

Tunkuwallin Reserve Gwandalan and Summerland Point



WYONG SHIRE
building a better tomorrow!



PLAN OF MANAGEMENT

NO. 14

FOR

TUNKUWALLIN RESERVE
GWANDALAN AND SUMMERLAND POINT

Amendment No	Adopted
1	December 8 2004

TABLE OF CONTENTS

SECTION 1 - GENERAL	1
<i>INTRODUCTION - WHY DOES THE PLAN EXIST?.....</i>	<i>1</i>
<i>LAND TO WHICH THE PLAN APPLIES.....</i>	<i>1</i>
<i>PLANNING CONTROLS APPLYING.....</i>	<i>3</i>
<i>STRATEGIC PLANNING OBJECTIVES.....</i>	<i>5</i>
<i>PLAN OF MANAGEMENT OBJECTIVES.....</i>	<i>5</i>
Core Objectives	5
General Objectives	7
SECTION 2 - BACKGROUND INFORMATION.....	8
RESOURCE DATA.....	8
1 History	8
2 Current Uses	9
3 Maps.....	9
5 Geology/Soil Conditions	10
6 Utility Services.....	10
7 Parking Facilities	10
8 Recreation Buildings and Facilities	10
9 Signage	11
10 Heritage Significance	11
11 Surveys of Demand or Use	11
12 Topography	11
13 Drainage.....	11
14 Vegetation.....	11
15 Habitat Values	13
LICENCES, LEASES, ETC.	14
DETAILS OF ADJOINING LAND.....	14
ROLE OF OTHER GOVERNMENT AGENCIES.....	14
SIGNIFICANCE AND VALUE	14
Social Significance.....	14
Environmental Significance	14
ACCEPTABLE ACTIVITIES AND USES	18
<i>Threatening Processes.....</i>	<i>18</i>
EXISTING IMPROVEMENTS.....	20
SECTION 3 - THE MASTER PLAN.....	21
MANAGEMENT UNITS PLAN.....	21
ELEMENTS OF THE MASTERPLAN.....	24
Sportsfield Facilities	24
Amenities Building	24
Controlled Parking to Sportsfield	24
Social Facilities.....	24
BMX Facilities.....	24
Expanded Skate Facilities	24
Equestrian Facility	24
Tennis Club.....	24
Circulation, Traffic and Parking.....	25
Ecological Restoration.....	25
FUNDING.....	25

SECTION 4 - MANAGEMENT	28
MANAGEMENT STRUCTURE – COMMITTEES ETC.	28
Management Authority	28
SECTION 5 - GENERAL GUIDELINES	29
ACCESS AND OCCUPATION	29
Access	29
Cycle ways	29
Fences and Fencing	29
Four Wheel Drive Access	29
Illegal Access	29
Illegal Occupation	29
Paths and Paving	29
Roads and Parking	30
Road Maintenance	30
Track Closure	30
Track Construction	30
Track Maintenance	30
ADJOINING DEVELOPMENTS	30
ADMINISTRATION	30
Activities Carried Out by Other Authorities	30
Community Involvement in Management	30
Contract and Volunteer Labour	31
Delegation of Management Responsibilities	31
Easements	31
Emergencies	31
Encroachment by Adjoining Land Owners	31
Environmental Impact Assessment of Activities	31
Leasing	31
Neighbours	32
Occupation by Adjoining Land Owners	32
Temporary Uses	32
User Charges	32
AMENITIES, BUILDINGS AND INFRASTRUCTURE	32
Natural Areas	32
Sportsgrounds and General Community	33
BUSHFIRE	34
Bushfire Hazard Reduction	34
Broad Scale Hazard Reduction Burns	35
Bushfire Management Plans	35
Fire Trails	35
COMMERCIAL ACTIVITIES (EG. SELLING FOOD AND DRINKS)	35
DEVELOPMENT ACTIVITIES, CONSTRUCTION WORKS AND EARTHWORKS	35
Clearing	35
Development Adjacent to Community Land	35
Development Adjoining Natural Areas	36
Earthworks	36
Filling	36
New Development Works	36
Nutrients Leached from Building Materials	36
Protection of Trees	36
Restoration	37
Soil Compaction	37
Stockpiling of Materials	37
DOMESTIC PETS	37

<i>Drainage</i>	37
Drainage, Runoff and Stormwater - Bushland	38
Drainage (eg. requirements, detention basins) – Sportsgrounds and General Community	38
<i>FAUNA</i>	38
Grazing	38
Introduced Fauna	38
Native Fauna	38
Flora and Fauna Surveys	39
Re-Introduction and Release of Native Fauna	39
Threatened Fauna	39
<i>INFORMATION, MONITORING AND RESEARCH</i>	39
Education and Research.....	39
Environmental Information and Monitoring.....	39
Surveys.....	39
<i>LANDSCAPE DESIGN</i>	40
<i>LANDSCAPE MAINTENANCE AND MANAGEMENT</i>	40
Developed Areas Management	40
Sportsgrounds Management.....	41
Natural Areas Vegetation Management	41
<i>POLLUTION CONTROL, RUBBISH AND LITTER</i>	44
Acid Sulphate Soils	Error! Bookmark not defined.
Environment Protection (noise control, dust, chemicals, etc.).....	44
Fertilisers and Pesticides	44
Litter	44
Noise from Sporting Events.....	44
Removal of Silt.....	44
Rubbish Dumping (including garden waste)	44
Soil Erosion and Sedimentation	44
<i>PUBLIC ACCESS</i>	44
<i>PUBLIC LIABILITY</i>	45
<i>PUBLIC SAFETY</i>	45
<i>RECREATION AND SPORT ACTIVITIES AND FACILITIES</i>	45
Natural Areas	45
Sports Grounds and General Community Areas.....	46
SECTION 6 - IMPLEMENTATION	48
<i>HOW TO APPLY THE MANAGEMENT POLICIES AND GUIDELINES</i>	48
<i>ACTION PLAN</i>	48
<i>ADMINISTRATION</i>	50
<i>REVIEW OF THE PLAN</i>	50

SECTION 1 - GENERAL

INTRODUCTION - WHY DOES THE PLAN EXIST?

The plan has been prepared by Wyong Council under the provisions of the Local Government Act 1993, which requires Councils to prepare Plans of Management for all land under Council ownership or control classified as community land.

The use and management of the community land to which this plan applies is regulated by this Plan of Management. The Local Government Act, 1993 provides that community land is required to be used and managed in accordance with the Plan of Management.

The procedure for the preparation of Plans of Management involves public exhibition and consultation processes. This plan may only be amended by a subsequent Plan of Management.

LAND TO WHICH THE PLAN APPLIES

This plan applies to land fronting part of Summerland Road, Summerland Point and Kanangra Drive, Gwandalan. The area of the land is 16.618 hectares. For the purposes of this plan the whole is referred to as Tunkuwallin and the separable portions within Tunkuwallin are given specific names.

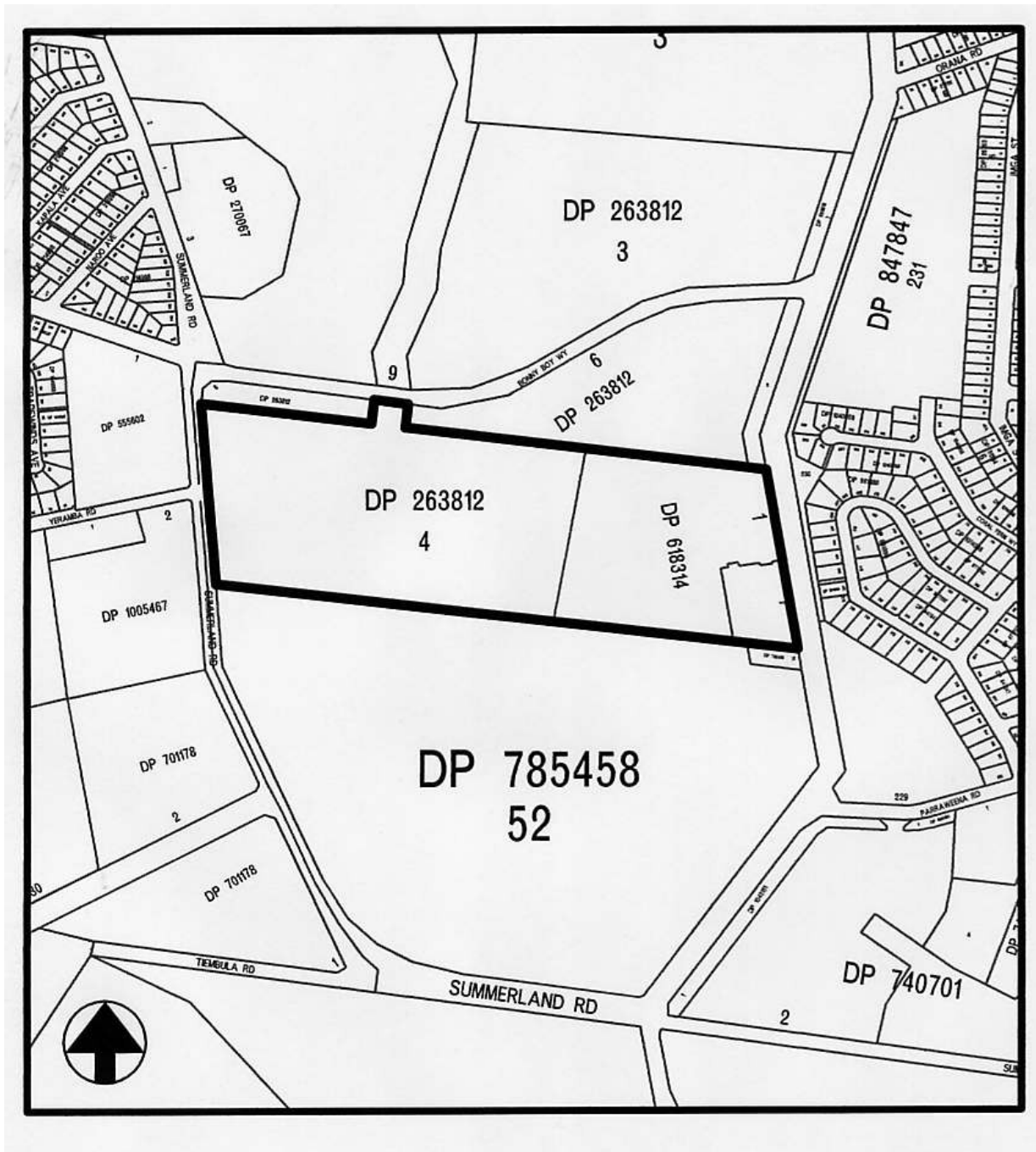
A map showing the location of the parcels of land to which the plan applies is on the following page.

The land is described as follows and for the purposes of the Local Government Act 1993, the land is classified as Community land. The category indicates the priority use of the land.

Table 1

Lot	DP	Street Name	Suburb	Owner	Classification	Categorisation	Zone
4	263812	Summerland Road	Summerland Point	WSC	Community	General Community Use	6 (a) Open Space & Recreation
1	618314	Kanangra Drive	Gwandalan	WSC	Community	Sportsground	6 (a) Open Space & Recreation
2	618314	Kanangra Drive	Gwandalan	WSC	Community	General Community Use	6 (a) Open Space & Recreation

Tunkuwallin Plan of Management Locality Plan
Not to Scale.



