

**REMNANT
BUSHLAND
GENERIC PLAN OF
MANAGEMENT**



RANDWICK  CITY COUNCIL

MESSAGE FROM THE MAYOR

Dear Readers,

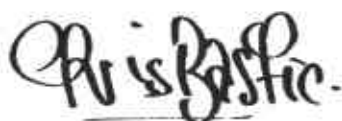
In June 1994, Randwick City Council began a major program developing open space Plans of Management for all parks, beaches and reserves under its management.

Open space comprises the second largest land use in the City of Randwick and is a public area for which Council has an important responsibility. Our parks and other recreation areas include some of the most valuable assets we have to offer, including large areas of natural vegetation and coastal reserves, a number of sports orientated parks and ovals, informal roadside reserves, pocket and neighbourhood parks. Within these areas you may find rare native vegetation species and even some wildlife.

Remnant bushlands are areas where original bushland still exists and includes the birds, insects, soil and rocks, as well as the plants and animals that live there. They are also some of the most important parts of our City's heritage and are desirable places to visit. This generic plan identifies how Council intends to protect these remnants and manage them in the future.

Public participation featured strongly in the development of this and other generic plans within the COSRPOM due to the public ownership of these areas. This communication and input has enabled meaningful strategies and actions to be developed with the collaborative support of the community and Council. It is hoped that such collaboration will continue in the future.

Thanks go to all those who were involved in the development of this plan. I commend it to you.



Councillor Chris Bastie
MAYOR

If you do not understand this letter please contact the Council on 9399 0999 and interpreting assistance will be arranged. English

Αν δεν καταλαβαίνεις το γράμμα αυτό τηλεφώνησε στη Δημαρχεία, αριθμός τηλεφώνου 9399 0999 για να σου κανονίσει διερμηνέα. Greek

Se non capisci questa lettera, per favore mettiti in contatto col Council al 9399 0999 per ottenere l'assistenza di un interprete. Italian

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Si usted no entendiera esta carta, tenga a bien llamar al Municipio, teléfono 9399 0999 se le tramitará la ayuda de un intérprete. Spanish

Nếu quý vị không hiểu thư này xin vui lòng liên lạc với Hội đồng, số điện thoại 9399 0999 và chúng tôi sẽ sắp đặt dịch vụ thông ngôn cho quý vị. Vietnamese

Jeżeli Pan/Pani nie rozumie tego listu, proszę zadzwonić do Rady Miejskiej na numer tel. 9399 0999 w celu uzyskania pomocy tłumacza. Polish

Jika tak paham akanmaksud surat ini hubungilah Kotapraja ini lewa 9399 0999 agar bantuan juru bahasa dapat diusahakan. Indonesian

Bu mektubu anlayamazsaniz, lutfen 9399 0999 'dan Belediye ile iliskiye geciniz; tercümanlik hizmeti ayarlanacaktır. Turkish

Ha nem érti, ami ebben a levélben áll és felhívja a Tanácsot a 9399 0999 számon, tolmácsolási segítséget fogunk szerezni. Hungarian

Když nerozumíte tomuto dopisu tak prosím zavolejte na Council na číslo 9399 0999 my Vám zařídíme pomoc tlumočnicka. Czech

إذا لم تفهم هذا الخطاب ، نرجوك الاتصال بالمجلس على هاتف ٩٣٩٩٠٩٩٩ ، وسيتم ترتيب مساعدته للترجمة. Arabic

如果你看不懂這封信，請與市政廳聯繫。電話是 9399 0999 我們會安排翻譯。 Chinese

Если Вам непонятно содержание этого письма, свяжитесь пожалуйста с Муниципалитетом по телефону 9399 0999 и Вам обеспечат помощь переводчика. Russian

Ако не разумете ово писмо, молим назовите Општину на 9399 0999 која ће вам средити помоћ тумача. Serbian

REMNANT BUSHLAND GENERIC PLAN OF MANAGEMENT

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GLOSSARY

| | |
|------------|---|
| CR Act | Crown Lands Act, 1989 |
| DLWC | Department of Land and Water Conservation |
| DUAP | Department of Urban Affairs and Planning |
| EPA | Environment Protection Agency |
| EP&A Act | Environmental Planning and Assessment Act, 1979 |
| LG Act | Local Government Act (NSW), 1993 |
| LGA | Local Government Area |
| RCC | Randwick City Council |
| SoE Report | State of the Environment Report |



EXECUTIVE SUMMARY

This plan of management is one in a set of eight *generic* plans of management which, along with a City-wide *Strategic* Plan for open space and recreation, comprise the City Open Space and Recreation Plan of Management (COSRPOM). It addresses issues raised by community representatives, government authorities, the COSRPOM Council officers support group and other local experts. This plan covers all remnant bushland areas (see definition, Section 1) under Council's control within the City of Randwick including those owned or vested in Council as 'community land' and those managed by Council which may be Crown land or Department of Housing land. There are a number of goals relevant to this plan with the overriding goal being:

'To conserve, maintain and where possible restore, all remnant bushland within Randwick City's parks and reserves'.

Remnant (original) bushland requires specific management considerations that are not common to any other type of open space. These areas are more sensitive to change and are more at risk from being lost to exotic species, destruction or neglect than any other vegetation type within Randwick's reserves. Their values are far reaching and include scientific, educational, heritage and aesthetic sources of interest and importance. Remnant bushland areas have been identified by community representatives as places that: should retain their peaceful settings; should have minimal impact from buildings and other 'urban' forms; and are under constant threat from development, inappropriate recreation, deliberate clearing, weed invasion and a lack of understanding or appreciation. In this plan, 'Remnant bushland' includes areas that contain one or two original species or a variety of bushland species, all of which are locally rare or significant.

The primary source of conflict when providing management options for this type of open space is the use of this land as a public recreation resource and the risk of over-use or inappropriate use for recreational purposes. Over or inappropriate use of remnant bushland may lead to the loss of its inherent values. Recommendations within this plan are based on those identified values and are reflected through the objectives which promote co-operation, education and commitment to the protection and restoration of remnant bushland areas within the City of Randwick.

