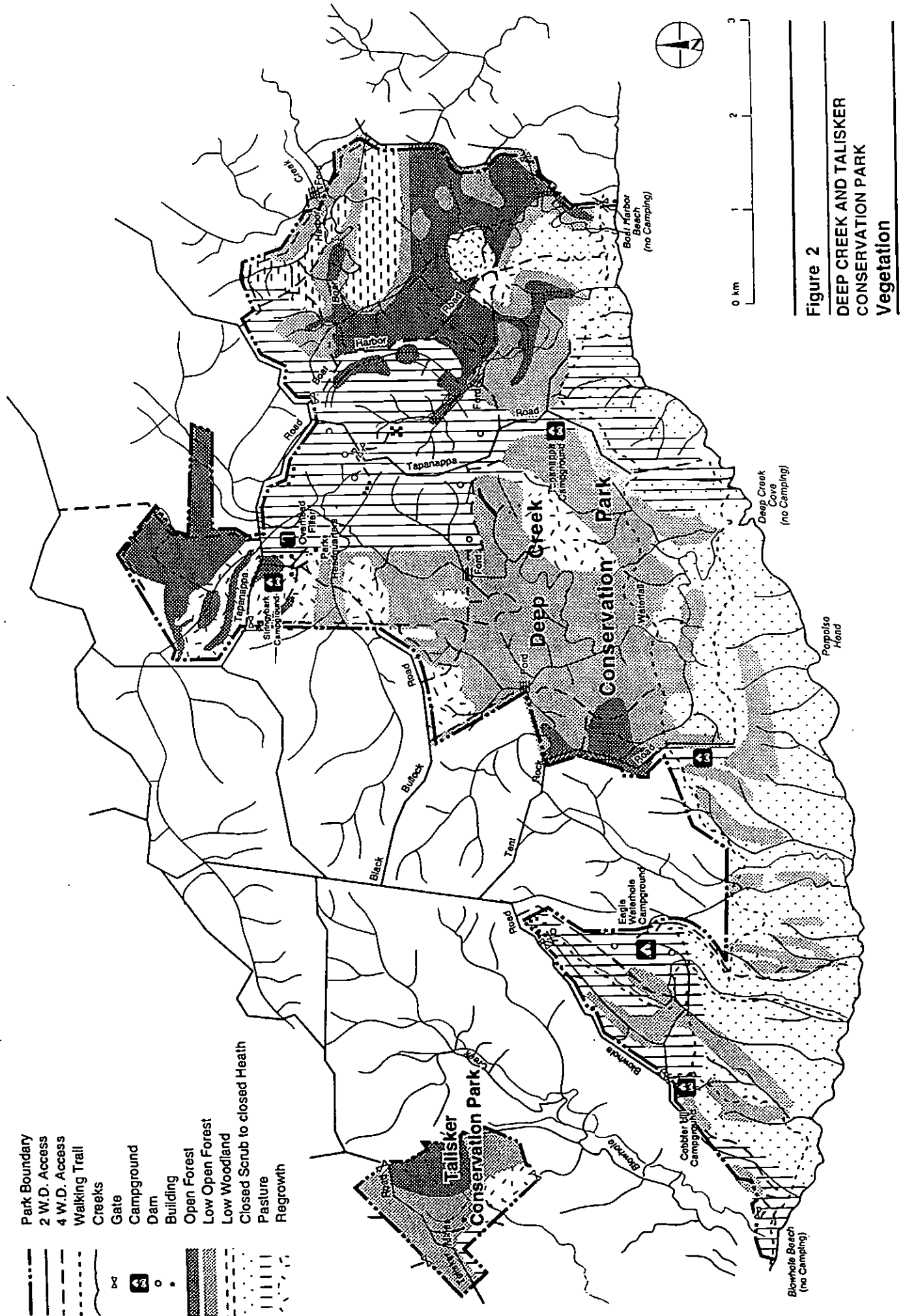
<i>Triglochin procerum</i> var. <i>procerum</i>		U
<i>Triglochin striatum</i>		
<i>Typha domingensis</i>		
* <i>Ulex europaeus</i>		
<i>Utricularia dichotoma</i>	U	U
* <i>Verbascum virgatum</i>		
<i>Villarsia umbricola</i> var. <i>umbricola</i>	U	U
<i>Viminaria juncea</i>	R	R
<i>Viola cleistogamoides</i>	R	R
<i>Viola sieberiana</i>		
* <i>Vulpia bromoides</i>		
* <i>Vulpia myuros</i>		
<i>Wahlenbergia gracilentia</i>		
<i>Wahlenbergia multicaulis</i>		V
<i>Wahlenbergia stricta</i> ssp. <i>stricta</i>		
<i>Wurmbea dioica</i> ssp. <i>dioica</i>		
<i>Xanthorrhoea semiplana</i> ssp. <i>semiplana</i>		
<i>Xanthorrhoea semiplana</i> ssp. <i>tateana</i>		U
<i>Xanthosia pusilla</i>		
<i>Xanthosia tasmanica</i>	R	R
<i>Xyris operculata</i>	R	V
* <i>Zantedeschia aethiopica</i>		

Indigenous species:	406
Alien species:	78
Total number of species:	484
(Lang and Kraehenbuehl, 1997)	

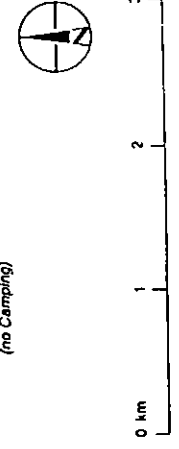
## 2.6 Fauna

One hundred and thirteen species of birds are recorded for the parks, including nine species of conservation significance. Populations of the Mount Lofty Ranges sub species of the southern emu wren (*Stipiturus malachurus* ssp. *intermedius*) have been observed in two separate locations within Deep Creek C.P. This species is classified critically endangered on a national basis and is currently the subject of a species recovery plan focusing on the Fleurieu Peninsula. (Littlely and Cutten, 1994)., Bird species rated as vulnerable recorded within the reserves include peregrine falcon, painted button quail, yellow tailed black cockatoo, white bellied sea eagle, chestnut rumped hylacola, lathams snipe and the beautiful fire tail. Species recorded as rare include mountain thrush, Lewins rail and peaceful dove (DENR ,1997)

Eleven indigenous mammal species have been recorded within the parks. Species of conservation significance include the southern brown bandicoot classified as vulnerable and the rare large forest eptisicus (DENR,1997). Nine species of reptiles are recorded for the parks. The permanent freshwater creeks support at least five species of native fish.