PLANNING CONTROLS APPLYING

The land to which this plan applies is subject to the provisions of Wyong Local Environmental Plan 1991 which identifies the land as being zoned 6 (a) Open Space and Recreation.

Development consent under the Environmental Planning and Assessment Act, 1979 is required for most developments.

Other relevant planning controls apply to the land and these are described below:

State Environmental Planning Policies

- * SEPP No 11 - Traffic Generating Developments
- * SEPP No 45 - 4.8.95 Permissibility Of Mining
- * SEPP No 50 - 30.10.97 Canal Estate Development
- * SEPP No 55 - 28.8.98 Remediation Of Land
- * SEPP No 5 - 18.2.82 as amended Housing For Older People Or People With A Disability
- * SEPP No 71 - Coastal Protection
- * SEPP No 32 - 19.11.1991 Urban Consolidation (Redevelopment Of Urban Land)

Draft State Environmental Planning Policies

DSEPP No 66 - Integrated Land Use and Transport.

Regional Environmental Plans

Nil.

Draft Regional Environmental Plans

Wyong Development Areas and Coal Mining.

Demolition Approval

Required under Wyong LEP 1991 unless DCP No 85 - Exempt Development - applies.

Development Control Plans

- * Development Control Plan No 13 - Interim Conservation Areas
- * Development Control Plan No 14 - addresses Tree Management within the Wyong Shire, including tree removal and land clearing
- * Development Control Plan No 18 - Gwandalan and Summerland Point
- * Development Control Plan No 50 - Guidelines for Advertising Signs
- * Development Control Plan No 67 - Engineering Requirements for Development
- * Development Control Plan No 69 - Controls for Site Waste Management
- * Development Control Plan No 70 - Notification of Development Proposals
- * Development Control Plan No 99 - Building Lines
- * Development Control Plan No 101 - Building over or adjacent to Sewer Mains

Draft Development Control Plans

- * Draft Development Control Plan – Communication Facilities
- * Draft Development Control Plan No 85 – Exempt Development
- * Draft Development Control Plan No 86 – Complying Development

Section 94 Contribution Plans

This land is subject to Section 94 Contributions Plan No 12 for the Gwandalan District.

Draft Section 94 Contributions Plans

Nil.

Section 76 A Directions

Applications for State Significant Development are subject to the determination of the Minister for Urban Affairs and Planning.

Threatened Species Conservation Act, 1995

Tunkuwallin contains two plant communities that are likely to contain plant species listed in the Threatened Species Conservation Act.

Coastal Protection Act, 1979

This land is within the coastal zone of the Coastal Protection Act, however there are no notices under Sections 38 or 39 of this Act.

Community Land Amendment Act, 1998

The site covered by the Plan of Management is Community Land.

Mine Subsidence

This land is within a proclaimed Mine Subsidence District and may be affected by surface development controls to prevent damage from old, current or future coal mining.

Road Widening or Road Alignment

The property is not affected by road widening or road re-alignment under Division 2 Section 25 of the Roads Act, 1993; environmental planning instruments or Council resolutions.

Bushfire Prone Land

The property is within an area identified on Council's Bush Fire Prone map as being partially or wholly within a high risk area or within 100 metres of a high risk area.

Current Development Consents

Property Description : Lot 4 DP 263812
 Application Number: 3107/02
 Date Approved: 30/12/2002
 Description: Advertising Sign

Property Description : Lots 1 And 2 DP 618314
 Application Number: 3335/02
 Date Approved: 07/01/2003
 Description: Sporting Field Extension and Flood lighting

STRATEGIC PLANNING OBJECTIVES

Wyong Council owns many parcels of community land and strategic plans are prepared and endorsed to ensure that the land is managed in a cost effective way to maximise the community benefits of its use. The Council's current strategy for Tunkuwallin is to maintain current appropriate uses and facilitate future works and management on the site.

The following objectives are appropriate for Tunkuwallin:

- 1 Maintain a mix of community, schools and facility users in keeping with the site's function as open space and recreation facility.
- 2 Develop, maintain and manage the site for appropriate current and future uses.
- 3 Regenerate and manage the Bonny Boy Creek corridor and the Bushland on the site in accordance with an appropriate Ecological Restoration Plan.
 (Refer to the *Ecological Restoration Plan, Heritage Walk, Bonny Boy Creek, Gwandalan* (Andrews Neil, 2000)).
- 4 Provide alternative facilities or manage and repair damage from inappropriate activities.

PLAN OF MANAGEMENT OBJECTIVES

Core Objectives

Tunkuwallin contains a mix of Management Units that reflect different classifications for public land. These may contain conflicting objectives and careful attention needs to be paid to impacts from one management unit upon another. These include:

- * Sportsgrounds
- * General Community Use
- * Natural Area
 - Bushland

The core objectives for management of community land categorised as sportsgrounds are:

- * To encourage, promote and facilitate recreational pursuits in the community involving organized and informal sporting activities and games.
- * To ensure that such activities are managed having regard to any adverse impact on nearby residences and the environment.

The core objectives for management of community land categorised as general community use are:

- * To promote, encourage and provide for the use of the land, and to provide facilities on the land, to meet the current and future needs of the local community and of the wider public.
- * In relation to public recreation and the physical, cultural, social and intellectual welfare or development of individual members of the public.
- * In relation to purposes for which a lease, licence or other estate may be granted in respect of the land (other than the provision of public utilities and works associated with or ancillary to public utilities).

Natural Area

The core objectives for management of community land categorised as a natural area and sub - categorised as bushland are:

- * To provide for community use of and access to the land while minimising and mitigating any disturbance caused by human intrusion.
- * To facilitate implementation of provisions restricting the use and management of the land that are set out in a recovery plan or threat abatement plan prepared under the Threatened Species Conservation Act 1995 or the Fisheries Management Act 1994.
- * To ensure the ongoing ecological viability of the land by protecting the ecological biodiversity and habitat values of the land, the flora and fauna (including invertebrates, fungi and micro-organisms) of the land and other ecological values of the land.
- * To protect the aesthetic, recreational, educational and scientific values of the land.
- * To promote the management of the land in a manner that protects and enhances the values and quality of the land and facilitates public enjoyment of the land, and to implement measures directed to minimising or mitigating any disturbance caused by human intrusion.
- * To restore degraded bushland.
- * To protect existing landforms such as natural drainage lines, watercourses and foreshores.

- * To retain bushland in parcels of a size and configuration that will enable the existing plant and animal communities to survive in the long term.
- * To protect bushland as a natural stabiliser of the soil surface.

General Objectives

The general objectives of the plan are:

- * To ensure that the Act is complied with in relation to preparation of Plans of Management.
- * To inform Council staff and the community of the way the land will be managed.
- * To progressively improve the values of the land and to minimise the long term cost of maintenance to Council.
- * To make provision for leases, licences and agreements in respect of the land.
- * To identify and recognise existing uses and improvements on the land.
- * To provide a reference and data bank in relation to information relevant to present and future management of the land.
- * To set in place an administrative structure to ensure the achievement of land management objectives.
- * To identify the major management issues applying to the land.
- * To simplify the process of management as far as possible.

SECTION 2 - BACKGROUND INFORMATION

RESOURCE DATA

1 History

A brief history follows derived from Council records.

Tunkuwallin Oval and Surrounds

- * There had been a strong community demand for recreation facilities in the Gwandalan Summerland Point area in the early 1970's.
- * 1977 - Tunkuwallin Park was the eastern portion of the current open space area with an oval and toilet facility constructed.
- * August 12 1981 - This Eastern portion of Tunkuwallin Lots 1 & 2 DP 618314 dedicated to Council.
- * January 14 1983 - The Western portion of Tunkuwallin Lot 4 DP 263812 dedicated to Council.
- * November 26 1981 - Lot 2 DP 618314 was initially leased by local community Trustees but this lease was reversed in 1986 and the care, control and management reverted to an appointed management committee.
- * 1987 - Quarter pipe skate ramp constructed.
- * 1988 - Equestrian area established by the Tunkuwallin Park Community Committee February.
- * December 1994 - A Development Approval was granted for the mobile Metal Skate ramp - located near hall.
- * March 18 1996 - Development consent for cycleway granted.
- * 1996 - Concrete shared path completed between Kanangra Drive and Summerland Road.
- * 1997 - DA (26/4/97) for Circus Sunrise approved on oval for 5 years.
- * February 1997 - Restoration of Bushland began.
- * 1997 - Cycleway bush regeneration completed.
- * August 1998 - Tree Planting and Heritage Grove Project by Summerland Point/Gwandalan Tidy Towns Committee.
- * 2000 - Sewer connection to Hall and Toilet.
- * June 2000 - Modular Concrete Skate park constructed near Hall.
- * 2000 - New entry and parking arrangements.
- * January 7 2003 - Approval for sporting field extension and flood lights granted.
- * Oval presently used for Soccer, Cricket and School activities.

Hall

- * May 12 1983 - Consent for construction of Centre granted.
- * July 19 1985 - Constructed and officially opened for youth indoor sports.
- * 1985-1986 - The success of the centre was so overwhelming that its management by voluntary committee became difficult.
- * May 1986 - The Committee requested Council to appoint a full time administrator for the hall.
- * 1987 - Hall use diminished significantly due to its size and the competition of Lake Haven and Bateau Bay Indoor Sports and Recreation Centres.

- * Fire brigade use of hall temporarily.
- * Lakes Anglican Grammar School - application to use hall.
- * 1999 - Concerns raised about parking areas and pedestrian access to oval.

Tunkuwallin Tennis

- * 1981 - Tunkuwallin Tennis Club Formed.
- * 1984 - Council acquires Lot 4 DP 263812.
- * 1984 - Council decision to allow tennis complex in south-west corner of Lot 4 DP 263812.
- * 1984 - Grant application for 2 Tennis Courts successful.
- * 1985 - Approval to construct 6 tennis courts.
- * 1994 - Tunkuwallin Tennis Association Inc. applied for lease.
- * 1994 - DA 91/94 for construction of clubhouse.
- * November 1997 - Opening of Hall on Tennis Club site.
- * November 1997 - Council Report - completion of clubhouse.
- * November 1998 - Lease part of Lot 4.
- * Tunkuwallin Tennis Club Management Committee.
- * Tunkuwallin Tennis Club 355 Committee.

2 Current Uses

The current uses of the land are as follows:

- * BMX Trails.
- * Bush Regeneration.
- * Car parking.
- * Court Sports.
- * Field Sports.
- * Gymkhana, Equestrian activities.
- * Indoor Recreation, Sport and Community Purposes.
- * Informal horse riding.
- * Licensed Club.
- * Recreational and commuter cycling from Kanangra Road to Summerland Road.
- * Skate and Roller Sports.
- * Trail bike riding.
- * Walking.

Details of facilities and users are recorded by Council.

3 Maps

The following maps are attached to the Plan of Management:

- * Locality Plan
- * Existing Situation Plan
- * Management Units Plan
- * Master Plan

5 Geology/Soil Conditions

Munmorah Conglomerate is the underlying geology of the site.