The major recommendations of this plan are as follows:

- * Remnant Bushland areas are to serve as natural and educational areas of open space that contain appropriate recreation facilities suited to the specific values of each location.
- * Measures that prevent the further loss of remnant vegetation should be implemented wherever possible.
- * Site specific plans of management or maintenance protection programs are to be developed for each remnant bushland area.
- * All remnant bushland plans and maintenance protection programs are to be integrated so that wildlife and vegetation corridors may be established.
- * That the opportunities provided by Randwick's remnant bushland for research and education be recognised and facilitated within all management and implementation works.
- * Community involvement in the protection and re-habilitation of remnant bushland areas is to be encouraged for the purposes of raising awareness, protection and appreciation of this rare resource.
- * Randwick's biodiversity to be conserved and increased through bush regeneration techniques within the remnant bushland areas.

A twenty year time frame is recommended for this plan with annual reviews for recommendations that have cost implications and a five year review of the entire plan.



COMMUNITY FEEDBACK

The community of the City of Randwick and others who have an interest in Council's future plans for its open space and recreation opportunities throughout the City were invited to comment on the draft version of this generic plan of management. This plan affects the management of remnant bushland areas under Council's management for the next two decades and has been important that members of the community have been made aware of, and have the opportunity to express their opinion on the strategies recommended.

Following the public exhibition period of 42 days, a number of submissions were received in relation to this and the other seven generic plans within the 'COSRPOM' set. These were then incorporated where appropriate. This plan is the final adopted plan for Remnant Bushland under the Local Government Act 1993.

Any further comments that you would like to make in assisting Council's monitoring and updating of the plan, should be put in writing, referring where appropriate, to the specific section concerned, and addressed to:

**The General Manager
Randwick City Council
Administrative Centre
30 Frances Street
RANDWICK NSW 2031**

marked to the attention of:

Ms Adrienne Jenda
Strategic Planner - Works Division



1. INTRODUCTION

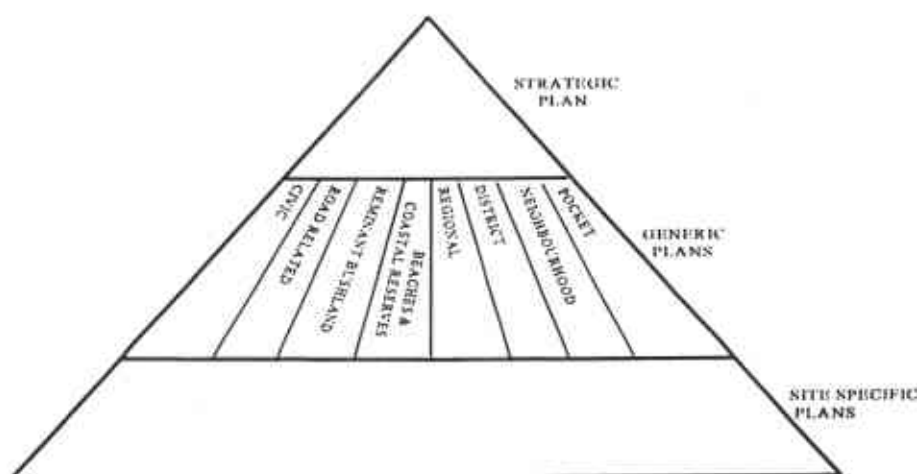
1.1 Aim and Background

Aim of the Remnant Bushland Plan of Management:

'To provide a practical framework and timetable for achieving short, medium and long term management objectives in accordance with the guiding principles for remnant bushland under Council's control within the City of Randwick.'

This generic plan of management for remnant bushland is one in a series of eight, twenty year generic plans that comprise the Randwick City Open Space and Recreation Plan of Management (COSRPOM). It has been prepared in compliance with the LG Act (1993) and is categorised a 'Natural Area' under the LG Act and sub-categorised into the 'Remnant Bushlands Generic Plan of Management for the COSRPOM'. 'Generic' plans are those that incorporate the management of a number of areas comprising the same values and characteristics, in this case, remnant bushland. A Strategic Plan for all open space and recreation opportunities within the City of Randwick links with, and provides direction to the Generic Plans which then feed directly into the site specific plans of management. Together, these provide a comprehensive management approach for open space and recreation in the City of Randwick for the next two decades. Figure 1 demonstrates how the generic plans of management relate to the overall structure of the COSRPOM.

Figure 1: The COSRPOM Plans of Management



There has been increasing recognition of the need to protect Randwick's remnants within its predominantly urban environment. For these reasons, in accordance with the Local Government Act 1993, a generic plan for remnant bushland under the primary heading 'Natural Areas' has been developed. Remnant bush areas on both 'community land' (land that is owned or vested in Council) and Crown Land administered by the Crown Lands Act 1989, has been identified. This and all other generic plans within the COSRPOM have however been prepared directly under the provisions of the Local Government Act 1993.

1.2 What is Remnant Bushland?

Within the context of this plan of management, 'remnant bushland' refers to all areas of remnant native vegetation within Council managed parks and reserves. This includes all areas of bushland as defined in State Environment Planning Policy (SEPP) 19. The definition within SEPP19 is presently being re-assessed and because remnant native vegetation, including the smaller and more degraded areas, is so scarce, this plan of management has taken as broad a scope as possible towards this valuable asset.

Some of the smallest and most degraded areas of remnant vegetation contain populations of plant species that do not occur elsewhere in the Eastern Suburbs. For this reason they warrant inclusion within this plan of management which will help determine their survival.

Below is a broad definition of remnant bushland that has been adapted from the 1995 State of the Environment (SolE) Report for Randwick City Council:

Ecosystems, and the habitats, plants and animals that they contain, that existed before non-Aboriginal settlement and continue today because of their own natural processes. As well as providing an important living record of our natural history, these remnants preserve Randwick's local identity and character, conserve our local plants and animals, provide a source of plants adapted to soils and climate and provide natural surroundings where city people can connect with nature.

Additionally, the soil, seedbank, the organic and non organic components such as decaying vegetation and the rocks that are present are part of the remnant ecosystems.