- Park Boundary
- 2 W.D. Access
- 4 W.D. Access
- - - Walking Trail
- ~ ~ ~ Creeks
- X Gate
- C Campground
- D Dam
- B Building
- Open Forest
- Low Open Forest
- Low Woodland
- Closed Scrub to closed Heath
- Pasture
- Regrowth



**Figure 2**  
**DEEP CREEK AND TALISKER**  
**CONSERVATION PARK**  
**Vegetation**



## **2.7 Aboriginal History**

The Deep Creek area is recorded as being within the lands traditionally associated with both the Kaurna and Ramindjeri Aboriginal people. It was a transition area at the boundary of their lands.

Locations within the park such as Blowhole Creek, feature in legends of the Dreamtime hero Ngurunderi and relate to the formation of the Pages and Kangaroo Island. Many place names close to Deep Creek Conservation Park can be traced to the languages of both groups. Cultural sites comprising stone chippings and midden sites have been located within Deep Creek Conservation Park.

## **2.8 European History**

European settlement of the area occurred progressively from the late 1850s. Talisker Mine was discovered by the McLeod Brothers of Cape Jervis in 1862. The mine was worked continuously up to 1872. Silver and lead were extracted to a value of 30,000 pounds. The mine site represents typical mid 19th century Cornish mining and is listed on the register of state heritage items. (Mesa 1990)

Diagrams in early books of the area show that a stone hut and woolshed existed near the mouth of Deep Creek prior to 1884. It was possibly built by Aaron Bennett. The area was utilised for rough grazing, usually wethers.

Land grants occurred from the mid 1880s; early grantees within the park boundaries included Isaac Norman and George Bennett. Other land uses during these early days included wattle bark stripping and later (especially during the depression years of the 1930s) yacca gum collecting. Some timber cutting occurred within the parks; at Talisker to feed the boilers at the mine and at Boat Harbour where stringybark was cut for fence posts and building purposes.

From the 1930s a concentrated effort began to clear the land and closer settlement followed. Early leaders in land clearance were the four Filsell brothers. Properties were progressively developed in and around what is now Deep Creek Conservation Park including Tapanappa, Tent Rock, Goondooloo, Callandra-brae and Angulong.

Significant increases in pasture carrying capacity occurred with the introduction of superphosphate after the Second World War.

From 1965 onwards, land purchases were made by the South Australian Government to create Deep Creek Conservation Park. The history of land acquisition over the next ten years was controversial. Considerable community concern was expressed at the inclusion of grazing land within the proposed boundaries of the park. Clearance of the Upper Boat Harbour Creek area for a pine plantation was stopped by the intervention of Cabinet; eventually the land was added to the park.

### **3. MANAGEMENT CONTEXT**

#### **3.1 Principal Values**

Deep Creek and Talisker Conservation Parks have been constituted to conserve the largest remnant area of native vegetation of the Southern Fleurieu Peninsula.

The conservation of both the natural and cultural values of these parks is a principal objective of management.

Scenic beauty and a sense of remoteness continue to draw visitors to these parks. The protection of the visitors' recreational experience is paramount.

The Department of Environment and Natural Resources will provide a range of facilities and services to meet the needs of the visiting public, consistent with the conservation and recreation values of the reserves.

A strategy of appropriate development will be devised that permits logical, progressive and non intrusive provision of facilities and services as visitor numbers increase. These developments should be in harmony with the cultural and natural scenic value of the parks.

It must be remembered that the proper management of natural and cultural values and the protection of ecological processes is critical to the maintenance of quality recreational experiences.

Two fundamental considerations provide the management context for this plan for Deep Creek and Talisker Conservation Parks. These are:

- the reasons for constitution of the reserves.
- the regional importance and potential of the reserves

### **3.1.1 Reasons for Constitution**

Deep Creek Conservation Park was originally constituted in 1971. The constitution resulted from the many representations made to the Government requesting conservation of the last remaining major areas of remnant native vegetation in the Southern Mount Lofty Ranges.

In addition, there was the potential to conserve the entire catchment of a permanent fresh water stream system.

The value of the area for its natural beauty and public enjoyment, including camping and hiking, were recognised at that time.

The conservation of over 4,000 hectares of sclerophyll forest and coastal heath is therefore a primary consideration of this plan.

Talisker Conservation Park was constituted in 1985. It was originally purchased by the South Australian Government in 1976 as a Regional Open Space Reserve and placed under the management of the State Planning Authority.

This was considered to be a strategic purchase of high quality natural land containing a historic mining site. The site was deemed worthy of preservation and interpretation for the visiting public.

The Talisker Silver Lead Mine ruins are recorded in the State Heritage Register as a significant representation of 19th century mining history.

The native vegetation of Talisker supplements and extends that conserved within Deep Creek Conservation Park. The conservation and interpretation of the Talisker Mine site and its natural setting is therefore an important consideration of this plan.

### **3.1.2 Regional Importance**

Deep Creek and Talisker Conservation Parks are within 1.5 hours drive of metropolitan Adelaide and only 45 minutes away from the burgeoning southern suburbs. The reserves contain natural forests and heaths, panoramic views and an extensive walking trail network in an almost pristine coastal environment. The parks, therefore provide a unique recreational setting.

In addition, Talisker Mine site is the most complete example of a 19th century silver lead mine in South Australia.

Current levels of visitor use stand at 25 000 - 30 000 people per year.

Three factors suggest that these visitor levels are likely to increase significantly over the next 20 years as a result of :

- increased activity in the tourism industry throughout the Fleurieu Peninsula and the South Coast.
- bitumen sealing of the Range Road, facilitating safe comfortable access to the park for motorists.
- increasing awareness by an urban population of the recreation and conservation values of the reserves.

## **4. OBJECTIVES OF MANAGEMENT**

Seven management objectives have been identified within the management context of these reserves. These are:

1. Identification, protection and conservation of ecologically and culturally significant areas.
2. The prevention and control of wildfire.
3. Identification, protection and enhancement of landscape values.
4. To provide opportunities for a range of recreational and interpretive experiences.
5. To provide for leasing concession arrangements.
6. To promote community involvement.

### **4.1 Application of Management Objectives**

#### **4.1.1 Identification, Protection and Conservation of Ecologically and Culturally Significant Areas.**

To facilitate implementation of this objective, the parks have been divided into nine management units (figure 3).

All areas are considered important in conservation terms, being either principal conservation/heritage areas or secondary regeneration buffer areas.