The upper slopes of the site are covered with erodable, shallow soils that are reflected in the natural vegetation and sediment erosion that occurs on the site. These are described (Murphy, 1992) as:

Doyalson (do) - Erosional Landscape

Limitations (extract from Murphy, 1992) are described as:

- * high erosion hazard
- * hard setting
- * stoniness
- * strongly acid soils of low fertility

Wyong (wy) - Alluvial Landscape

The lower part of the valley is covered by an alluvial soil of low fertility. Limitations (extract from Murphy, 1992) are described as:

- * flooding
- * seasonal waterlogging
- * strongly acid
- * poorly drained
- * impermeable soils of very low fertility

The presence of these soils has two implications:

- * Locally occurring vegetation is adapted to low fertility and inputs of high nutrient levels may cause significant changes; and
- * There is significant potential for erosion of exposed soil on the sloping areas of the site.

6 Utility Services

- * Electricity
- * Water
- * Telephone
- * Sewer

7 Parking Facilities

- * Unsealed off-road parking to serve Hall, Oval, Skate park and Gymkhana area.
- * Informal car parking between fenced Gymkhana area and Skate park.
- * Sealed car parking to serve Tunkuwallin Tennis Club.

8 Recreation Buildings and Facilities

Refer to Table 10.

9 Signage

There are information signs indicating most of the uses on the site and the buildings.

10 Heritage Significance

No Aboriginal sites were identified on plans provided by the National Parks and Wildlife Service. No European sites were identified by Wyong Council's Heritage Study.

11 Surveys of Demand or Use

There have been no Surveys of Demand or Use undertaken that are targeted specifically at Tunkuwallin.

12 Topography

Tunkuwallin is located over a section of the valley of Bonny Boy Creek with falls from both the West and East to a watercourse running approximately North-South towards Lake Macquarie. There are gentle to moderate slopes throughout the site except for constructed building platforms and areas levelled for fields and courts.

13 Drainage

Site drains from East and West to a central drainage line that becomes Bonny Boy Creek and then north towards Lake Macquarie.

14 Vegetation

Two communities are identified for the site, which reflect the valley topography and hydrology of the site: a Riparian community that encloses Bonny Boy Creek on the valley floor and a Woodland Community that covers the valley sides. A detailed description of the communities is contained in *The Native Vegetation of the Wyong Local Government Area, Central Coast, New South Wales* (Bell, 2002). A detailed discussion of significance for the two Map Units is extracted from Bell (2002) in the later Significance Section.

Riparian Community

This community is described as Vegetation Map Unit 26 (b) Narrabeen Alluvial Drainage Line Complex (Bell, 2002) (Equivalent to Qa4 - Payne and Duncan, 1999) This is characterised as a shallow drainage line variant. An excerpt from Bell (2002) describes the community:

“Within shallow drainage lines of the Narrabeen Sandstone lowlands, a complex of alluvial vegetation occurs. This vegetation is generally restricted to narrow deposits of the Wyong soil landscape within the Doyalson and Gorokan soil landscapes, although small areas of Wyong landscape have understandably not been mapped on available soils mapping. Variation in this community is dependant on soil depth and drainage, with structure including open woodland with sedgeland and swamp forest with a dense shrubby understorey. In most cases, this community is surrounded by the Narrabeen Doyalson Coastal Woodland (Unit 31) or Narrabeen Narrow-leaf Scribbly Gum Forest (Unit 32), and boundaries are often reasonably distinct.

Shallow drainage line variant – in narrow alluvial bands higher in the catchment, a scrub variant comprising stunted *Eucalyptus robusta* and dense *Acacia longifolia* and other shrub species occurs. There is generally a gradation of vegetation structure as soils become deeper.

Sedge woodland variant – on lower relief deposits, a dense sedgeland with scattered shrubs (eg: *Banksia spinulosa*, *Leptospermum juniperinum*) develops beneath a canopy of *Eucalyptus resinifera* subsp. *resinifera*, *Angophora inopina*, *Angophora costata*, and occasionally *Eucalyptus robusta*, with a small tree layer of *Melaleuca sieberi*. Dominant sedges include *Gahnia clarkei*, *Lepyrodia scariosa*, *Schoenus brevifolius*, *Lepidosperma quadrangulatum*, *Chorizandra cymbaria*, and *Empodisma minus*.”

(Note that this Sedge woodland variant is identified in Andrews Neil (2000) as Swamp Community and provides habitat for the significant Wallum Froglet, identified as calling during the survey.)

Woodland Communities

The two Woodland Communities are described as Vegetation Map Unit 31 a b Narrabeen Doyalson Coastal Woodland (Bell, 2002) (Equivalent to Rnm2 - Payne and Duncan, 1999). The two variants are characterised as:

- * Map Unit 31 a Frequent Fire Variation
- * Map Unit 31 b Healthy Understorey Variation

An excerpt from Bell (2002) describes the Community:

“Narrabeen Doyalson Coastal Woodland occurs principally on the Doyalson (do) and Gorokan (gk) soil landscapes in the northern parts of the Shire. These landscapes typically comprise gentle slopes and rises of woodland or occasionally open forest vegetation dominated by *Eucalyptus haemastoma* in association with any of *Corymbia gummifera*, *Eucalyptus capitellata*, *Angophora inopina*, or *Angophora costata*. Understorey vegetation is generally consistent but is variable in parts, principally related to fire history and other disturbance. Representatives from the Fabaceae, Myrtaceae, Proteaceae, and Epacridaceae are prominent.

Frequent fire variation – areas subject to frequent low intensity fires (1-3 years) support a higher proportion of grasses and graminoids in the understorey, with only scattered or sporadic woody shrubs.

Healthy understorey variation – depending on local soil characteristics, variation in understorey components may be reflected in a low healthy understorey with scattered canopy trees, or in taller and denser understorey components. “

Map unit associations – Andrews Neil (2000) subdivides the Coastal Woodland Community into two associations describing variance in canopy and understorey dominance according to topographical position:

- * Scribbly Gum (*E. haemastoma*) - Red Bloodwood (*C. gummifera*) Woodland (Woodland 1) (Upper Slopes)
- * Red Bloodwood (*C. gummifera*) - Scribbly Gum (*E. haemastoma*) Woodland (Woodland 2) (Lower Slopes intergrade with Riparian Corridor)

For further information, refer to Andrews Neil (2000).

15 Habitat Values

Riparian Community

Significant flora species – Threatened (Threatened Species Conservation Act, 1995) - *Angophora inopina* is likely to be a component of Map Unit 26.

Fauna habitat – The Terrestrial Fauna Habitat description for the Community is Swamp Mahogany Paperbark Swamp Forest, which surrounds areas of Wetland / Sedge in the drainage line of Bonny Boy Creek.

Fauna habitat value – Swamp Forest provides winter flowering vegetation.

Fauna records – Squirrel Glider *Petaurus norfolcensis* have been identified adjacent to Bonny Boy Creek in the *Sub-regional Squirrel Glider Study* (Smith, 2000). Wallum Froglet *Crinia tinnula* was heard calling during survey of the Sedge Woodland area, called Swamp Community in relevant report. (Refer to the *Ecological Restoration Plan - Heritage Walk Gwandalan* (Andrews Neil, 2000)).

Woodland Communities

Significant flora species – The following flora species are likely to occur in Map Unit 31:

- * Threatened (TCS Act) - *Acacia byoneana*, *Angophora inopina*, *Cryptostylis hunteriana*, *Tetratheca juncea*
- * Rare (ROTAP) - *Macrozamia flexulosa*

Flora records – *Tetratheca juncea* has been recorded on the site by Payne as part of the *Conservation Management Plan for Tetratheca juncea* (Payne, 2001).

Fauna habitat value – Likely to provide tree hollows due to tree species.

LICENCES, LEASES, ETC.

There are currently no leases in force on Tunkuwallin.

DETAILS OF ADJOINING LAND

Lot	DP	House Number	Street Name	Suburb
51	785458		Kanangra Dr	Gwandalan
52	785458	10	Summerland Rd	Summerland Point
6	263812	4	Bonny Boy Way	Gwandalan
6	263812	4	Bonny Boy Way	Gwandalan

ROLE OF OTHER GOVERNMENT AGENCIES

There are no other Government Agencies with a direct role of management of Tunkuwallin.

There is a review role for the National Parks and Wildlife Service for development that may impact upon the habitat of significant Species or Vegetation Communities listed under the Threatened Species Conservation Act, 1995. Refer to discussion of vegetation and habitat values for species of significance.

Both the Department of Infrastructure, Planning and Natural Resources and the Fisheries Department may have an approval role for development that may impact upon the Bonny Boy Creek watercourse.

SIGNIFICANCE AND VALUE

Social Significance

Tunkuwallin is of great social significance to the two communities of Gwandalan and Summerland Point and to the other communities in the north of the Shire due to the size of the open space; the diversity of sport, recreation and natural values that the site offers; and to the specific facilities which are located on the site such as the hall, sporting facilities and Tennis Club complex.

Environmental Significance

Issues of significance are described in a concise form here. Refer to Bell (2002).

Endangered Ecological Communities

The central riparian corridor of Tunkuwallin supports the Vegetation Map Unit 26 (b) Narrabeen Alluvial Drainage Line Complex (Bell, 2002). This is characterised as a Shallow drainage line variant. This complex has been aligned with the Endangered Ecological Community of State Conservation Significance described as the Sydney Coastal Estuary Forest Complex (Threatened Species Conservation Act, 1995).

Vegetation Communities of Local Conservation Significance

Both the Narrabeen Alluvial Drainage Complex and the Narrabeen Doyalson Coastal Woodland are ascribed Local Conservation Significance in Bell (2002). The following table from the Strategy provides specific comments.

Table 3
Locally Significant Vegetation Types (Derived from Bell, 2002)

Unit 26a: Narrabeen Alluvial Drainage Line Complex (Parramatta Redgum variant)	Highly restricted occurrence and rare in the region
Unit 26d: Narrabeen Alluvial Drainage Line Complex (sedge woodland variant)	Uncommon regionally and prone to edge effects from development
Unit 31d: Narrabeen Doyalson Coastal Woodland (moist heath variant)	Highly restricted occurrence
Unit 31e: Narrabeen Doyalson Coastal Woodland (coastal exposure variant)	Highly restricted occurrence

Keystone and Refugia Habitats

The *Central Coast Riparian Corridor Strategy* (Payne, 2001) describes keystone and refugia habitats occurring in Wyong Shire and assigns equivalent Vegetation Map Units to the habitat groupings. The relevant Map Units for Tunkuwallin are shown in the following table.

Table 4
Keystone and Refugia Habitats in Wyong Shire (Payne, 2001)

Keystone and Refugia Habitats	Local Vegetation Communities
Scribbly Gum forests are considered to be keystone habitats for Squirrel Gliders and woodland birds in the Central Coast region. It is important that connections are maintained to both Scribbly Gum and Swamp Mahogany forests to access different resources throughout the year.	31 Narrabeen Doyalson Coastal Woodland
	31a Narrabeen Doyalson Coastal Woodland - Frequent fire variation
	31b Narrabeen Doyalson Coastal Woodland - Healthy understorey variation

Taxa of National and State Significance

Wyong Shire supports important populations of several significant plant taxa. This includes seven (7) species listed as endangered in NSW, thirteen (13) vulnerable species, and six (6) nationally rare species. Tunkuwallin contains vegetation communities in which five of these species may be found. These species are shown in the following table.

Table 5
Significant Plant Species in Wyong Shire (Derived from Bell, 2002)

Species	Significance (Threatened Species Conservation Act, 1995 or Briggs & Leigh, 1996)
<i>Acacia bynoeana</i>	Endangered (TSC S1)
<i>Corunastylis insignis</i>	Endangered (TSC S1)
<i>Angophora inopina</i>	Vulnerable (TSC S2)
<i>Cryptostylis hunteriana</i>	Vulnerable (TSC S2)
<i>Tetratheca juncea</i>	Vulnerable (TSC S2)

A detailed discussion of the occurrence of these species is contained in *The Natural Vegetation of the Wyong Local Government Area, Central Coast, New South Wales* (Bell, 2002).