Much has been written of the unique and valuable nature of Randwick's remnants (Benson and Howell, (1990), Malcolm Reed (undated) & Adam (various publications)). The unique value of Randwick's remnants is usually represented by one of the following:

- * the only example present
- * rare
- * a member of a rare or unusual group
- * a landscape or vegetation which has become or may become unique by virtue of changes occurring to the environment. (Lamb, 1994)

However, the 1993 SolE Report states that 'where there is so little vegetation left, (as is the case in Randwick) it is *all* locally rare.



1.3 Requirements of the Local Government Act, 1993 (The Act) and other relevant legislation

The Act sets out Council's duty in respect to preparing plans of management for 'community land'. By July 1993 Council had undertaken an extensive assessment of its public land (land vested in or owned by Council) and classified such land as either 'community' or 'operational'.

The following definition of 'community land' has been summarised from clause 6 (2) of schedule 7 of the Act:

Community Land is land that is owned by Council, and all land, other than Crown and commons, which has been placed, or falls under its care and control (vested in) and may comprise: a public reserve; land subject to a trust for a public reserve; land dedicated as a condition of development consent under Section 94 of the EP & A Act 1979; land reserved, zoned or dedicated for use as open space under a planning instrument; or land that is owned by the Minister for Urban Affairs and Planning.

All land that Council resolved to be 'community' must, by July 1st 1996, be used and managed in accordance with plans of management (PoM's). It is intended that these PoM's will aid the effective co-ordination and management of community land within the Council area. Where Council holds a number of community land areas that have similar values and characteristics, 'generic' PoM's may be adopted to provide one comprehensive plan of management. Generic plans must contain a schedule (list) of those areas included.

The Act requires the following information to be contained within each plan of management:

1. the category or categories of land;
2. objectives and performance targets of the plan with respect to the land;
3. the means by which Council proposes to achieve the plan's objectives;
4. the manner in which Council proposed to assess its performance with respect to the plan's objectives and performance targets;
5. for land categorised as natural area, further categorisation;
6. express authorisation for leasing or licensing (specifying whether or not limited to public purposes), and any other provisions; and
7. provisions applying to the grant of a lease or license or other estate in land.

Community land cannot be sold or otherwise disposed of by councils and there are restrictions on community land use and on the granting of leases and licenses. Where appropriate, Environmental Planning Instruments under the EP&A Act (1979) may impose additional restrictions. There are also additional matters that are required to be addressed where the land is not owned by Council.

State planning legislation that relates to remnant bushland open space within the City of Randwick includes:

- * Sydney Regional Environmental Plan No.14 Eastern Beaches (SREP 14) 1988;
- * State Environmental Planning Policy No.19 - Bushland in Urban Areas (SEPP 19) 1988;
- * the Noxious Weeds Act 1993
- * the Clean Waters Act; and
- * the Threatened Species Conservation Act 1995.



SREP 14 provides a framework for the management of the coastal open space areas from Cape Banks, the northern headland of Botany Bay, up to South Head, the southern headland of Sydney Harbour. Its recommendations include the need to improve the coastal open space landscape through tree planting and vegetation programs, to upgrade recreational facilities, maintain and enhance the coastal walkway and respond to user desires for clean beaches and water, for more open space areas and linkages between them, for protection from climatic elements and for more facilities and amenities.

SEPP 19 was prepared in response to widespread concern that bushland in Sydney was disappearing as the metropolitan area expanded. It sets a framework for the protection of areas of original natural vegetation and for those areas adjacent to bushland. It therefore affects land which is not public open space and also developments on open space land that contains bush and non-bush areas. The policy states that:

“A person shall not disturb bushland zoned or reserved for public space purposes without the consent of Council”

Any development within remnant bushland and any new site specific plans of management for remnant bushland within the City of Randwick must have regard to Part III of the Environmental Planning and Assessment Regulation 1980. Where each reference to a Development Control Plan in the Regulation may be construed as the 'plan of management prepared' under Clause 8 of the SEPP No.19, and where reference to a Local Environment Plan is to be construed as a reference to SEPP No.19.

The Noxious Weeds Act 1993 declares a number of noxious plants as weeds that must be controlled and removed. Council as the owner/manager therefore has an obligation to remove these weeds from its public open space and this is of particular importance within remnant bushland areas. Council has additional weeds that have been declared on its own 'invasive' weeds list.

The Clean Waters Act 1970 covers water quality aspects of stormwater and legislates the use of herbicides for weed control, while the Threatened Species Conservation Act 1995 protects not only species but also plant and fauna communities, populations, habitats and threatening processes, all of which must be considered during Council improvements and others' activities that may affect threatened remnant species.

1.4 Remnant Bushland in the City of Randwick

There is little remaining of the original vegetation once common to the Eastern Suburbs, other than a few small remnants which are primarily located within the City of Randwick. These include much of Malabar Headland, small patches of sandstone heath on the headlands of Burrows Park and Dunningham Reserve, a small freshwater swamp in Trenerry Reserve and the remnant of Eastern Suburbs Banksia Scrub at Little Bay. The original vegetation cover was mainly heathland but this was once diverse, ranging from wetlands to rainforest. Bushland remnants are being discovered all the time. This plan of management lists those remnants that Council is currently aware of but it must also be stated that those remnants within Council managed open space that are found in the future, will be covered by this plan in the same way that those identified below have been.