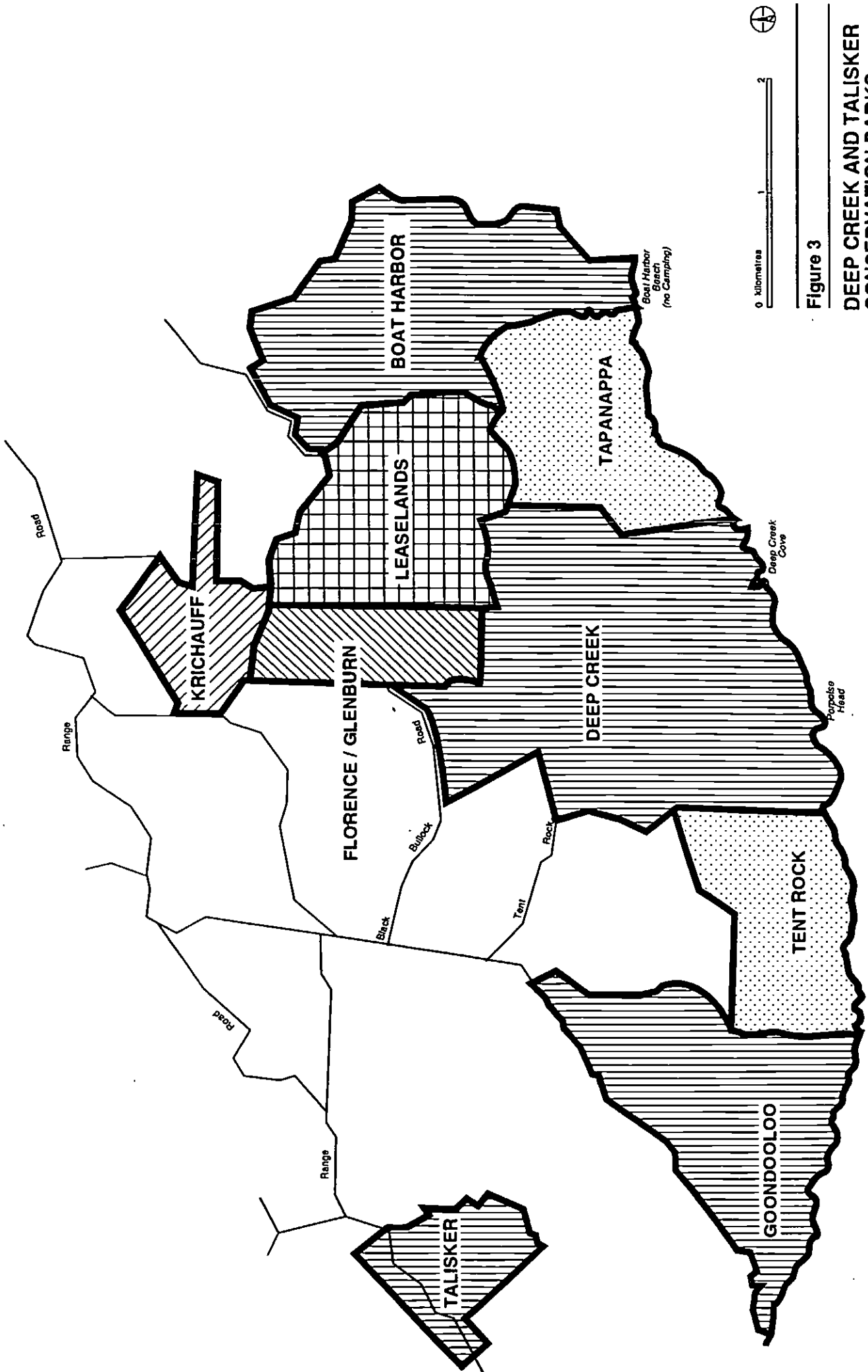


Figure 3

**DEEP CREEK AND TALISKER  
CONSERVATION PARKS**  
Management Units

Each management unit should be subject to a biophysical survey. The purpose of the survey would be to evaluate:

- conservation significance
- degree of modification by weeds, vermin and other agencies
- value for recreation
- significance for Aboriginal culture
- significance for European culture
- importance for fire management

Whilst it is desirable that any management actions proposed should be dependent on the outcome of the survey of each management unit, there are a number of issues that need to be endorsed in the short term in this plan.

These relate to:

- existing patterns of recreational use including camping and cabin accommodation
- fire management plan
- grazing of pasture areas
- control of specified weeds
- maintenance of public and management access
- community involvement in park management

Notwithstanding the need to undertake biophysical surveys of the management units within these parks, the following statements reflect the current state of knowledge of conservation issues within each management unit.

e.g. The major mainland remnant population of *Eucalyptus cneorifolia* is located within this park.

## Principal Strategies

The principal strategies that will be used to protect the primary conservation/cultural areas are:

- Adequately fence the perimeter of the parks to prevent the intrusion of stock.
- Manage recreational use to minimise human impact on prime conservation areas. Walking trails will be permitted within these areas, however the areas will need to be carefully assessed prior to any further trails being constructed.

- Focus weed control programs upon those species that actively invade native vegetation and specifically concentrate efforts in those locations that threaten prime conservation areas. Statutory requirements for the control of scheduled pest plants and animals should be met.
- Protect the parks (as far as possible) from a too frequent incidence of wildfire and control wildfire (see objective 2).
- Progressively rehabilitate and revegetate cleared land and protect water catchments as far as is practicable.
- Monitor the population of western grey kangaroos and their impact upon the native vegetation.
- Develop and support threatened species action plans and support the ongoing Mount Lofty Ranges Southern Emu Wren Recovery Plan

**Actions:**

**Biological data base** The conservation significance of these two reserves needs to be supported by an accurate and comprehensive data base of biological assets, including locations and distributions of any threatened species. Existing database is to reviewed, updated and maintained within the District office and at DENR Resource Management Branch.

**Fencing:** Deep Creek and Talisker Conservation Parks have approximately 40 km of boundary. In addition, some 11 km of internal fencing protects conservation areas from the incursion of stock. Of this 51 km of fencing, some 25 km needs replacing immediately or within the next 5 years. Approximately 5 km are urgently required.

**Control of Pest Plants and Animals:** DENR will continue to meet its statutory obligations under the Animal and Plant Control Act and control and eradicate noxious weeds, exotic plants and vermin.

**Weeds:** Within Deep Creek and Talisker Conservation Parks, the following weed species are of concern in priority order:

Gorse (100 ha)

Cape Broom (15 ha)

Blackberry (4 ha)

Pines (throughout Northern areas of Deep Creek)

Watsonia (1 ha)

Sweet Briar (3 ha)

Salvation Jane (40 ha)

Elm (5 ha in Krichauff block)

Hore Hound (2 ha)

Three Cornered Garlic (1 ha)

Of these the most significant, is gorse. Infestations at Tapanappa, Boat Harbour and elsewhere in the parks threaten to further invade healthy native vegetation. Gorse has the potential to spread rapidly following wildfire.