Habitat Corridors

The site supports Sub-Regional Corridor Number 38 linking two National Park Reserves: Point Wolstoncroft and Lake Macquarie Foreshore Reserve. The corridor is considered to be in good condition with no embellishment required (Payne, 2002).

Habitat Classification

The *Fauna Habitat Modelling and Wildlife Linkages in Wyong Shire* (Smith, Watson, Murray, 2002) provides a relationship between the identified communities and fauna habitats which is shown in the table below:

Table 6

Vegetation Map Unit (Bell, 2002)	Fauna Habitat Classification
26 (b) Narrabeen Alluvial Drainage Line Complex	Swamp Forest
26 (d) Narrabeen Alluvial Drainage Line Complex	Wetland Sedge
31 a b Narrabeen Doyalson Coastal Woodland	Dry Woodland

Fauna and Habitat Relationships

The table below, based upon Smith et. al. (2002), shows the species that have a relationship with the fauna habitats identified on Tunkuwallin.

Table 7

Scientific Name	Common Name	Status	Swamp Forest	Dry Woodland	Wetland Sedge
BIRDS					
<i>Burhinus grallarius</i>	Bush Stone-curlew	E1		X	
<i>Lathamus discolor</i>	Swift Parrot	E1	X	X	
<i>Xanthomyza phrygia</i>	Regent Honeyeater	E1	X	X	
<i>Neophema pulchella</i>	Turquoise Parrot	V2		X	
<i>Ninox connivens</i>	Barking Owl	V2		X	
<i>Ninox strenua</i>	Powerful Owl	V2		X	
<i>Tyto novaehollandiae</i>	Masked Owl	V2		X	
<i>Tyto tenebricosa</i>	Sooty Owl	V2			X ?
<i>Grantiella picta</i>	Painted Honeyeater	V2		X	
<i>Stipiturus malachurus</i>	Southern Emu-wren	L2		X	
<i>Botaurus poiciloptilus</i>	Australasian Bittern	V2			X
<i>Calyptorhynchus lathami</i>	Glossy Black - Cockatoo	V2			X
FROGS					
<i>Crinia tinnula</i>	Wallum Froglet	V2			X
REPTILES					
<i>Hoplocephalus bitorquatus</i>	Pale-headed Snake	V2		X	
<i>Hoplocephalus stephensii</i>	Stephen's Banded Snake	V2		X	X
MAMMALS					
<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V2	X	X	X
<i>Petaurus norfolkensis</i>	Squirrel Glider	V2	X		
<i>Pseudomys gracilicaudatus</i>	Eastern Chestnut mouse	V2		X	
<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail-bat	V2	X	X	X
<i>Mormopterus norfolkensis</i>	Eastern Freetail Bat	V2		X	
<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	V2			X
<i>Miniopterus australis</i>	Little Bent-wing Bat	V2	X	X	
<i>Miniopterus schreibersii</i>	Common Bent-wing Bat	V2	X	X	
<i>Myotis adversus</i>	Large-footed Myotis	V2	X	X	X
<i>Scoteanax rueppellii</i>	Greater Broad-nosed Bat	V2	X		X
<i>Hypsilurus spinipes</i>	Southern Angle-headed Dragon	LS			X
<i>Isodon macrourus</i>	Northern Brown and Long-nosed Bandicoots	LS		X	X
<i>Perameles nasuta</i>					
<i>Nyctophilus gouldi</i>	Gould's Long-eared Bat	LS			X
<i>Petauroides volans</i>	Greater Glider	LS			X
<i>Acrobates pygmaeus</i>	Feather-tailed Glider	LS			X

ACCEPTABLE ACTIVITIES AND USES

The following activities and uses are acceptable at Tunkuwallin:

- * Field and court sports.
- * Skate park activities.
- * Walking, cycling on paths, horse riding in designated areas.
- * Informal recreation and social activities.
- * Hall uses.

The following activities and uses are of concern at Tunkuwallin that threaten the environmental values of the site:

- * Trail bike riding and uncontrolled vehicle access.
- * Construction of dirt jumps and trails in inappropriate areas.
- * Horse trail riding in inappropriate areas.

Tunkuwallin has an extensive canopy but has residential development to the East and West which has led to the establishment of an extensive network of tracks for these uses.

THREATENING PROCESSES

There are specific threatening processes identified for the onsite communities which need to be managed and eliminated where possible while maintaining the existing social and recreational values of the site. Key threatening processes likely to be operating in Tunkuwallin are listed below (Bell, 2002):

- * **Weeds:** Threats posed by the invasion of aggressive weed species into habitat for threatened plants, or significant communities.
- * **Fire:** Threats posed by inappropriate fire regimes applied to a habitat, such as high frequency fires which exhaust the seed bank of a fire sensitive species, or which dramatically simplify the floristic composition of a community.
- * **Rubbish Dumping:** Threats posed by the illegal dumping of rubbish, which may cause the local extinction of plant species, or introduce weed species which will alter the integrity of a community.
- * **Fragmentation:** Threats posed by the fragmentation of habitat of threatened species or communities, such that disturbance effects associated with edges and small remnants are amplified.
- * **Collection:** Threats posed by the illegal collection of plant material by horticultural enthusiasts, normally associated with threatened orchid species.
- * **Low Populations:** Threats posed by the inherent problems associated with low population numbers, such that single catastrophic impacts may cause local or regional extinction of a species.

Development: Threats posed by further significant development outside of existing disturbed areas for single purpose works. Council has reviewed many such enquiries for uses such as child care centres, churches etc. Such uses should be restricted to use of existing structures on a shared use basis.

- * **Grazing/Mowing:** Threats posed to a vegetation community that may dramatically simplify its floristic composition by repeated disturbance.
- * **Pollution:** Threats posed by the incursion of pollutants into water bodies, normally associated with wetland vegetation types.
- * **Other Processes:** Inappropriate activities such as trail bike riding, and in some places, riding and horse riding have led to vegetation degradation and creation of eroding paths.

The two tables below are extracted from Bell (2002). These have been summarised to show the key processes likely to operate on species and vegetation communities likely to occur on the site.

Table 8
Threatening Processes of Significant Plant Taxa within Wyong Shire (Derived from Bell, 2002)

Taxa	Weeds	Development	Fire	Rubbish Dumping	Fragmentation	Collection	Low Populations
Threatened Species Conservation Act - Endangered							
<i>Acacia bynoeana</i>		•		•	•		•
Threatened Species Conservation Act - Vulnerable							
<i>Angophora inopina</i>	•	•	•	•	•		
<i>Callistemon linearifolius</i>	•			•	•		
<i>Cryptostylis hunteriana</i>		•	•		•	•	•
<i>Tetratheca juncea</i>	•	•	•	•	•		

Table 9
Threatening Processes of Vegetation Communities within Wyong Shire (Derived from Bell, 2002)

Vegetation Community	Weeds	Development	Inappropriate Fire	Rubbish Dumping	Grazing/Mowing
26 Narrabeen Alluvial Drainage Line Complex	•	•	•	•	•
31 Narrabeen Doyalson Coastal Woodland	•	•	•	•	

EXISTING IMPROVEMENTS

Table 10

Description	Condition of the Land, and of any Buildings or other Improvements on the Land	Use of the Land and any such Buildings or Improvements	Purposes for which the Land, and any such Buildings or Improvements, will be Permitted to be Used	Purposes for which any Further Development of the Land will be Permitted, Whether Under Lease or licence or otherwise	Scale and Intensity of any such Permitted Use or Development
Buildings					
Tunkuwallin Hall	Reasonable condition only. Ongoing maintenance required.	Recreation	Recreation	Recreation	See Masterplan notes
Toilet Block	As above.	Recreation	Recreation	Recreation	See Masterplan notes
Summerland Point Tennis Club house	Good condition.	Recreation	Recreation	Recreation	See Masterplan notes
Ancillary					
Tunkuwallin Oval	Presently being expanded and improved. Playing surface requires leveling and drainage works.	Recreation	Recreation	Recreation	See Masterplan notes
Tennis Courts	Good Condition.	Recreation	Recreation	Recreation	See Masterplan notes
Skate Facility	Good Condition.	Recreation	Recreation	Recreation	See Masterplan notes
Gymkhana Yard	Poor condition. Requires urgent attention to fences and sheds.	Recreation	Recreation	Recreation	See Masterplan notes
Shared Cycle Path	Good Condition.	Recreation	Recreation	Recreation	See Masterplan notes
Cricket Pitch	Good Condition.	Recreation	Recreation	Recreation	See Masterplan notes
Seats	Some vandalism.	Recreation	Recreation	Recreation	See Masterplan notes
Tables		Recreation	Recreation	Recreation	See Masterplan notes
Tennis Lighting Towers		Recreation	Recreation	Recreation	See Masterplan notes
Tennis Club Car park	Good condition.	Recreation	Recreation	Recreation	See Masterplan notes
Oval, Hall and Gymkhana Car parks	Unsealed and uncontrolled parking on cleared and leveled areas requiring works.	Recreation	Recreation	Recreation	See Masterplan notes

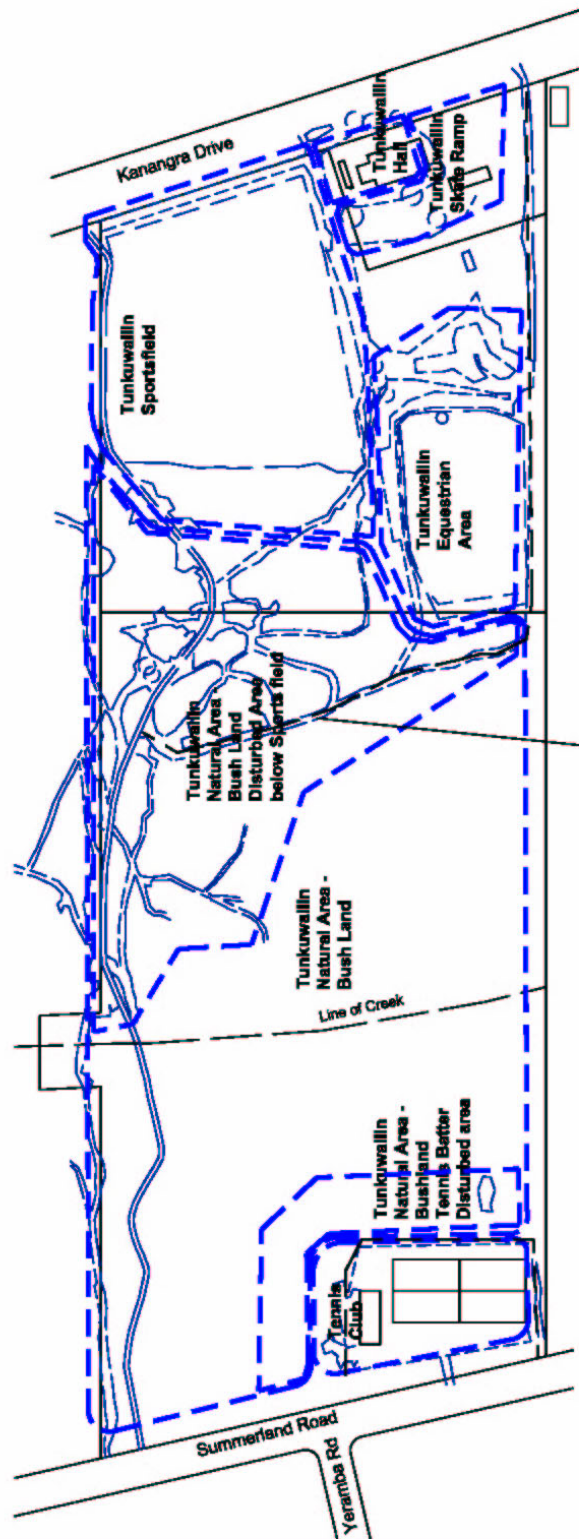
SECTION 3 - THE MASTER PLAN

MANAGEMENT UNITS PLAN

The areas shown on the plan reflect separable Management Units between which different Ecological Values and Development Functions apply. The boundaries are notional only and do not reflect surveyed information.