Remnants under Council's care and control are found at the following locations within the City of Randwick:



Table 1: Remnant Bushland under Randwick City Council's Management

| Parcel of Land | * Recreation Inventory No. | Ownership | Management Body | Reference No. on Fig.2 |
|--|----------------------------|-----------|-----------------|------------------------|
| Gordons Bay, Clovelly | A/5-494-01 | Council | Council | 1 |
| Burrows Park, Clovelly | B/5-583-01 | Crown | Council | 2 |
| Bundock Park, Clovelly Bay | B/5-259-01 | Crown | Council | 17 |
| Dunningham Reserve, Coogee | B/5-068-01 | Crown | Council | 3 |
| Rock Platforms adjacent to Grant Reserve, Coogee | B/5-068-02 | Crown | Council | 19 |
| Trenerry Reserve, South Coogee | B/5-783-01 | Crown | Council | 4 |
| Larline Bay, South Coogee | B/3-716-01 | Crown | Council | 5 |
| Jack Vanny Reserve, Maroubra | B/4-500-01 | Crown | Council | 6 |
| South Maroubra Beach | B/4-120-01 | Crown | Council | 20 |
| Malabar Beach/Long Bay | B/3-066-02 | Crown | Council | 21 |
| Randwick Golf Course, Long Bay | B/3-628-01 | Crown | Council | 7 |
| SW Arthur Byrne Reserve | B/4-120-01 | Crown | Council | 8 |
| Yarra Bay Remnants: Yarra House, NW Yarra beach and Bomborah Point | B/1-449-01 | Crown | Council | 9 |
| Bunnerong Road, Chifley | B/3-130-07 | Crown | Council | 10 |

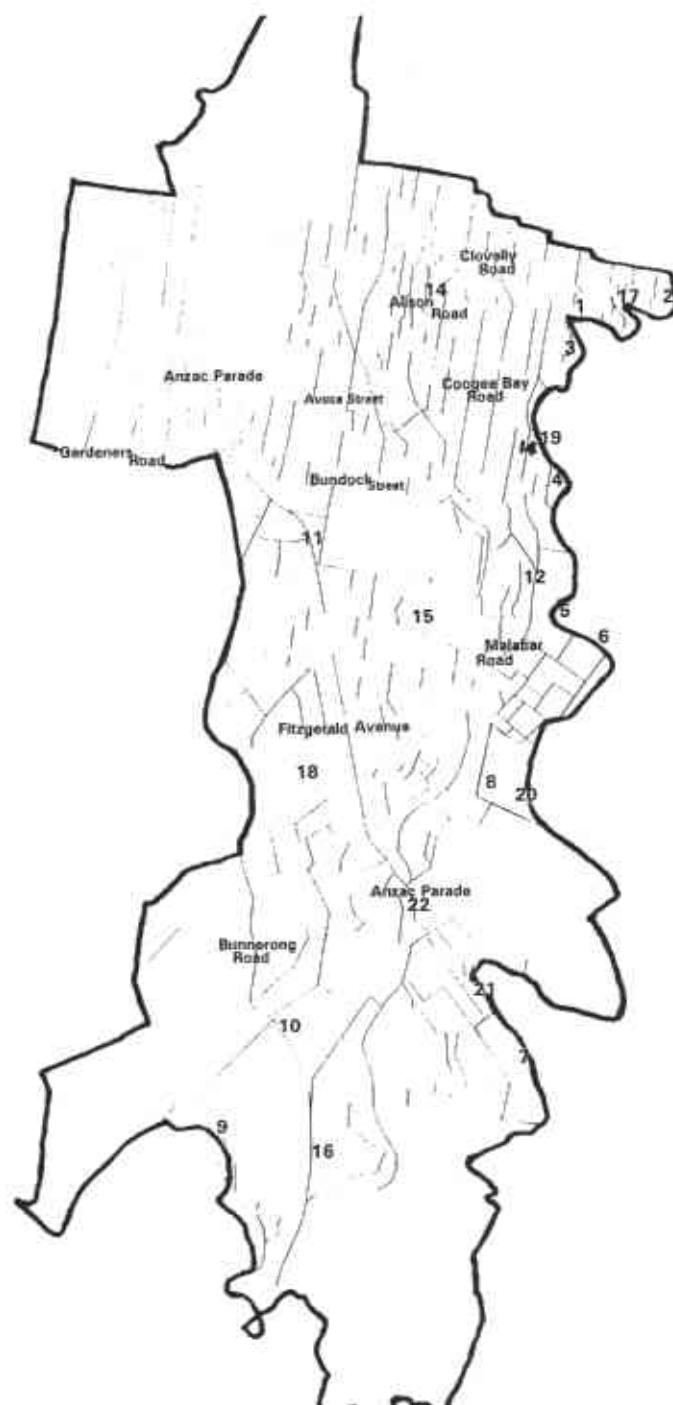


| Parcel of Land | *Recreation Inventory No. | Ownership | Management Body | Reference No. on Fig.2 |
|---|---------------------------|-----------|-----------------|------------------------|
| Anzac Parade Median Strip, Kingsford | B/4-031-09 | Crown | Council | 11 |
| Pioneers Park, Malabar/Anzac Parade Nature Strip, | B/3-031-05 | Crown | Council | 22 |
| Popplewell Park, Maroubra | B/4-345-01 | Crown | Council | 12 |
| Glebe Gully/Fred Hollows Reserve | A/4-345-01 | Council | Council | 13 |
| Coastal Reserve South of Little Bay | B/4-031-09 | Crown | Council | 14 |
| Quarry Reserve | B/4-154-04 | Crown | Council | 15 |
| Woomera Reserve | B/1-130-02 | Crown | Council | 16 |
| Heffron Park | B/3-418-02 | Crown | Council | 17 |
| Additionally, remnants exist along the majority of Randwick's coast and include indigenous herbs, sedges and grasses eg. <i>Samolus repens</i> and <i>Isolepis cernua</i> on rock platforms and adjacent slopes. These, where possible should be retained and managed in relation to the guiding principles of this plan. | | | | |

* The recreation inventory is the data base in which all land information concerning parks and reserves within the City of Randwick is held. The reference number is the number which has been given to each park or reserve within the inventory data base.