A gorse control program required the complete removal of 40 hectares of infested habitat at Tapanappa during 1985. To ensure successful removal of gorse from this area a revegetation pest plant control program will need to be maintained for a minimum of 15 years.

Another serious weed is Cape broom, particularly in the Krichauff management unit and the upper reaches of the Deep Creek. DENR has limited capacity to control this weed at present. Proposed action at this stage will be delayed until either the gorse program is completed, or a wildfire simplifies the control of Cape broom by providing easy access to seedling regrowth. Mapping the extent of the infestation should be undertaken.

Weed control monitoring and control programmes will continue to be instituted in Deep Creek and Talisker Conservation Parks. Priority will be given to weeds that infest native vegetation, like gorse, Cape broom and blackberry.

Control will focus on protecting principle conservation areas, as well as preventing the spread of weeds onto adjoining properties.

An ongoing monitoring program of weed species known to be in surrounding areas (EG. Boneseed and Bridal Creeper), but not yet found in the reserves, will be implemented.

**Phytophthora cinnamomi:** This destructive root fungus was first discovered in Sections 51 and 52, Hundred of Waitpinga, in 1975. The land was then managed by the Woods and Forest Department. Approximately six hectares of vegetation was affected in the upper Boat Harbour Creek unit. This increased to 8.3 ha by 1976.



This disease has not been monitored since the 1983 fire, as all the vegetation was burnt and the regrowth has not shown symptoms of the pathogen. This area will be monitored for any re-occurrence. Soil disturbance should be kept to a minimum in the affected locations.

**Rehabilitation:** Areas within the park once cleared for agricultural purposes will continue to be revegetated as funding and time permits. The methods used will include:

- natural regeneration
- direct planting by staff and volunteers
- direct seeding

Areas currently held under grazing license will progressively be resumed over the next 15-20 years and revegetated as resources permit. This action is part of the long term aim to maximise conservation values, protect significant conservation areas, reduce the long term incidence of weed infestations and to protect water catchment areas and water quality.

A systematic rehabilitation of areas cleared for the control of gorse will be implemented once eradication is completed and the chance of reinfestation is eliminated.

**Animals:** The occurrence of rabbits within the parks will be monitored and action taken as required. The other significant vertebrate pests, cats and foxes, will be monitored. Fallow deer have been recorded in the surrounding district and within Deep Creek Conservation Park. To ensure the impact on the park is kept to a minimum, deer will be eradicated from the reserve where possible.

**Monitoring of Western Grey Kangaroos:** The population of Western Grey Kangaroos within the park appears high. The occurrence of cleared pasture within and outside the parks, coupled with abundant fresh water, has favoured an increase in the population of Western Grey Kangaroos.

A base line study and on-going monitoring will be conducted to determine whether population levels are too high for the native vegetation to sustain. If it is demonstrated that this is the case, action should be instigated to manage the population of Western Grey Kangaroos.

**Threatened Species:** Action plans will be prepared and implemented for significant native species of plants and animals identified as being under threat as a strategy to enhance the status of those species.

**Heritage Sites:** The following actions will be undertaken to establish and protect heritage sites:

- Establish an inventory of known sites and record the condition of the sites.
- Produce a conservation and rehabilitation plan for the Talisker Mine cultural site.
- Encourage a survey for sites of significance to Aboriginal culture.
- While protecting cultural sites, attempt to integrate their management with interpretive programs for the parks.
- Initiate and liaise with descendants of the former aboriginal occupants of the lands.

#### **4.1.2 Prevention and Suppression of Wildfire.**

Since initial constitution in 1971, three major wildfires have swept the park in 1980, 1983 and 1990. The 1980 fire burnt approx. 2,000 ha of coastal and central areas of the park. The 1983 fire burnt approx. 300 ha mainly in the Boat Harbour area. Section 376 was actually burnt on both occasions. The 1990 fire burnt approx. 80 ha in the Goondooloo Ridge area.

Deep Creek and Talisker Conservation Parks represent a significant percentage of the remaining native vegetation within the Southern Fleurieu Peninsula. The burning of a large area of the park area in a wildfire should be avoided. The capacity for a burnt area to recolonise is dependent of the biological resources that can transfer from the unburnt area. There is limited capacity to draw on biological resources from area outside the park. In addition, people now live and manage high value assets adjacent to the parks. Consequently it is not appropriate to permit wildfires to burn unchecked in these parks.

#### **Management Strategies**

All reasonable measures will be taken to stop the occurrence of wildfire within these parks. When wildfires do occur there will be a policy of speedy suppression.

This suppression will take two forms. Firstly, direct attack on the fire by conventional fire fighting methods and with the use of aircraft. Secondly, block burning of discrete management units of the park will be undertaken from prepared access tracks to contain wildfires.(Figure 4)

The use of earth moving equipment will only be used for the protection of life and property or under exceptional circumstances to achieve a critical fire management objective.

Controlled burning of these parks to reduce fire fuel will not be undertaken without prior research into the potential effects on the park's ecology. A modified burning regime may create structural changes to native vegetation and associations and increase the likelihood of weed and plant pathogens spreading within the parks.

Each year the fire access network will be maintained as a component of an established program.

**Actions:**

- Update the Fire Management and Prevention Plans for Deep Creek Conservation Park and include Talisker Conservation Park within the plan.
- Maintain the 58 km of fire access track in the parks
- Improve the availability of emergency water throughout the parks, particularly in all sites developed for public recreation, accommodation and infrastructure.
- Provide "refuge areas" for public assembly during wildfires.
- Maintain equipment and communications on a regular basis.
- Continue to work closely with C.F.S. organisations and Bushfire Fire Prevention Committees.
- Design camp grounds to minimise the possibility of accidental fire escaping.

#### **4.1.3 Identification, Protection and Enhancement of Landscape Values.**

Deep Creek and Talisker Conservation Parks conserve the most natural, scenic land and seascapes within the Fleurieu Peninsula. The high rainfall, maritime environment, large areas of forest, steep cliffs and valleys combine to produce a landscape of significant value to the South Australian community. The variety of weather patterns produce ever-changing landscape moods. The remote quality of much of the area is of value to a metropolitan urban community. This value can only increase with time.