The Management Units for Tunkuwallin are listed and described below:

- 1 Tunkuwallin Sportsfield – the area developed for sports field and the batters and ancillary areas around it.
- 2 Tunkuwallin Hall – the Hall and ancillary buildings.
- 3 Tunkuwallin Skate Park – the cleared area around the west and south of the hall centred on the skate park.
- 4 Tunkuwallin Equestrian Area – the cleared and fenced area developed for equestrian activities and the informal access and parking area to the east.
- 5 Tunkuwallin Tennis Club – the cleared area developed for the tennis club building, courts and car park and ancillary facilities.
- 6 Tunkuwallin Natural Area (Bushland) – the healthy bushland centre on Bonny Boy Creek.
- 7 Tunkuwallin Natural Area (Disturbed Area below Sportsfield) – the area of bushland fragmented by access trails.
- 8 Tunkuwallin Natural Area (Tennis Batter Disturbed Area) – the area of bushland impacted by the batter of the tennis club filling.



Management Units

Management Units
The Areas shown on the plan reflect separable Management Units between which different Ecological Values and Development Functions apply.

The boundaries are notional only and do not reflect surveyed information.

Management Unit Descriptions

Turkuvallin Sports field
The area developed for sports field and the butters and ancillary areas around it.

Turkswall In Hall
The Hall and ancillary buildings.

Tunkuwallin Skate Park
The cleared area around the west and south of the hall centred on the skate park.

Tunkuwallin Equestrian Area
The cleared and fenced area developed for equestrian activities and the informal access and parking area to the east.

Management Unit Descriptions:

Tunkwallowin Tennis Club
The cleared area developed for the tennis club building, courts and carpark and ancillary facilities.

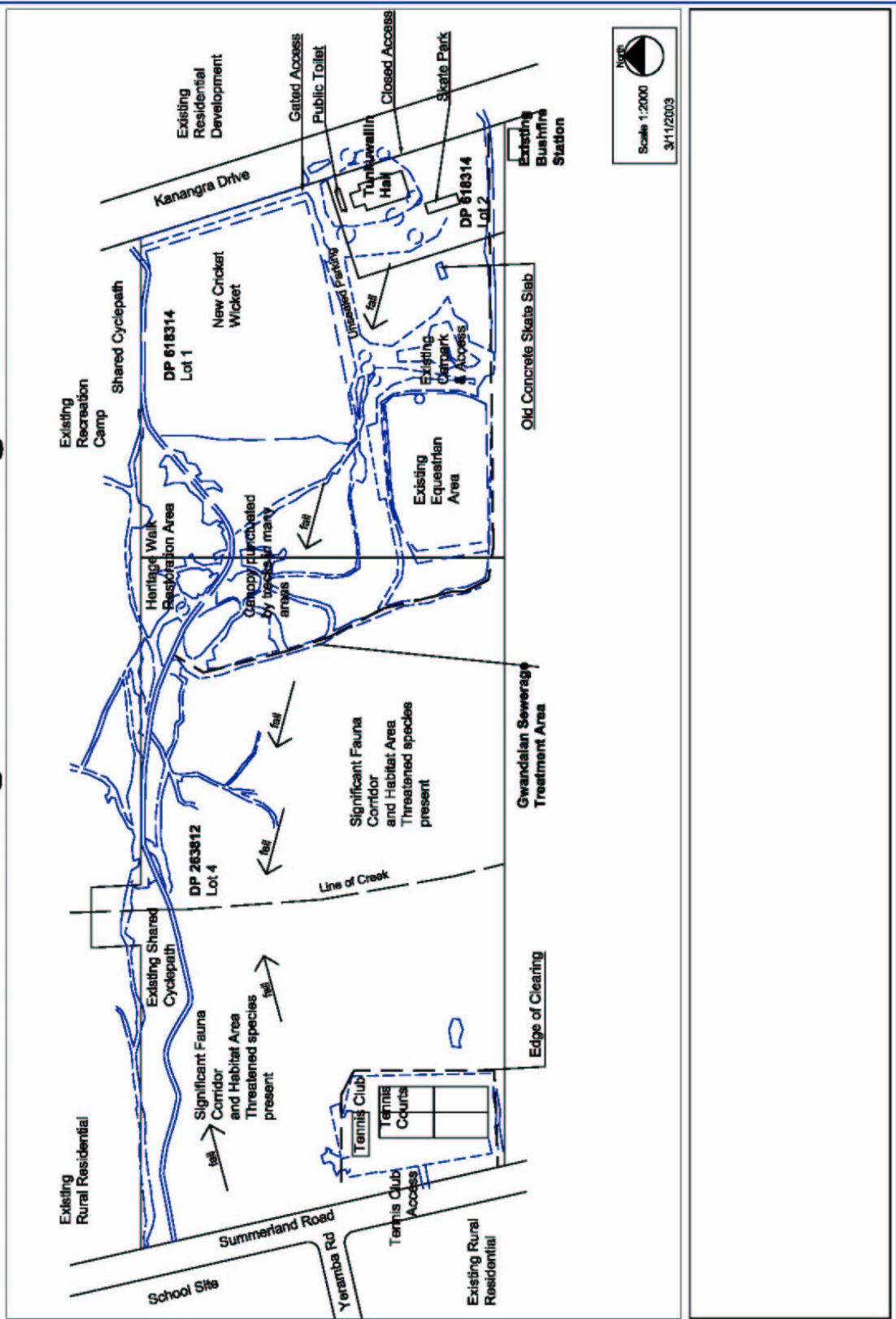
Tunkuwallin Natural Area - Bushland
The healthy bushland centre on Bonny Boy Creek

Tunkuwallin Natural Area - Disturbed Area below Sports field
The area of bushland fragmented by access trails.

Tunkwa'llin Natural Area - Tennis Batter Disturbed Area
The area of bushland impacted by the batter of the tennis club filling.



Tunkuwallin Plan of Management Existing Situation Plan



ELEMENTS OF THE MASTERPLAN

The major elements and actions of the master plan are listed below:

Sportsfield Facilities

- * Fill, re-grade and level the existing degraded area west of sportsfield Batter to increase the size and efficiency of the sporting field area.
- * Provide lighting to sportsfield.
- * Investigate possible locations to provide Practice Cricket Nets.
- * Upgrade the existing sportsfield.

Amenities Building

- * Provide a new Amenities Building with appropriate canteen, storage, toilet and changing facilities to serve the Sports field without the need to use the Hall Toilet Block.

Controlled Parking to Sportsfield

- * Address the erosion and compaction problems created by the uncontrolled parking on unsealed areas around the Sports field and Hall.
- * Create an area of adequate capacity with a permeable, stabilized surface and perimeter vehicle controls that provides clear vehicle circulation and safe pedestrian access to recreation facilities.
- * Ensure at grade ambulance access is maintained to the Sports field area from road access.

Social Facilities

- * Plan a new Playground in a safe location near the Sports field and Hall.
- * Provide seats, tables and BBQ's near the Sports field and Hall.

BMX Facilities

- * Plan and assess the impact of a consolidated BMX trails area in an existing cleared area with appropriate surface treatments and robust sediment controls.

Expanded Skate Facilities

- * Plan for expansion of the existing skate facility.

Equestrian Facility

- * Plan the upgrade of fencing and facilities for the existing Equestrian area.
- * Create a parking area of adequate capacity for horse floats and vehicles to Equestrian area with a permeable, stabilized surface and perimeter vehicle controls that provides clear vehicle circulation and safe pedestrian access to recreation facilities.

Tennis Club

- * Plan and assess the impact of providing expanded Tennis Club Facilities.

Circulation, Traffic and Parking

- * Plan and implement a safer vehicle access to the eastern side of the reserve from Kanangra Drive.
- * Plan and implement adequate and appropriate car parking and circulation within the reserve in association with safe pedestrian and bicycle circulation.
- * Plan and implement safe pedestrian and bicycle circulation within the reserve and to perimeter access points.
- * Provide limited safety lighting to Cycle path / Walkway.
- * Control and reduce vehicle access through identified areas of significance with appropriate works and signage.
- * Plan and maintain fire control access tracks within Tunkuwallin in liaison with the Fire Brigade.

Ecological Restoration

- * Support the continued bush regeneration and sediment control work occurring on the reserve in accordance with the Ecological Restoration Plan for Heritage Walk, Bonny Boy Creek, Gwandalan (Andrews Neil 2000) or an alternative restoration plan that addresses the identified ecological values of Tunkuwallin. This should include:
 - Weed control
 - Regeneration
 - Reconstruction
 - Removal of dumped materials
 - Soil erosion control measures
- * Plan and assess all proposals to reduce threatening processes on identified ecological values.
- * Where possible close and rehabilitate informal access tracks to reduce vegetation and habitat fragmentation and weed invasion.
- * In the area of identified habitat for *Tetratheca juncea* west of the proposed fire access track use the following techniques:
 - Deep ripping of existing problem trails leading downhill from the fire access track that runs south from the concrete path to the Southern boundary past the Equestrian area.
 - Mulching of the trails and seed spreading using adjacent plant material.
 - Erection of sediment control fencing at intervals down the trails to discourage access and to reduce the impact of erosion by overland flows.
- * Once appropriate BMX facilities are provided, progressively close and rehabilitate the existing BMX trails areas using bush land rehabilitation techniques as above.
- * Rehabilitate degraded vegetation areas once parking is defined.

FUNDING

Council's adoption of the plan does not guarantee any budget commitment by Council. Works will occur subject to funds being made available as part of Council's normal budget process.



SECTION 4 - MANAGEMENT

The management issues that need to be addressed by this plan are as follows:

- * Balancing public recreation needs with the protection of ecological values of the site.
- * Maintenance of the playing fields, gymkhana and recreation areas.
- * Continued ecological restoration of the disturbed areas of the site.
- * Safe circulation and access within and to the site.
- * Improving the visual appearance of degraded areas of the site.

MANAGEMENT STRUCTURE - COMMITTEES ETC.

The Tunkuwallin hall is managed by a Committee formed by resident and user representatives. The Tunkuwallin Tennis Club lease a portion of Lot 4, DP 263812 from Council on which its facilities are located.

Management Authority

The management authority is the Council. The Council's responsibilities for management of land may be delegated and undertaken by a Section 355 Committee, trusteeship, or other authorized persons or organizations or lessees.