Bushland in Randwick City's boundaries is approximately 7% of the City area but this includes the Anzac Rifle Range and Botany Bay National Park, both of which are outside Council's jurisdiction. The remnant vegetation that is described in this plan as those areas located on land managed by Council (community and Crown lands), amounts to only between 1 and 2 % of the total area of Randwick. (See Figure 2)



Figure 2: Distribution of Remnant Bushland within the City of Randwick**LEGEND**

| PARK NAME | PARK LOCATION NUMBER |
|--|----------------------|
| Giordons Bay, Clovelly | 1 |
| Burrows Park, Clovelly | 2 |
| Dunningham Reserve, Coogee | 3 |
| Trenerry Reserve, South Coogee | 4 |
| Lurline Bay, South Coogee | 5 |
| Jack Vanny Reserve, Maroubra | 6 |
| Randwick Golf Course, Long Bay | 7 |
| SW Arthur Byrne Reserve | 8 |
| Yarra Bay Remnants: Yarra House, NW Yarra Beach and Bomborah Point | 9 |
| Bunnerong Road, Chifley | 10 |
| Anzac Parade Median Strip, Kingsford | 11 |
| Popplewell Park, Maroubra | 12 |
| Glebe Gully/Fred Hollows Reserve | 13 |
| Coogee Reserve, South of Coogee Bay Bridge | 14 |
| Quarry Reserve | 15 |
| Woomera Reserve | 16 |
| Bundock Park, Clovelly Bay | 17 |
| Hefron Park | 18 |
| Rock Platforms Adjacent to Grant Reserve, Coogee | 19 |
| South Maroubra Beach | 20 |
| Malabar Beach/Long Bay | 21 |
| Pioneers Park/Anzac Parade, Malabar Nature Strip | 22 |



Community land under the Local Government Act 1993 that is to be categorised 'Remnant Bushland' is:

1. Gordons Bay remnant coastal heath (small section of)
2. Fred Hollows remnant gully forest

1.5 Using this Plan of Management

As described in Section 1.1, this generic plan is one of a series of eight which are directed by the Strategic Plan. All generic plans follow the same format which is derived from the strategic plan. This plan comprises the following sections:

1. *Introduction:* This component explains the background to the development of the plan of management, the history and function of remnant bushland in Randwick, how the plan works, community participation and the distribution of remnant bushland throughout the City of Randwick.
2. *Management Philosophy and Context:*
This component provides the basis for management for the plan and its recommendations, including the vision, the guiding principles for the management of remnant vegetation in the City of Randwick and the overall aims and objectives of the plan itself.
3. *Objectives, Priorities and Implementation:*
The objectives are derived from major issues identified via the management philosophy section and a range of internal and external information sources. The means of implementing objectives include: statements on priority; proposed year of completion; and the department or division within Council that is responsible for implementation. These are presented in a tabular format. This section also addressed *how* the objectives and performance targets will be achieved and assessed. This is the main way in which implementation of the plan may be monitored.
4. *Indicative Time Frame for Implementation:*
This determines when the required development works should take place and therefore when the funds are required. It is based on the information contained in Section 3; 'Management Objectives and Priorities' and will help to link this plan with Council's Management Plan and Section 94 Contributions Plan.

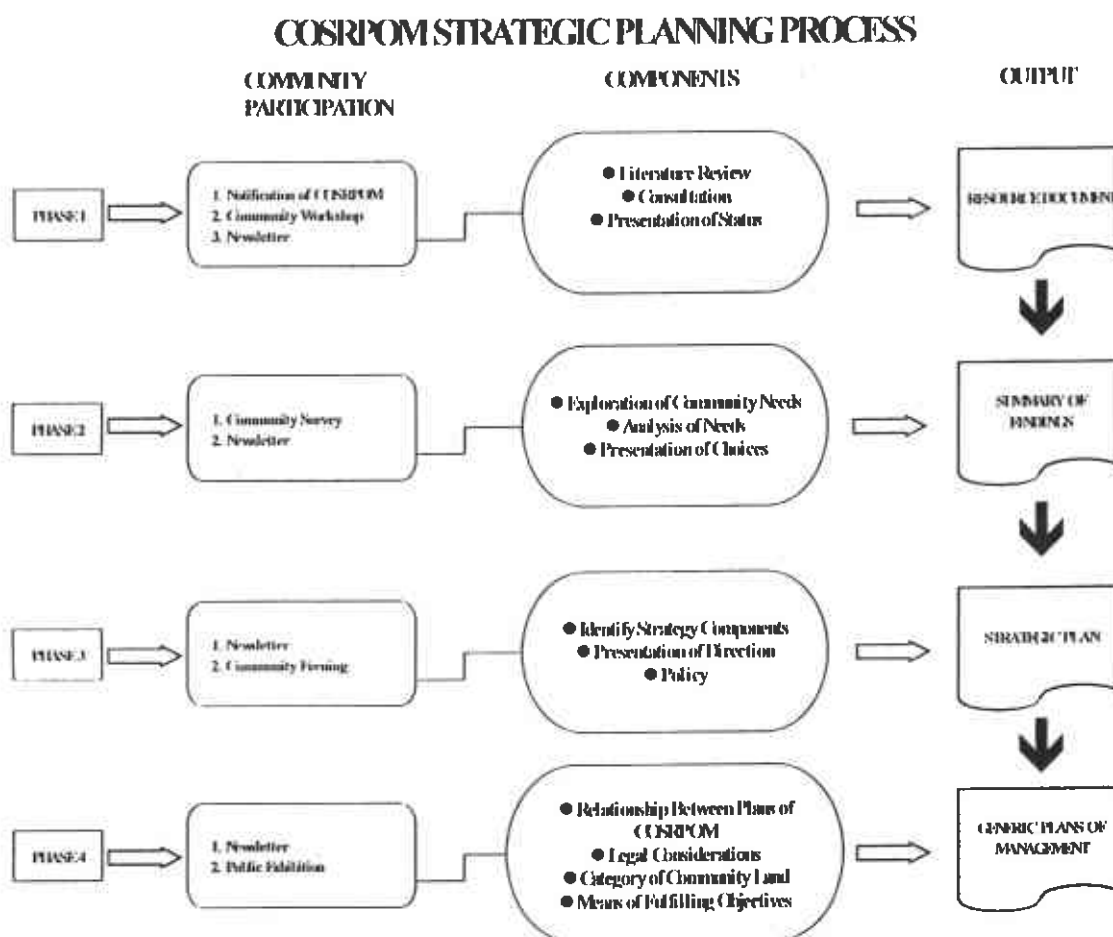


1.6 Community Participation

Community Participation Process

A comprehensive consultative process was undertaken throughout the preparation of the City Open Space and Recreation Plan of Management (COSRPOM). Figure 3 outlines the components of the community participation and consultation process and how it relates to the production of the plans that comprise the COSRPOM.