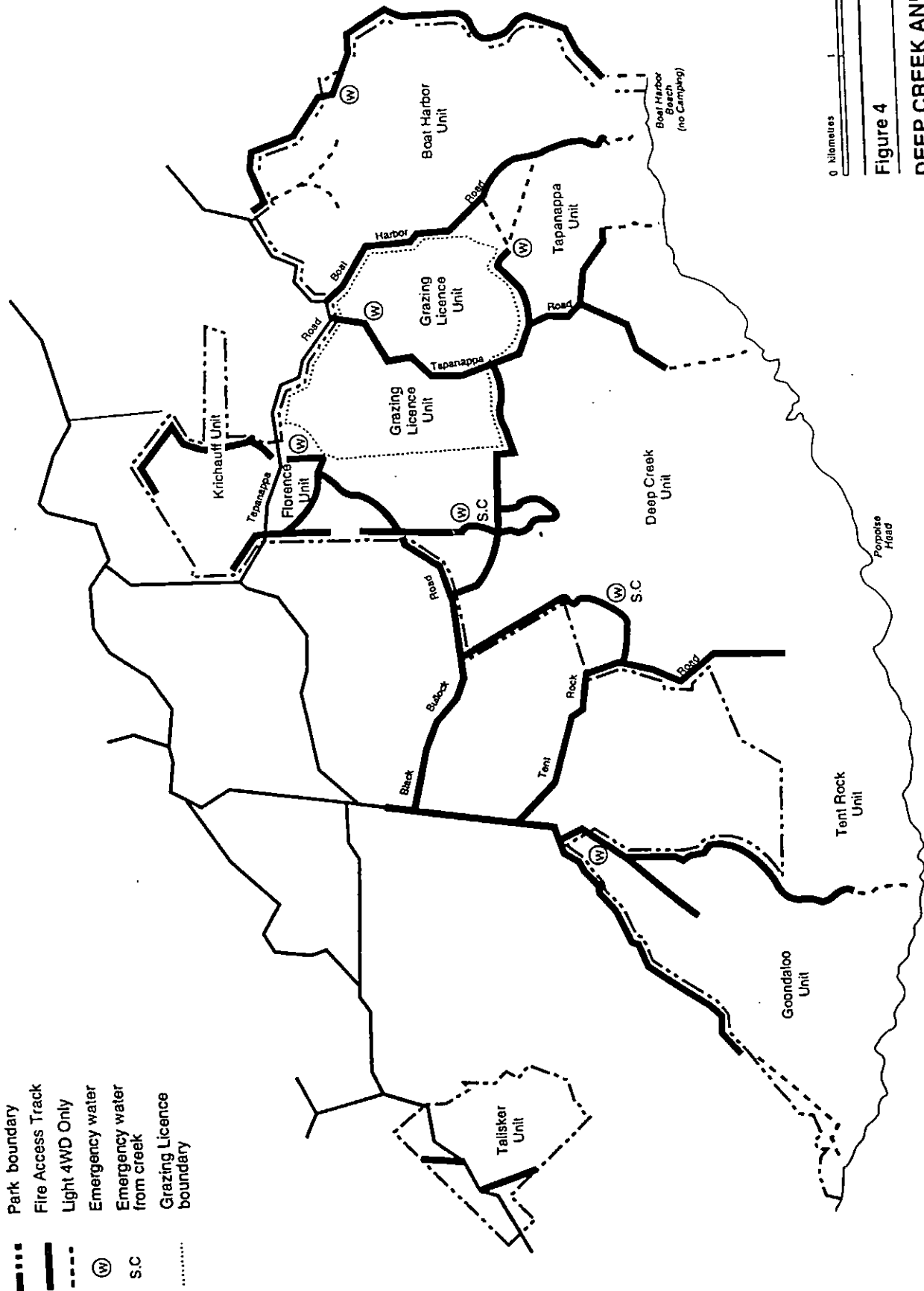


Figure 4

**DEEP CREEK AND TALISKER  
CONSERVATION PARKS  
Management Units and Access Tracks**

The most significant threats to landscape values are intrusions for other management purposes. The location of roads, tracks and buildings can disturb the lines and forms, texture and contrast contained in a natural landscape. The potential intrusion of negative elements into the natural landscape needs to be considered when management actions are being considered. This is particularly the case with coastal vistas.

### **Strategies**

No further tracks for management or public access are to be developed down coastal spurs. The landscape implications must be considered and every attempt made to minimise visual impact.

Building and similar structures should not be built in remote landscape areas. If buildings and other structures are required within the coastal zone, they should be designed to blend with and not intrude into the landscape.

Walking trail construction routes and surfacing material should not be discordant with the form, line, texture and contrasts of the natural landscape.

A landscape analysis plan should be drawn up that identifies key viewing and landscape locations. This should be included in development plans produced in accordance with the objective.

All developments undertaken in the park should be sympathetic with surrounding environs.

#### **4.1.4 Provision of a range of recreational and interpretive experiences**

An estimated 25,000 - 30,000 people visit Deep Creek and Talisker Conservation Parks each year. This figure is based on traffic counts taken within the parks. Camping permit sales for Deep Creek Conservation Park indicate that approximately 4,000 persons per year stay at Deep Creek; approximately 6,000 camper nights.

Visitor numbers to the parks peak during Easter and October long weekends. School holidays in Spring and Autumn also are popular. Up to 400 campers stay in Deep Creek Conservation Park during Easter and October long weekends.

The cooler seasons are popular for bush walking. Walking trail surveys done in 1988 over Easter showed over 300 people used the Deep Creek Cove Trail and 334 used the Deep Creek Waterfall Trail.

The major recreational activities undertaken are bush walking, camping, scenic driving, picnicking, nature study, visiting the Talisker Mine Site, fishing, hang gliding, and diving. The park is also used on occasions by the Army, Emergency Services, Scouts, School groups and Rogaining Clubs. The topography and complexity of the walking trail system are ideal for navigation and bush camping exercises. Some scenic four wheel driving occurs on the safer, accessible access tracks.

Mountain bikes are becoming an increasingly popular recreational activity. The use of existing vehicle tracks for passive mountain bike use may be explored where the use does not impact on the park's natural values or conflict with other park users.

The existing pattern of recreational use is shown in Figure 5. The major campsites, walking trails and access routes used at present are marked.

A number of issues have emerged in the management of recreation use of the parks.

1. Many vehicle access tracks within the park are steep and subject to erosion. Vehicles often become stranded during wet conditions. The steep access tracks into areas such as Blowhole Beach and Boat Harbour Beach cause difficulties to visitors when they attempt to drive back up the slope. The problem is mainly confined to two wheel drive vehicles attempting to gain close access to the coast.
2. Limited toilet and shower facilities are available throughout the park.
3. Limited drinking water is available only at campsites.
4. Walking trails within the parks tend not to return to point of origin. This results in visitors either having to make complex vehicle arrangements to facilitate pick-up or walking back along the same trail.
5. No arrangements currently exist to cater for day visit picnic activities.
6. With the exception of three cottages available for hire, overnight accommodation is restricted to camping grounds with limited facilities. A range of accommodation types with appropriate facilities would be advantageous to visitors to the park.
7. Public safety is an issue within the parks. Deep Creek Conservation Park has a history of search and rescue operations. Incidents have declined in recent years due to improvements to park signage and the availability of maps and brochures. The park however, remains potentially dangerous to unwary or careless members of the public.