SECTION 5 – GENERAL GUIDELINES

ACCESS AND OCCUPATION

Access

Access to the land may be limited by the Council at times where this may interfere with works or may have an adverse effect on the land.

Cycle ways

Cycle ways may be constructed to give access to facilities within natural areas and shall be constructed in accordance with Council's adopted cycle ways plan.

Fences and Fencing

Fences may be constructed to restrict access or to protect sensitive areas. Fences shall be in accordance with any standards or guidelines adopted by the Council. Normally, as provided for in the Dividing Fences Act, boundary fences are the responsibility of adjoining owners to construct and maintain and Council does not contribute to fencing boundaries to private land. Fencing types used shall have regard to the impact on native fauna, and generally barbed wire shall not be used.

Four Wheel Drive Access

Four wheel drive and recreation vehicle access shall not be provided, due to such use being incompatible with other uses, safety concerns and ecological values. Inappropriate access may be denied, having regard to the objectives of the plan.

Illegal Access

Unauthorised access is not supported, and where Council is aware of such access, measures will be taken to stop it.

Illegal Occupation

Unauthorised occupation of community land is not supported, and where Council is aware of such occupation, measures will be taken to stop it.

Paths and Paving

New paths and paving may be constructed in association with existing facilities, and shall be adequately maintained.

Roads and Parking

Roads and parking areas may be constructed or reconstructed to a safe and all-weather standard. New roads and parking areas may be constructed in accordance with this plan subject to appropriate approvals.

The plan seeks to ensure that essential pedestrian and vehicular access through or into natural areas minimises the impact on the area. Non-essential pedestrian and vehicular access shall be progressively closed and affected areas restored. Permanent or temporary use of natural areas on community land for access to private lands is in general not supported or permitted.

Road Maintenance

Existing roads are to be regularly maintained in a safe condition.

Track Closure

The Council may close and rehabilitate non essential tracks, or other roads and tracks that are poorly located and represent an erosion hazard.

Track Construction

Location and construction of tracks shall ensure minimal erosion, vegetation and soil loss, and be constructed of a suitable standard to require minimal maintenance.

Track Maintenance

Tracks are to be inspected at least annually and are to be maintained to ensure they do not become unsafe, or cause land degradation.

ADJOINING DEVELOPMENTS

Council will take into account the effect of development and management activities carried out on adjoining land. Activities of concern include discharge of stormwater, clearing and unauthorised filling. The nearby sewage treatment facilities also can create odour concerns impacting on some forms of use. Adjoining developments should provide buffer zones on private land adjoining natural areas and joint boundary management programs with adjacent landholders.

ADMINISTRATION

Administrative issues have an important influence on the way in which the land is managed.

Activities Carried Out by Other Authorities

Where activities are carried out on the land by other authorities, the Council will make such authorities aware of the provisions of this plan and as far as possible shall seek to ensure that any activities are compatible with the objectives and guidelines of this plan.

Community Involvement in Management

Council encourages community involvement in management of the reserve and will seek active participation in activities such as bush regeneration, clean ups and on management committees. Where appropriate, the Council may undertake community consultation subsequent to the making of this plan and may give community groups a role in management.

Contract and Volunteer Labour

In managing the land the Council may use contract and volunteer labour but shall ensure that supervisors have appropriate qualifications and/or experience, comply with all OH&S procedures, and are made aware of the requirements of this plan.

Delegation of Management Responsibilities

Where management responsibilities are delegated by the Council a requirement of the delegation shall be that the provisions of this plan of management are complied with.

Easements

The Council may grant easements for the provision of services over, or on land to which this plan applies.

Emergencies

This plan authorises any necessary activities to be carried out during emergencies as may be required by emergency personnel. Following the carrying out of any activities, periodic monitoring will be undertaken, and rehabilitation works undertaken if necessary.

Encroachment by Adjoining Land Owners

Where the Council is aware of encroachment by private land owners onto land to which this plan applies, measures will be taken to prevent this occurring.

Environmental Impact Assessment of Activities

The environmental impact of activities carried out on the land will be assessed having regard to the requirements under Part V of the Environmental Planning and Assessment Act 1979.

Leasing

The plan authorises the Council to lease land to which this plan applies for a purpose for which the land was being used at the date of commencement of the plan, or for any other purpose which is deemed to be in accordance with the objectives of this management plan. Any leases are to be in accordance with the provisions of the Local Government Act 1993.

Neighbours

The Council shall endeavour to be a good neighbour, and as far as possible shall consult with adjoining owners in respect of management activities which may affect them. All neighbours will be given copies of any draft Plans of Management for comment as well as final plans.

Occupation by Adjoining Land Owners

Where the Council is aware of occupation or encroachment by private landowners onto land to which this plan applies, measures will be taken to prevent this occurring in consultation with landowners involved.

Temporary Uses

The Council may allow temporary use of any of the land to which this plan applies up to a maximum continuous period of one month in any calendar year, provided it is satisfied that the use does not significantly adversely affect the permanent uses or environmental values of the land and it conforms with the objectives of this plan.

Temporary uses which may be allowed include erection of marquees, fairs, markets, shows, advertising, sporting events, carnivals and similar activities and events. In allowing such a temporary use, the Council will have regard to the environmental impact of the use, as provided for in the Environmental Planning and Assessment Act 1979.

User Charges

Subject to any provisions in the Local Government Act 1993 charges for the use of facilities may be imposed by the Council.

AMENITIES, BUILDINGS AND INFRASTRUCTURE

Natural Areas

Amenities and facilities may be provided to facilitate public enjoyment of the natural area compatible with its conservation in accordance with this management plan and appropriate approvals. Generally, provision of facilities in sensitive natural areas will be limited. Amenities and infrastructure are to be maintained to the highest possible standard. Some portions of land classified as natural areas include intensively developed areas.

Community Uses and Buildings (eg. clubs)

Community uses are encouraged in and adjacent to existing buildings, provided it does not impact on the site's ecological values. New development is subject to other provisions of this plan.

Lighting

Lighting shall not be provided in natural areas, except where required for public safety and the protection of assets along the cycleway and in proximity to the sportsfield.

Recreation Facilities

Facilities specifically for active recreation purposes will not be provided in natural areas. Passive recreation facilities consistent with the objectives of this plan may be provided, subject to the other provisions of the plan.

Services and Utilities

Services and utilities (such as water supply, reservoirs, sewerage, electricity supply, and telecommunications) may be constructed, maintained or repaired on the land, provided that the other guidelines of this plan are complied with.

Sportsgrounds and General Community

Buildings and amenities may be provided where consistent with the need to facilitate the recreational use of the land. Buildings and amenities are to be maintained to the highest possible standard.

Buildings and amenities will be regularly cleaned and maintained in a tidy condition in accordance with any adopted Council procedures manual.

Energy Efficiency

Measures shall be taken to improve the energy efficiency of all buildings and activities carried out on the land to which this plan applies. Measures will include use of energy efficient lighting and appropriate orientation of any new buildings to passive solar design principles.

Floodlighting

Floodlighting shall be designed and operated to minimise the glare and spillage of light to adjoining properties. Where possible, floodlighting should comply with AS2560.

Lighting

Adequate lighting shall be provided on the land where appropriate to improve public safety and security for buildings and amenities.

Maintenance

Maintenance will match the level and type of use, and wherever possible, users will be encouraged to help. Areas held under lease, licence or regular occupancy shall be maintained by the regular occupant. Existing assets on the land shall be identified and measures taken to maintain them in a satisfactory manner. The Council may make arrangements for community groups to undertake maintenance of specific facilities on the Council's behalf.

Outdoor Furniture (seats, bubblers, barbecues etc.)

Outdoor furniture shall be provided as required and maintained to a safe standard in accordance with any adopted landscape design.

Public Buildings

Public buildings may be constructed for any purpose ancillary to the dominant use of the land or any other activity authorised under this plan. Community facilities are also permitted in accordance with this Plan.

Public Toilets and Amenities

Where appropriate, public toilets and amenities shall be provided and maintained at the playing fields.

Removal of Buildings or Utilities

Buildings or utilities on the land may be removed by the Council where these are no longer required. The land is to be rehabilitated following removal.

Signs

Signs may be erected on the land in accordance with the Council's Sign Code and any adopted sign manual.

BUSHFIRE

Management aims to take measures to prevent damage to life and property from bushfires and to ensure that, as far as possible, bushfire management is compatible with the other objectives of this plan of management.

Bushfire Hazard Reduction

Shall be undertaken where there is an identified high hazard to improvements on the land or on surrounding land.

As far as possible, bushfire hazard reduction shall be by mechanical means and will be undertaken along property boundaries. Hazard reduction programs are to include an adequate environmental assessment and will be implemented in a manner which protects the biological diversity. In undertaking bushfire hazard reduction, regard shall be had to the effect of the works on plant regeneration and soil erosion.

Bushfire hazard reduction activities may be undertaken along the boundaries of bushland and in the vicinity of any improvements.

Asset Protection Zones

Widen the existing APZ north of the Tennis Club building to 20 metres and maintain the eastern APZ by slashing.

Reduce the hazard load immediately west of the Equestrian Area and replant with fire resistant material such as *Banksia* sp.

Broad Scale Hazard Reduction Burns

Hazard reduction burns required for maintenance of ecological values should be conducted in a manner that retains patches of unburnt vegetation.

Bushfire Management Plans

Where appropriate, specific parcels of community land will have a fire management plan prepared and adopted. This should reflect the appropriate fire regime for the two vegetation communities found on site:

- * Narrabeen Alluvial Drainage Line Component , Map Unit 26 (Rare event)
- * Narrabeen Doyalson Coastal Woodland, Map Unit 31 (Burn Frequency 10 to 30 years)

Fire Trails

An existing vehicle track should be upgraded to a fire trail of 4 metre wide formation and 1 metre under scrub on both sides. It should be constructed and shaped to reduce potential runoff and maintained in good condition. This track is shown on the Masterplan and runs south from the Cycle path in an alignment west of the Oval and Equestrian area then runs east along the Southern boundary.

No new trails are to be constructed.

COMMERCIAL ACTIVITIES (EG. SELLING FOOD AND DRINKS)

Commercial activities may be carried out on the land to which this plan applies, provided that such use is ancillary to the use of land for a purpose authorised under this plan and subject to prior Council consent. The requirements of the Environmental Planning and Assessment Act 1979 apply regarding development consent.

DEVELOPMENT ACTIVITIES, CONSTRUCTION WORKS AND EARTHWORKS

Development activities shall be undertaken in a way that minimises the area, degree and duration of disturbance, and areas are to be restored to greatest extent practicable. On site resources (topsoil, vegetation, etc.) shall be used to the maximum possible extent.

The plan does not authorise new development works except in accordance with the Plan, and provided any necessary approvals have been obtained.

Clearing

There shall be no further clearing of bushland on the land except in accordance with this Plan.

Development Adjacent to Community Land

Development works along boundaries and adjacent to the land to which this plan applies shall take into account the guidelines outlined in this section.

Development Adjoining Natural Areas

As far as possible development adjoining natural areas shall retain natural areas on adjoining private land, and appropriate conditions of consent shall be imposed to prevent adverse impacts on natural areas.

Earthworks

Earthworks shall be minimised as far as possible, and are to be undertaken in a manner to ensure that the necessity for rehabilitation is minimised.

Any earthworks within bushland or immediately adjacent shall be undertaken in such a way that there is no alteration to natural drainage, and any disturbance shall be rehabilitated with species indigenous to the site, preferably by natural regeneration.