Figure 3: Community Participation and the COSRPOM Planning Process



Community Participation Components

The COSRPOM *Guiding Principles* which are set out in Section 2 have been derived primarily from the community consultative and participative process. In addition to a survey questionnaire which was completed by over seven hundred residents throughout the City of Randwick. Two rounds of evening participative meetings were held between Council and community members.

The first round of community participation was held between September and October 1994. It addressed open space and recreation provision on a City wide basis via a series of eight workshops which were attended by a total of sixty people. Within these workshops the strengths, weaknesses and opportunities were determined by community representatives. The second round of participation was held in July 1995 and attended by nearly seventy people. It comprised both a community forum and small group discussion evening, whereby community representatives addressed the goals for various open space areas.

Many of the *objectives* that are presented within Section 3 are derived from both the first round of community participation and the *COSRPOM Community Survey*. The survey was distributed to 8,000 residents throughout the City. Refer to Appendix B for the questions and results of the survey.



2. MANAGEMENT PHILOSOPHY AND CONTEXT

2.1 Vision Statement

Vision:

The conservation and appropriate management of all remnant bushland within parks and reserves in the City of Randwick thereby enhancing its aesthetic, scientific, educational and recreational qualities.

2.2 Corporate and Community Goals

Corporate Goals:

1. To protect, restore and increase the diversity of remnant bushland species.
2. To propagate indigenous species for Council and wholesale use from the seed of remnant vegetation.
3. To provide appropriate and equitable recreational and open space opportunities as identified through community needs.
4. To provide safe, diverse and quality recreation opportunities for Randwick residents.

Community Goal:

'To preserve and restore the existing bushland, control future impacts and promote public awareness and responsibility.'

2.3 Guiding Principles

1. Identification of all remnant bushland in The City of Randwick
2. Local and regional values of remnant bushland to direct its management
3. An integrated approach to the conservation of all known remnant bushland
4. Individual remnant bushland areas to be linked with other open space by vegetation and wildlife corridors
5. Promotion of community involvement and education within remnant bushland
6. Appropriate funding and professional staff must be allocated to the management of this rare resource

These guiding principles directly link into the 'issues' that have been identified within Section 3 of this plan. The objectives have taken direction from the guiding principles while also presenting actions that will address the related issues.



2.4 Management Context

A number of plans form the context for this generic plan of management. These plans are in addition to the statutory Acts described in Section 1 and include Council and other relevant documents.

City Open Space and Recreation Strategic Plan

This document was compiled to provide a 'Strategic Direction' for all of Randwick Council's owned or managed open space. It therefore covers all different open space types such as the district parks, beach and coastal reserves and civic open space. The strategic plan also addresses the need for rationalisation of open space in certain areas and the acquisition of open space in others, and addresses the methods by which this may be undertaken. Recommendations outlined in the Strategic Plan that relate specifically to this plan of management include the acquisition of land along the coastal edge and a section of the Chifley remnant at Leichardt Street, where a number of remnant species are found.

Randwick City Council Management Plan

The Local Government Act, 1993 requires that each council must prepare a Management Plan for at least a three year period, in Randwick City Council's case it is from 1994 to 1997 and aims to make Council more accountable to its residents and sets out how it will achieve a high level of service. Council's Management Plan also contains information of a similar nature so that the community is able to identify what, how and when changes and undertakings will take occur. This generic plan of management is an important component in the overall land management undertakings of Council. It provides clear objectives and means of achieving those objectives over a twenty year period and also includes decisions on priority and costing implications.

Objectives and priorities that are presented in Section 3 of this plan must be reflected in the Management Plan so that funds can be allocated and the recommended works can be implemented. Each relevant department must therefore address the areas of responsibility that are allocated to them within Section 3.2 and convey these responsibilities into the overall management plan beginning in the 1996/97 financial year. It is the Management Plan that will effectively give force to the recommendations and actions within this plan as it is the principle mechanism by which Council priorities are set and resources allocated.

Works programs will be particularly influenced by this and other generic plans of management whereby relevant Council officers will incorporate recommended actions into the financial planning section of the report on an annual basis - this will also provide Council with the opportunity to review targets as time goes on. Council departments and divisions other than the Works - Recreation and Parks and Recreation divisions that have responsibility for particular aspects of the COSRPOM such as Council's Planning Department, Corporate Services, the Plant Nursery, Works Department and Community Services, must incorporate within their divisional/departmental budgets and works programs, the necessary undertakings.



Plans of Management

Three site specific plans have already been drawn up for remnant bushland areas and are summarised as follows. Plans of management and 'maintenance protection programs' are recommended to be drawn up for all remnant areas by the end of this decade. Review of existing plans of management (PoM's) should be led by the recommendations held within this generic plan. Similarly, all new site specific PoM's are to adhere to the recommendations presented within this plan.

Trenerry Reserve

This draft 'Regeneration and Revegetation Plan' was prepared by consultants 'Seaside Landscapes' in 1991. It was incorporated in the South Coogee Plan of Management which is now being reviewed. The plan recommended that Council re-establish or restore the vegetation community in structure and species to a similar community to that in existence prior to the first European settlers. The plan also aims to protect the habitat of the locally rare plant, *Centrolepis fascicularis* (more recently *Eriocaulon scariosum*) which was under threat from disturbance. A professional team of National Trust Bush Regenerators has been commissioned to work one day a week on the reserve and a raised board walk has been completed so that people may walk over the remnant without disturbing it.

Gordons Bay

This plan of management addressed the physical, ecological and cultural resources of the bay and provided recommendations for the management and rehabilitation of the remnant bush area. It proposed the implementation of a vegetation restoration program involving the expansion of the Gordons Bay Bush Regeneration Project and the preparation of a comprehensive vegetation study.