## Strategies

- Safe, reliable, all weather 2 wheel drive access should be provided to existing major locations within the park. Some upgrading, re-routing and forming will be required to develop roads to a safe standard.
- Consideration to be given to expanding the range of accommodation facilities including cabins, bunkhouses, powered camping caravan sites and sheltered camping sites.
- Basic facilities such as water and toilets should be provided in all designated camping areas.
- Walking trail networks should meet the needs of the people that use them. This includes catering for people of different ages and physical ability.
- Adequate information and interpretive services should be provided. These need to be accessible to the visiting public.

## Actions

To provide for infrastructure facilities and recreational use the parks are to contain six development zones (Figure 6) to allow for appropriate infrastructure and services.

### Glenburn Development Zone

- Park administration
- Park workshop and storage areas
- Existing cottage and possible future cabin and bunkhouse or similar development
- Camp ground and possible powered sites
- Toilets, showers and other facilities
- Information, services and sales outlets
- Roads, car-parks and trail heads
- Day visitor area

### Trig Development Zone

- Roads and tracks with car parks
- Trail heads and day visit area
- Bush camp sites with toilets and water
- Interpretation and information

### **Blowhole Beach and Cobbler Hill Development Zone**

- Car-parks, road and tracks, scenic lookout
- Day visit facilities including toilets
- Interpretation and information
- Trail head
- Limited bush campsite with toilet (Cobbler Hill)

### **Tapanappa Development Zone**

- Roads and tracks
- Scenic lookout
- Day visit area
- Trail head, interpretation and information
- Small number of bush campsites with toilet

### **Goondooloo Development Zone**

- Staff Accommodation
- Goondooloo cottage overnight accommodation existing
- No camping will be provided for at Goondooloo.
- Bush camping for walkers only will continue at Eagle Water Hole.

### **Talisker Mine Site**

- Car park and toilets
- Day visitor facilities
- Interpretation and information
- Extended walking trails

All developments should have a detailed site and demand analysis prior to implementation.



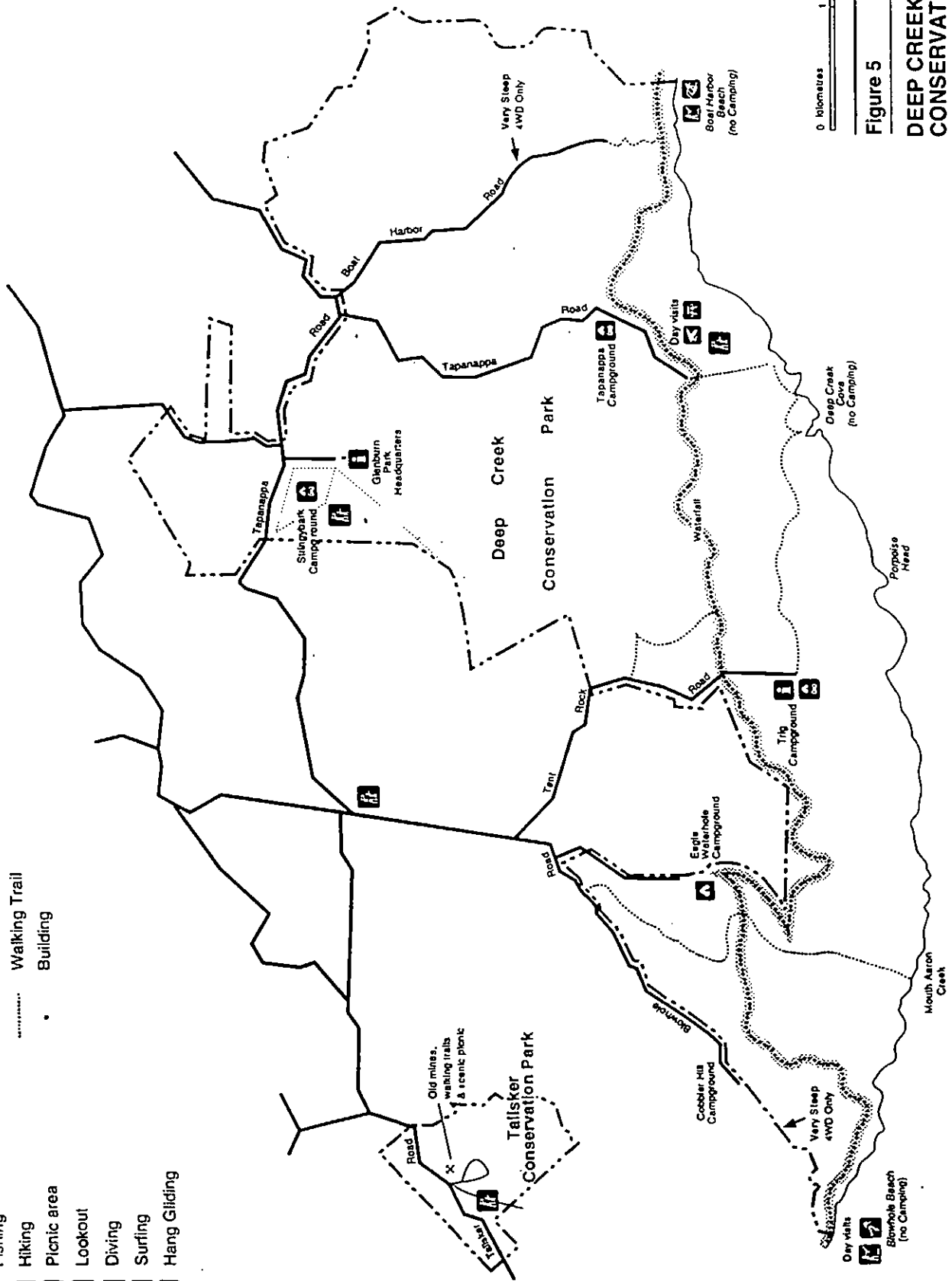
## **WALKING TRAILS**

The walking trail network will be reviewed and improved over time. The new network will be based on the following principles:

- Most walking trails will depart from trail heads adjacent to car parks in day visit areas
- The Heysen Trail will remain central to the network
- The majority of walk trails will be circuits
- The trails will cater for a range of ages and physical capabilities
- The cost of maintaining trails will be a factor in the construction of new trails
- Trails will be established and maintained to a high standard to meet nature conservation requirements
- All trails currently being utilised to access significant locations will remain

A schematic representation of the existing network is shown in Figure 5. Future choices of trail locations are to be based on detailed site analysis and demand.