Progressive site stabilisation and restoration shall be undertaken during the construction process.

Filling

On site soil material shall only be used where it has no weed content. Excess material from construction works will be removed from the site and not spread on the site. Introduced fill shall be subject to chemical analysis and must be certified weed free.

There shall be no reclamation, filling or draining which results in any loss of, or disturbance to wetlands or other associated natural habitat.

New Development Works

New development works (such as construction of roads, parking areas, cycleways, etc.) are not authorised by this plan, except where the works are consistent with the objectives of this plan, and are identified in the adopted master plan and where any necessary approvals have been obtained under the Environmental Planning and Assessment Act 1979 or the Local Government Act 1993.

Nutrients Leached from Building Materials

Materials (including concrete, gravel, topsoil, etc.) shall be stockpiled in such a way as to prevent nutrients from leaching into watercourses or into groundwater systems. As far as possible, materials low in nutrients are to be used.

Protection of Trees

Measures are to be taken to prevent damage and disturbance to tree roots by cutting of roots, loss of water, soil compaction or build up of soil.

Restoration

Following construction, all areas immediately adjoining natural areas shall be restored, as far as possible reinstating the plant species, structure and dynamics of the pre existing indigenous plant communities. Strategies should be adopted which maximise the natural recovery of those plant communities. Restoration shall ensure that weed invasion of nearby natural areas is minimised and shall include ongoing maintenance of restoration measures.

Soil Compaction

Measures shall be taken to avoid soil compaction around existing vegetation arising from construction works, heavy machinery and earthworks.

Where compaction occurs it will be relieved on completion of the activity.

Stockpiling of Materials

Works are to be completed in stages (clearing, topsoil stripping, relocation of topsoil, mulching, planting, etc.) and shall follow the principle of isolating stockpiles of different materials to prevent contamination. Materials and soil may be stockpiled but only on a temporary basis, and provided that measures are taken to prevent adverse affects such as soil erosion, introduction of weed species, soil compaction, and the like. Stockpiles are to be more than 5 metres from trees.

DOMESTIC PETS

Domestic pets may use the land subject to Council's Policy in relation to this land, provided that they are under the control of a responsible person at all times and do not cause a loss of amenity to other users of the land, except where specifically publicly notified. Dogs must be registered and leashed.

The use of natural areas for exercising or training of domestic animals (eg. horses, dogs, cats, etc.) is an activity which is incompatible with the protection and management of native fauna and habitat. Domestic animals should not be taken into the natural areas of the site, except for seeing eye dogs.

Domestic pets should be discouraged from utilising natural areas. They can only use these areas in accordance with signs erected on the land. In some areas domestic pets are prohibited. In these instances, signs are to be erected informing the public of this restriction.

DRAINAGE

Drainage works are allowed on the land to which this plan applies. Any works within defined water courses are to be minimised, and are to comply with any environmental management guidelines adopted by the Council to minimise flow of nutrients and pollutants into water courses or water bodies.

Drainage works shall only be undertaken where these do not adversely affect the natural drainage patterns on the land, and where the works are essential to protect roads, services, buildings or other improvements on the land.

Where external activities have affected natural drainage, measures may be taken to minimise such effects.

There shall be no reclamation, filling or draining which results in any loss of, or disturbance to wetlands or other associated natural habitat.

Drainage, Runoff and Stormwater - Bushland

Water quality and quantity entering natural areas is to be maintained at a level which is acceptable for sustainable natural area management, as far as possible to maintain pre development conditions. Special design requirements apply for pipe discharges into bushland including measures to ensure dissipation of stormwater velocity. Permeable ground surfaces are to be maintained as far as possible and on site disposal of stormwater should occur.

Drainage (eg. requirements, detention basins) – Sportsgrounds and General Community

Drainage works are allowed on the land to which this plan applies. Any works within defined watercourses are to be minimised, and are to comply with any environmental management guidelines adopted by the Council to minimise the flow of nutrients and pollutants into watercourses.

FAUNA

Native fauna populations and habitats shall be protected, maintained and enhanced. The impacts on wildlife and habitat shall be taken into consideration whenever any management activity is proposed (such as bushland regeneration, weed control, bushfire hazard reduction, recreation activities, etc.)

Measures shall be taken which ensure that natural fauna habitat is retained within the bushland. This may include retention of old and dead trees where an unacceptable hazard is not created, fallen trees and branches, and bush rock. Refer to the threatening process and fauna habitat sections for further discussion.

Grazing

Non native grazing animals (such as cattle and sheep) shall not occupy the land and are contrary to the objectives of the plan.

Introduced Fauna

Control of feral animals (foxes, wild dogs, feral cats, etc.) will be undertaken within natural areas.

Native Fauna

The Council shall take into account the presence of any native fauna in the management of the land.

Flora and Fauna Surveys

Fauna and fauna surveys shall be undertaken prior to any significant development works likely to affect the habitat of any native fauna.

Re-Introduction and Release of Native Fauna

Release of native fauna will only be permitted where it is reasonably likely that the land on which the animal is to be released forms part of its expected home range.

Threatened Fauna

Threatened native fauna utilise natural areas to which the plan applies. Any activities undertaken on the land shall be carried out in a manner that ensures that such animals are not adversely affected by the activity.

INFORMATION, MONITORING AND RESEARCH

An important part of the management process is to regularly document and update information relating to land to which the plan applies, and to monitor changes.

Education and Research

Educational and scientific use of natural areas is encouraged. Education and interpretative facilities may be provided in natural areas. Where a demonstrated need has been identified, an educational programme shall be developed to encourage appropriate recreational use of all or part of the land to which this plan applies.

The plan allows and seeks to promote use for educational and scientific purposes, especially filling in data gaps. Educational institutions are to advise Council of their activities and of the results of any research undertaken.

Environmental Information and Monitoring

A data base of environmental information of relevance for management should be established and maintained. Key components would include information on the presence of plant and fauna species, plant communities, bushfire history and weeds.

Periodic environmental monitoring of important environmental indicators is desirable to establish changes or trends, and should be undertaken, especially in relation to water quality. Management arrangements shall be implemented to regularly monitor the usage of the land, environmental conditions and facilities.

Surveys

Surveys of visitation and/or satisfaction with recreational facilities may be undertaken to facilitate the management and use of the land.

LANDSCAPE DESIGN

Detailed Landscape design will be in accordance with the objectives of the Plan of Management, the Management Units and the Master Plan Concepts.

LANDSCAPE MAINTENANCE AND MANAGEMENT

Developed Areas Management

Tunkuwallin falls within Sub-Regional Fauna Corridor Number 38 (Wildlife Corridors Strategy, Payne 2002) so the use of indigenous species is important to the environmental values of the site. Proper management of landscaping measures, trees and vegetation is important to provide a high degree of amenity on the land.

Guidelines for landscaping and trees are as follows:

Gardens

No formal gardens shall be constructed or maintained on the land.

Natural Regeneration

Natural regeneration of trees shall be encouraged wherever possible and measures may be taken to fence areas off (either permanently or temporarily) to promote natural regeneration. Natural regeneration of disused access tracks within the bushland shall be allowed to occur. This may be facilitated by the erection of temporary fencing to prevent access and ripping up old tracks.

Removal of Trees

Trees may be removed only where they are diseased or dangerous or where they require removal for the construction of an approved development proposal. Such trees scheduled for removal in development areas should be assessed for their habitat values before approval for removal.

Replacement of Trees

Where trees are removed they shall be replaced with other trees that shall be native species local to the area. In replacing trees, regard will be had to endorsed plans and any adopted policies outlining preferred species.

Tree Planting

Trees to be planted shall be native species local to the area.

Tree Protection

Appropriate protection such as guards and barriers shall generally be provided for all new plantings as may be required.

Trees

Trees will be maintained, as will maintenance of appropriate growing conditions involving management of soil compaction and other encroachments. Trees are to be regarded as a capital asset requiring appropriate maintenance.

Sportsgrounds Management

The following specific guidelines apply only to land classified as sportsgrounds.

Erection of Posts

The erection of posts on playing fields is the responsibility of the users.

Hours of Operation

The Council may restrict the hours of operation of any playing field at its discretion.

Line Marking

Line marking may be undertaken, but will normally be the responsibility of users after the initial line marking by Council.

Mowing

Playing fields and ovals will be mowed in accordance with approved manuals or schedules as required.

Watering

Watering of playing fields and ovals shall be undertaken as required.

Wet Weather Use

During periods of wet weather, the Council may restrict use of playing fields and ovals to prevent damage to grass surfaces.

Natural Areas Vegetation Management

The aim of vegetation management is to retain the distribution, abundance and diversity of native species and communities presently existing on the land and where appropriate to regenerate pre-existing natural communities.

A key element of vegetation management is to minimise the area, degree and duration of disturbance to natural vegetation. Another important part of vegetation management is to identify and recognise the important features and significance of the land.

Disturbance to Vegetation

Measures will be taken to prevent disturbance to existing vegetation, including roots, water regime, and surrounding soil.

Diversity

Retain the identified diversity of natural areas on Tunkuwallin.

Dominant Species

Management should retain dominant native species and allow natural processes to continue.

Fauna Habitat

Vegetation management shall have regard to the value of the vegetation as fauna habitat. In particular, old trees (both living and dead) and a diverse vegetation structure maintaining understorey species will be retained to maintain fauna habitat. Fallen logs and bushrock are to be retained and left undisturbed.

Fire Sensitivity of Plant Species

Different species and plant communities have varying sensitivity to fire and may require varying fire frequencies and intensities for survival. This is to be considered in undertaking any management activities involving the use of fire.

Formal Gardens

Formal gardens are not compatible with retention of natural vegetation, and new gardens will not be constructed in natural areas.

Fragmentation of Natural Areas

Measures will be taken to avoid fragmentation of vegetation in natural areas by roads, tracks, services, and the like. As far as possible, natural areas should be retained in contiguous areas as large as possible, with the minimum length of edges.

Replacement and Planting of Vegetation

Genetic material from local sources will be used for revegetation and restoration work in natural areas as far as possible. Any regeneration and soil stabilisation measures shall use non invasive, local species.

Species Inventory

Before any activity with the potential to disturb bushland is carried out on the land, a plant survey will be undertaken to establish an inventory of the species present, and any specific management requirements for particular plants.

Vegetation Structure

Vegetation structure is the term to describe the general character of the cover of the tallest stratum of vegetation, including its height, density and form. In Wyong, typical vegetation structures that occur are tall open forest, woodland, and heath. Different management is required for the different structural forms.

Non-Indigenous Plant Control (Weed Control)

Measures are to be implemented to control and manage existing and future processes leading to weed invasion and sources of weeds which are invasive of natural areas. Weed control shall be in accordance with any manual that may be adopted by the Council.

Weed control techniques are to minimise negative environmental impacts. Different techniques are required in varying situations, especially along watercourses, which are very sensitive to pollution impacts. An important part of control is the regular monitoring of weeds in natural areas on an ongoing basis.

Noxious Weeds

Noxious weeds are declared under the Noxious Weeds Act, 1993 and are plants posing a threat to agriculture, the environment or the community. Noxious weeds are to be removed as soon as possible. There is a legal obligation on land owners and Council to remove these plants from their properties.

Rare and Threatened Plants

Areas worthy of special protection are identified on the Management Units Plan. These include locations of rare plant communities or rare or threatened plants (ROTAP) as recorded by the National Parks and Wildlife Service.