Excellent progress within this bushland has been gained since the development of the plan of management including work being undertaken one day a week by a qualified National Trust Team of bush regenerators. Additionally, the installation of a very popular board walk which protects the bush from pedestrian damage and enables people to view the area and the continuing growth and formalisation of the voluntary team of workers. All these significant accomplishments have been precipitated by the plan of management and have aided the protection and improvement of the remnant bushland.

Glebe Gully

There is also a gazetted Local Environment Plan (LEP No.58) that relates to this reserve (which is more recently known as the Fred Hollows Reserve). The POM is a planning document primarily as it identifies the extent of building lines and its relationship with the LEP. It describes the need to implement a plant "rehabilitation" process and the establishment of a field studies centre. The main emphasis is the environmental protection of the area. The process used in writing the plan did not involve as high a degree of consultation as would now be the case.

Relationship between the Site Specific Plans of Management and this Generic Plan

The above plans that have already been prepared will be reviewed at the date indicated within each individual plan, having regard to the direction and emphasis set out within this generic plan of management. Review and changes within all remnant bushland plans must also have regard for the recommendations within the Department of Urban Affairs and Planning guidelines of SEPP 19; Urban Bushland. The objectives within Section 3 of this document relate closely to the development and review of site specific plans of management. Having made a positive start on a number of remnant bushland areas, it is now necessary to continue with a view to completion of these plans within the next decade. It is intended that this generic plan will provide the first fully comprehensive plan for remnant bushland.



This is supported by the COSRPOM Strategic Plan, providing a direct link into the future plans and the reviews of the existing site specific plans of management, as depicted in Figure 1.

Maintenance Protection Programs and Planting Guidelines

Since some of the remnant bushland areas consist of isolated remnant species or small groups of remnants, plans of management are not appropriate. Maintenance protection programs and planting guidelines are two other ways that Council is able to conserve and restore its remnants, often quite easily and with only a small funding commitment. Council's community nursery have, in many respects been drawing up maintenance protection programs and specific planting guidelines for remnant areas in the past. This will become more formalised and, just as the plans of management must comply with the recommendations of this plan, so must the maintenance protections programs and any particular planting guidelines. These documents will not have the profile or exposure that plans of management have as they will be almost entirely used by those working on the sites.

Integrating Plans of Management and Maintenance Protection Programs

All plans and programs that evolve from the direction of this document must be linked with one another. This compatibility will enable maintenance methods and restoration progress to be measured and any improvement works to be undertaken in a logical order ensuring maximum protection of remnants and maximising increased biodiversity.



3. ISSUES, PRIORITIES AND IMPLEMENTATION

3.1 Major Issues

Issue 1: Management Planning

The management planning issues tie together all issues that are identified below which include the identification and protection of remnant bushland, its restoration and maintenance and the mechanisms by which Council will undertake their responsibilities. The legislation that Council is bound by ensures the protection of remnant bushland and that plans of management and other management methods must be in place by July 1996. This plan presents management recommendations at the generic level and also proposes alternatives to site specific plans of management such as maintenance protection programs and planting guidelines. These alternative management documents are relevant to small or single species remnants which require very specific yet straightforward maintenance procedures.

Council's Community Nursery has the expertise to ensure that implementation of these recommendations takes place and will also be given the role of overseeing improvements and change. The monitoring of this plan's recommendations will, to a large extent rest with staff from that section and more staff must be provided in the long term for this to work effectively. A 'bushland unit' should be formed to ensure that the vision of this plan of management is fulfilled and to nurture and conserve Randwick's remnant bushland.

There are a number of changes that are required within the recreation inventory. It presently provides few 'natural area' categorised sites as it was written during a period when little was known of our remnant vegetation. (Refer to Section 2.1; Remnant Bushland in Randwick) It is therefore necessary to define on a map each of the boundaries of the remnants and accordingly, provide new recreation inventory codes for them. Additionally, the term 'natural area' provided in the existing recreation inventory should be re-named 'remnant bushland'. Where remnant bushland is located within other recreation open space areas, its boundary should be clearly defined so that management of that area is specific to the remnant rather than the open space type that it is otherwise located within. This will ensure the protection of the remnant through any appropriate treatment of the remnant resource.

Remnant bushland areas, although identified separately within this plan, should not be considered in isolation. All site specific plans and 'maintenance protection programs' that are to be recommended from this generic plan must be integrated within a strategic manner so that they enable wildlife and vegetation corridors between the remnants and so that biodiversity may be increased and maintained.

Ideally, current and future needs should be included. The provision of a review every 5 to 10 years is recommended. The following remnants require plans of management that are either within the context of a beach/coastal reserve plan of management eg. Yarra Bay remnants within the forthcoming Botany Bay beach and coastal plan of management, or as an individual remnant bushland plan of management in its own right:

- * Burrows Park: to be incorporated into the Clovelly Bay PoM
- * Dunningham Reserve: to be incorporated into the Coogee beach and Foreshore PoM
- * Randwick Golf Course



- * Woomera Reserve and associated remnants
- * Yarra Bay Beach (both headlands): to be incorporated into the Botany Bay Headland PoM
- * Popplewell Park
- * Bunnerong Road #5, Leichardt St, Chifley

The following remnants will require specific 'maintenance protection programs'. Their protection and future management can be fulfilled through the objectives of this plan and through the use of SEPP 19 'Urban Bushland':

- * Anzac Pde #9 (B/4-031-09)
- * Quarry Reserve, Storey Street, Maroubra
- * Lurline Bay
- * Rock platforms east of Grant Reserve
- * Bundock Park, Clovelly Bay
- * Malabar/Long Bay

Other remnants that have not been included within the above lists will be subject to smaller scale management, maintenance or planting guidelines which will be overseen by the staff of the Community Nursery.

Issue 2: Values of Remnant Bushland

Remnant bushland areas are important for a number of reasons and have very specific values. Values may range from the obvious; 'rarity' to the less obvious; 'social history'. SEPP 19, 'Urban Bushland' identifies three main values: natural heritage; aesthetic; and as a recreational, educational and aesthetic resource. The following summary of bushland values is taken from 'Urban Bushland Management Inc.', a brochure by McGloughlin-Rawling Publications, 1992:

Scenic

Natural history

Social History

Wildlife conservation

Science

Education

Recreation.