- Information
- Camping Ground
- Fishing
- Hiking
- Picnic area
- Lookout
- Diving
- Surfing
- Hang Gliding
- Park Boundary
- Heysen Trail
- Vehicle access
- Walking Trail
- Building



**Figure 5**  
**DEEP CREEK AND TALISKER**  
**CONSERVATION PARKS**  
 Access and existing use

## OTHER RECREATIONAL ACTIVITIES

All current recreational activities compatible with the parks' values will continue to be catered for.

- Vehicle access will be restricted to roads and tracks shown in Figure 5.
- Mountain bikes will be restricted to roads set aside for vehicular traffic.
- The reasons for not permitting access to other fire access tracks within the park are:
  - ◆ The high cost of maintenance of fire access tracks which can be damaged and eroded by indiscriminate use
  - ◆ The incursion of noise into semi-wilderness areas, resulting in conflict with significant park values (peace, tranquility, landscape)
  - ◆ The very steep nature of some of these tracks requires driver skills and vehicle standards above that required by the law for conventional driving.
  - ◆ DENR has no way of assessing skill and vehicle quality.
  - ◆ The past history of 4 WD vehicles getting stranded on tracks and then requiring recovery by park staff

## INFORMATION AND INTERPRETATION

To ensure accurate and appropriate information is available the following services will be provided.

- Quality directional signs and information boards.
- Quality maps and brochures.
- Educational and interpretive services.
- Facilities for educational activities conducted by school, tertiary institutions and other groups.

## **RESOURCES AND ECONOMICS**

The range, quality and type of facilities proposed in this plan require significant investments of capital and will incur heavy, on-going maintenance costs.

It is intended that the resources to implement these services, come from a variety of sources including Treasury allocation, grants, loans funds, fee for service, entry fees and license and concession management arrangements.

### **4.1.5. To provide for leasing and concession arrangements**

The localities within Deep Creek Conservation Park known as "Glenburn" and "Tapanappa" are currently on 5 year leases. These areas will continue to be licensed for grazing purposes until DENR is able to revegetate them effectively. Monies raised from this license should continue to be directed to the General Reserves Trust for management purposes within the parks.

Currently the three cottages within Deep Creek Conservation Park are leased to private operators to provide park visitors with comfortable accommodation within the reserve. The lease arrangements also allow for further development of holiday accommodation facilities within the Glenburn Development Zone.

Opportunities exist to permit private operators to provide some of the facilities and services foreshadowed in this plan.

#### **Strategy**

Concession development within Deep Creek and Talisker Conservation Parks for the provision of visitor facilities will be permitted only if the development is consistent with the preservation of the park values.

#### **Actions**

1. Grazing licenses will continue to be offered for appropriate lands but will be progressively withdrawn once DENR is capable of effectively rehabilitating and revegetating these lands.
2. When public use requires it and an opportunity is available, concession arrangements may be negotiated to provide facilities and services.
3. The three cottages within Deep Creek Conservation Park will continue to be leased by private operators as per existing lease agreement.

#### **4.1.6 To promote community involvement**

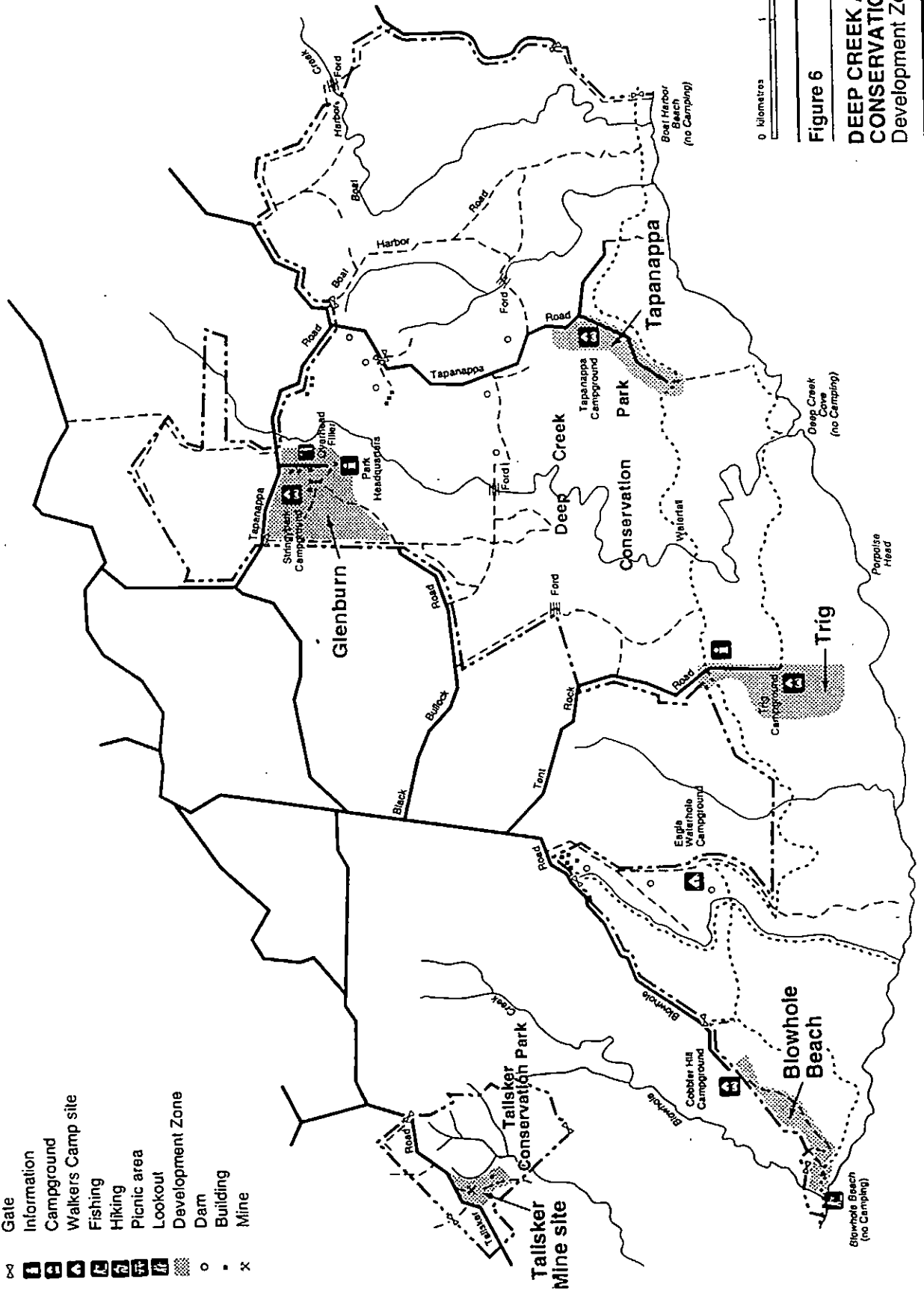
DENR encourages community participation in the management of reserves by four principal mechanisms:

- Submissions to plans of management
- District Consultative Committees reporting to the Minister of Environment and Natural Resources
- Friends of Parks - volunteer organisations working directly with park staff within parks
- Broader community volunteer work including schools and educational institutions

##### **Strategy**

All these mechanisms are currently being utilised for Deep Creek and Talisker Conservation Parks and will continue.

- Park Boundary
- - - 2 W.D. Access
- - - 4 W.D. Access
- ..... Walking Trail
- ⌘ Gate
- ⓘ Information
- Ⓞ Campground
- Ⓜ Walkers Camp site
- 🎣 Fishing
- 🥾 Hiking
- 🌳 Picnic area
- 🔭 Lookout
- 🏠 Development Zone
- 🌊 Dam
- 🏠 Building
- Ⓧ Mine



**Figure 6**  
**DEEP CREEK AND TALISKER**  
**CONSERVATION PARKS**  
**Development Zones**

## ACTION SUMMARY

	PRIORITY	DURATION
<b>MONITORING</b>		
Weed control programs	High	On-going
Undertake Biophysical Survey of Management Units	High	5 years
Develop and support threatened species action plans	High	5 years
Kangaroo numbers	Medium	5 years
Phytophthora cinnamomi	Medium	On-going
Review , update and maintain biological data base	High	5 years
<b>DEVELOPMENT PLANS AND STUDIES</b>		
Long term weed control and rehabilitation plan	High	2 years
Landscape analysis plan	High	2 years
Development Plans for development zones	High	2 years
Walking Trail analysis	Medium	1 year
Rehabilitation plan - Talisker Mine site and other cultural assets	High	2 years
Interpretation plan for parks	High	1 year
Business Plan	High	1 year

<b>WORKS</b>	<b>PRIORITY</b>	<b>DURATION</b>
Provision of defined camp-sites with water, car parks and toilets at Trig Camp ground	High	1 year
Redevelopment of park infra-structure including office and workshop	High	5 years
Establishment of day visit areas with toilets, car parks, information and interpretation.		
Picnic facilities and trail heads at Trig, Tapanappa and Krichauff's.	Medium-High	1 year
Develop camp ground at Glenburn	High	1 year
Implement weed control programs	High	On-going
Implement replacement fencing strategy	High	5 years
Implement fire access works	High	Annually
Upgrade road and track system	High	5 years
Implement restructured walking trail system	Medium	3 years
Implement interpretive services	High	On-going



# **Plants of Particular Conservation Significance in South Australia's Agricultural Regions**

**Update of unpublished database**

**Explanation of Ratings**

**Lang, P.J. & Kraehenbuehl, D.N.**

Resource Management Branch,  
Department of Environment and Natural Resources

assisted by

**Murfet, D., Overton, B.M., & Taplin R.**

## CONSERVATION STATUS CODES

The categories below may apply to the whole of a species distribution (usually equivalent to the Australian (AUS) level) or to a specified part of a species distribution at State (SA) or regional level (AD region code).

They are listed in order of decreasing conservation significance.

- 
- X**      **Extinct/Presumed extinct:** not located despite thorough searching of all known and likely habitats; known to have been eliminated by the loss of localised population(s); or not recorded for more than 50 years from an area where substantial habitat modification has occurred.
- E**      **Endangered:** rare and in danger of becoming extinct in the wild.
- T**      **Threatened:** likely to be either Endangered or Vulnerable but insufficient data for a more precise assessment.
- V**      **Vulnerable:** rare and at risk from potential threats or long term threats which could cause the species to become endangered in the future.
- K**      **Uncertain:** likely to be either Threatened or Rare but insufficient data for a more precise assessment.
- R**      **Rare:** has a low overall frequency of occurrence (may be locally common with a very restricted distribution or may be scattered sparsely over a wider area). Not currently exposed to significant threats, but warrants monitoring and protective measures to prevent reduction of population sizes.
- U**      **Uncommon:** less common species of interest but not rare enough to warrant special protective measures.
- 
- Q**      Not yet assessed but flagged as being of **possible significance**.
- N**      **Not of particular significance / Common.**  
(Also indicated by a blank entry.)
-

## AUSTRALIAN STATUS CODES

Where the Australian status is indicated by a single letter code it follows the definitions on the preceding page.

Where the Australian status is indicated by a three or four letter code (eg 2RCi) it is derived from Briggs, J.D., & Leigh, J.H. (1996). "Rare or Threatened Australian Plants, 1995 Revised Edition." (CSIRO, Australia). These codes comprise the following elements.

### Distribution categories:

- 1 species known from type collection only or from a single location only
- 2 species with a very restricted distribution in Australia and with a maximum geographic range of less than 100 km
- 3 species with a range of at least 100 km but occurring only in small populations (often restricted to highly specific and localised habitats)

### Conservation categories

- X** **Presumed extinct:** species that have either not been found in recent years despite thorough searching, or have not been collected for at least 50 years and were known only from now intensively settled areas.
- E** **Endangered:** in serious risk of disappearing from the wild state within one or two decades if present land use and other causal factors continue to operate.
- V** **Vulnerable:** not presently Endangered but at risk of disappearing from the wild over a longer period (20-50 years), or which largely occur on sites likely to experience changes in land use that would threaten the survival of the species in the wild.
- R** **Rare:** species which are rare in Australia but which overall are not considered Endangered or Vulnerable. Such species may be represented by a relatively large population in very restricted area, or by smaller populations spread over a wider range or some intermediate combination of distribution pattern.
- K** **Poorly known:** species that are suspected, but not definitely known, to belong to any of the above categories

### Reservation categories

- C** known to present within a national park or other conservation reserve
- a** adequately reserved with a total of at least 1000 plants known to occur in reserves.
- i** in adequately reserved, with a total of less than 1000 plants in reserves
- t** total known populations are in reserves

**References:**

Mines and Energy South Australia 1990. *Talisker Silver-Lead Mine*.

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