Regeneration and Rehabilitation

Where land disturbance occurs, bush regeneration is the preferred method of rehabilitation in accordance with a bushland regeneration plan (refer to The Ecological Restoration Plan for Bonny Boy Creek, Gwandalan – Andrews Neil 2000).

Vegetation Removal

Native vegetation is not to be removed from the site except as part of approved scientific programs or maintenance or construction related removal. Any non native vegetation removed from the site is to be disposed of away from bushland to avoid spread of seed, or introduction of additional nutrients.

Vegetation along Watercourses

Vegetation and natural hydrological processes shall be retained along watercourses. Any disturbance shall be regenerated with appropriate native species. Watercourses within bushland are particularly susceptible to disturbance and invasion by weeds, and extra effort should be given to monitor and control disturbance in such areas.

POLLUTION CONTROL, RUBBISH AND LITTER

Pollution is a major factor in weed invasion and in the degradation of natural areas. Management should seek to ensure that no pollution is generated on the land, and that adequate measures are taken to prevent adverse impacts from adjoining land.

Environment Protection (noise control, dust, chemicals, etc.)

Measures will be taken during any construction or maintenance works on the land to ensure that normal environmental protection, pollution control and health guidelines are complied with.

Fertilisers and Pesticides

The use of fertilisers and pesticides may be permitted on land to which this plan applies, but only where no suitable alternatives exist and they are applied strictly in accordance with the manufacturer's requirements. New landscape designs are to minimise the need for these.

Litter

Litter shall be regularly collected and removed. Provision shall be made for litter bins at all playing fields and ovals and adjacent to amenities only in natural areas. It is the responsibility of all users to ensure that fields and surrounds are left in a tidy manner after use.

Noise from Sporting Events

Noise from sporting events shall be required to comply with normal noise pollution control requirements.

Removal of Silt

Silt shall be removed from drains and silt traps as necessary.

Rubbish Dumping (including garden waste)

Rubbish dumping is not permitted. Any lawn clippings are to be disposed of off site or in a manner that does not affect natural vegetation, or encourage the spread of weeds.

Soil Erosion and Sedimentation

All activities are to ensure adequate controls to prevent soil erosion and sedimentation in accordance with Council's existing guidelines and are to be inspected periodically. This is particularly important during any construction works, and in the maintenance of roads and tracks.

PUBLIC ACCESS

Public access to any of the land to which this plan applies shall not be denied at any time, except:

- * where a lease or other formal arrangement applies,
- * to assist rehabilitation,

- * to protect special items of significance, and/or
- * to manage a safe work site.

Access to the land may also be limited by the Council at times where this may interfere with works or may have an adverse effect on the land or on the amenity of the area.

PUBLIC LIABILITY

The Council will maintain public liability insurance for the land to which the plan applies.

PUBLIC SAFETY

Reasonable measures will be taken by the Council to ensure and maintain the public safety of persons using the land for recreational purposes or other authorized purposes.

RECREATION AND SPORT ACTIVITIES AND FACILITIES

Natural Areas

Recreation activities are encouraged, but are subsidiary to the objective of management of the land to retain its natural features and qualities.

Bushwalking

Bushwalking is permitted in all natural areas unless specifically prohibited in site specific locations.

Camping

Overnight camping is only permissible if approved in advance by Council.

Cycling

Cycling is encouraged on formed and constructed roads and tracks. On informal tracks within natural areas, cycling may cause damage to natural vegetation, or may contribute to soil erosion or track damage and may be restricted or prohibited by the Council.

Field Sports

Formal playing fields for sports will not be provided on natural areas.

Horse Riding

Horse riding is restricted to designated tracks. Horse riding causes damage to tracks and natural areas, spread of weeds and introduces nutrients. Any designated tracks are not to be located in undisturbed bushland areas, and regular maintenance is required, especially to control track damage and erosion as well as to remove weeds. All horse riding trails are to be signposted.

Public Entertainment

Public entertainment may be carried out with the prior consent of the Council and where no public nuisance will occur.

Recreational Activities

Within natural areas, the Council may restrict any recreational activity to specific areas, times, or seasons where this is necessary to achieve the objectives of the plan.

Sports Grounds and General Community Areas

A significant value of Tunkuwallin is for recreational purposes, both active and passive. As far as possible, a high standard of facilities will be provided to meet community needs for recreational facilities.

Barbecues

Barbecues may be established in designated formal picnic areas, and measures shall be taken to prevent bushfire hazards. Such measures shall include a minimum cleared distance between the barbecue and bushland of 20 metres and provision of reticulated water supply on site.

BMX Trails (Jumps)

New BMX Trails may be provided where the location, construction and management protects the ecological values identified on the site and adjacent areas as shown on the masterplan.

Other Sport and Recreation Facilities

Other facilities may be provided on the site following the preparation and adoption of a revised master plan for the site and appropriate development approval.

Play Equipment

Play equipment may be installed and replaced or removed as required. Play equipment shall be constructed and kept in a safe condition and maintained in accordance with the relevant Australian Standard.

Skate Parks

A skate park may be provided in an approved location.

Tennis and Netball Courts

Additional tennis or netball courts may be provided if future demand warrants them where the location, construction and management protects the ecological values identified on the site and adjacent areas. Additional ball court facilities shall require the preparation and adoption of a revised master plan for the site and appropriate development approval.

SECTION 6 - IMPLEMENTATION

HOW TO APPLY THE MANAGEMENT POLICIES AND GUIDELINES

The management policies and guidelines outlined in this plan must be taken into consideration in making decisions on management.

ACTION PLAN

This plan specifies performance targets and priorities for actions to be taken in relation to the land to which the plan applies. As far as possible, the matters specified in the plan will occur. Assessment of achievements of the management issues of the plan is to be undertaken. The table below indicates performance targets, the means of achieving the targets and manner of assessing performance in relation to the management issues of this plan.

Objectives and Performance Targets of the Plan with respect to the Land	Means by which the Council proposes to achieve the Plan's Objectives and Performance Targets	Manner in which the Council proposes to assess its Performance with respect to the Plan's Objectives and Performance Targets
General Objectives		
To ensure that the Act is complied with in relation to preparation of Plans of Management.	All aspects of the Act are complied with	Plan of Management is adopted by Council
To inform Council staff and the community of the way the land will be managed.	Plan is exhibited internally and externally for comment and is made available for reference or information	Plans are available to Council staff and the general public
To progressively improve the values of the land and to minimize the long term cost of maintenance to Council.	All improvements are maintained in accordance with user agreements or Council's adopted procedures	The value of the improvements is maintained or increased and maintenance costs are minimized.
To make provision for leases, licenses and agreements in respect of the land.	Leases and licenses are prepared in accordance with the requirements of the Act.	Leases and licenses are executed in accordance with the requirements of the Act and this Plan.
To identify and recognize existing uses and improvements on the land.	Physical inspection and file research	All uses and improvements are identified and the Plan is adopted.
To provide a reference and data bank in relation to information relevant to present and future management of the land.	Physical inspection and file research	All uses and improvements are identified and the Plan is adopted.
To set in place an administrative structure to ensure the achievement of land management objectives.	Ensure that all sections of Council are aware of the contents of the Plan	All future works are carried out in accordance with the Plan
To identify the major management issues applying to the land.	Consultation and staff discussions	The Plan is exhibited and adopted by Council

Objectives and Performance Targets of the Plan with respect to the Land	Means by which the Council proposes to achieve the Plan's Objectives and Performance Targets	Manner in which the Council proposes to assess its Performance with respect to the Plan's Objectives and Performance Targets
To simplify the process of management as far as possible.	Preparation of the Plan in accordance with the Act	The Plan is exhibited and adopted by Council
Natural Area Objectives		
To conserve biodiversity and maintain ecosystem function in respect of the land, or the feature or habitat in respect of which the land is categorised as a natural area.	Compliance with guidelines of this plan and relevant Acts.	Natural areas are regularly assessed as part of SOE reporting.
To maintain the land, or that feature or habitat, in its natural state and setting.	Compliance with guidelines of this plan and relevant Acts.	Natural areas are regularly assessed as part of SOE reporting.
To provide for the restoration and regeneration of the land.	Compliance with guidelines of an appropriate bushland management plan.	Achievement of bushland management plan objectives.
To provide for community use of and access to the land in such a manner as will minimise and mitigate any disturbance caused by human intrusion.	Compliance with guidelines of this plan and relevant Acts.	Natural areas are regularly assessed as part of SOE reporting.
To assist in and facilitate the implementation of any provisions restricting the use and management of the land that are set out in a recovery plan or threat abatement plan prepared under the Threatened Species Conservation Act 1995 or the Fisheries Management Act 1994.	Compliance with guidelines of this plan and relevant Acts. Use the Ecological Restoration Plan, Heritage Walk, Bonny Boy Creek, Gwandalan.	Natural areas are regularly assessed as part of SOE reporting.
Sportsground		
To encourage, promote and facilitate recreational pursuits in the community involving formal and informal sporting activities and games.	Ground is maintained in a condition to be able to be used for such activities	User satisfaction.
To redevelop the existing oval to provide the most efficient use of the leveled and turfed area.	Oval is extended into existing disturbed area and made a more regular shape.	Oval redevelopment by 2006.
To redevelop the existing oval and minimize the threats to ecological values.	Control construction and contain impacts within construction zone. Carry out timely and effective restoration of disturbed areas.	No identified sediment or pollutant transport or construction activities to adjacent areas.
To ensure that sportsfield maintenance practices are managed having regard to any adverse impact on adjacent areas.	Maintenance practices are controlled to reduce impacts.	No identified sediment or nutrient transport to adjacent areas.
To ensure that sporting activities are managed having regard to any adverse impact on nearby residences or adjacent areas.	Council's booking system sets appropriate conditions for users	No negative feedback from adjacent residents.

Objectives and Performance Targets of the Plan with respect to the Land	Means by which the Council proposes to achieve the Plan's Objectives and Performance Targets	Manner in which the Council proposes to assess its Performance with respect to the Plan's Objectives and Performance Targets
Park		
To encourage, promote and facilitate recreational, cultural, social and educational pastimes and activities.	Park area is maintained in a condition to be able to be used for such activities	User satisfaction.
To provide for passive recreational activities or pastimes and for the casual playing of games.	Park area is maintained in a condition to be able to be used for such activities	User satisfaction.
To develop the land in such a way as to promote and facilitate its use to achieve the other core objectives for its management.	Amenities and play equipment is maintained to a satisfactory standard	User satisfaction.
General Community Use		
To promote, encourage and provide for the use of the land, and to provide facilities on the land, to meet the current and future needs of the local community and of the wider public:		
a In relation to public recreation and the physical, cultural, social and intellectual welfare or development of individual members of the public, and	Compliance with guidelines of this plan and relevant Acts provides appropriate opportunities.	User satisfaction.
b In relation to purposes for which a lease, licence or other estate may be granted in respect of the land (other than the provision of public utilities and works associated with or ancillary to public utilities).	Property is leased in accordance with the requirements of the Local Government Act	

ADMINISTRATION

The Council's General Manager is responsible for implementing the provisions of this plan. The Council's Strategic Planning Department is responsible for coordinating the planning studies and for reviewing the plan.

REVIEW OF THE PLAN

The plan may be reviewed if required and an updated plan will be adopted by the Council. The review will ensure that additional background information is included in the updated plan, including details of expenditure and works undertaken.