Urban Bushland also provides a number of vital service functions in cities, towns and suburbs including reducing air temperature and wind velocity, filtering air pollution, providing an important catchment area to reduce the risk of flooding, stabilising soil and reducing the flow of silt into rivers and streams, acting as a visual screen against busy roads and in absorbing and reducing noise". (McGloughlin-Rawling, 1992) The educational and scientific value of some of Randwick City's remnant bushland is great, reflected through Malabar Headland (not covered by this plan) and the smaller pockets throughout the City being recorded or nominated for inclusion within the Register of the National Estate. A nomination for the Eastern Suburbs Banksia Scrub as a plant community to be included under the Threatened Species Act 1995 also indicates the value of Randwick's remaining remnant vegetation.

Improved communication of the above values of remnant bushland shall be one of the most important commitments for Council's park, recreation and nursery staff following the protection of those areas that



are most threatened. Once these values are recognised by the local community and neighbouring residents, the long term survival of the remnant areas may be more certain.

The following table presents those characteristics that community representatives identify as common and specific to remnant bushland areas. These may also be interpreted as 'values' that this open space category possesses.

Table 2: Remnant Bushland Generic Characteristics determined by Community Representatives

| Setting | Vegetation | Furniture | Size | Buildings | No. of People | User type | Distance to travel |
|---------|--------------------|-------------------------------|---------------------------------|-----------|---|--|------------------------------------|
| quiet | native/ diverse | signage board walks | varied 'preserve all' | none | numbers that create minimal impact | no domestic or ferrel animals | varied perimeter parking |

Issue 3: Degradation and Protection

Remnant bushland is being degraded by a number of factors which, if allowed to go unchecked, will result in the potential loss of all bushland. Perceived and potential threats to remnant ecosystems include the following:

1. *Walking tracks:* increase compaction, erosion, rubbish dumping, fire, weed and feral animal invasion and removal of, and damage to, flora, fauna, soil etc.
2. *Dog walking:* increases nutrients from dog faeces, predation on native fauna and physical damage to fragile off-track areas, especially wetlands.
3. *Bike riding (including mountain bikes):* increases erosion in particular but also has the same effects as walking tracks.
4. *Horse riding:* increases erosion, nutrients and weed invasion from horse manure, and physical damage to off-track areas, especially wetlands.
5. *Trail-bike riding:* increases erosion and physical damage to the vegetation, noise, disturbance of native fauna and the same effects as walking tracks.
6. *Off-road vehicle use:* similar or worse effects as trail-bike riding.
7. *Feral/domestic animals:* increases predation on, and outbreak of disease in, and competition with native fauna.
8. *Environmental weeds:* (may include Australian species from outside Randwick) compete with indigenous flora for nutrients, light, moisture etc. Reduces aesthetic, scientific, educational and habitat value of native vegetation.
9. *Dumping of garbage, building materials, soil and garden waste:* increases damage to, or death, of native plants, nutrients, weed invasion, fire risk. Reduces aesthetic value of native vegetation.



10. *Removal of flora, fauna, rocks, soil etc: reduces habitat and species diversity and numbers; increases erosion.*
11. *Fires (too frequent or too few): too frequent - reduces flora and fauna species diversity, increases erosion, weed invasion; too few - reduces flora and fauna species diversity.*
12. *Clearing for development: reduces remnant size and fauna habitat. Increases erosion and siltation of waterways, fragmentation of remnants.*
13. *Adjacent development: increases urban run-off, erosion, weed and animal invasion, rubbish dumping, fire, changes to micro-climatic conditions.*
14. *Urban run-off: increases nutrients and soil moisture levels, weed invasion, erosion and pollution of waterways.*
15. *Leachate from landfill: increases nutrient and soil moisture levels, weed invasion, erosion, toxicant levels in soil and water.*
16. *Fragmentation of remnants: reduces reproduction, genetic diversity and may stop reproduction completely and decreases habitat value.*
17. *Mowing and whipper snipping: increases damage to, or death of, plants, especially regenerating seedlings, weed invasion and disturbance of fauna. Reduces remnant size, fauna habitat.*
18. *Grazing by horses and rabbits: similar to mowing and increases nutrients and erosion.*
19. *Inappropriate herbicide use: increases damage to, or death of, plants and pollution of waterways.*
20. *Illegal removal of entire plants, or branches, to maintain views and reduce fire risk: increases damage to, or death of, plants and fauna disturbance. Reduces aesthetic and habitat value of native vegetation.*
21. *Road kills of wildlife: reduces species diversity and numbers.*

(Taken from the 1995 State of the Environment Report for Randwick City Council where further information specific to each remnant may be found)

Some of the above degrading items will be addressed among the various issues of the Action Plan, Section 3.2, coupled with the use of legislation such as SEPP 19, the Threatened Species Act 1995 and other relevant legislation that must be complied with by Council. The protection of remnant bushland areas is subject to many of the above problems in addition to having limited funds and resources with which to manage the remnants. Identification of those most threatened from development and degradation is an important step towards protection and must be met with action. Maintenance of remnant areas is very specialised and can also be extremely intensive. In some cases, providing protective barriers and re-directing pathways may hold the most immediate and realistic solution



although more comprehensive management practices will be needed when resources become available.

Identifying and mapping the remnants and any associated archaeological relics or features is an essential area of progress for Council. Another area that is being developed is the conservation of the whole *habitat* as opposed to each individual species - this is considered as being essential to the long term viability of all individual remnant species including any remaining wildlife.

Minimising pollution, runoff and weeds, protecting original landforms and drainage patterns and careful seed collecting are all areas that require specific objectives in order to protect the remaining remnants of the City of Randwick.

Issue 4: *Rehabilitation and Maintenance*

Randwick is fortunate in having a number of remnant areas that may be improved and made viable through the use of regeneration practices. In many cases, simply weeding out the exotic species will provide an environment that is more conducive to natural regeneration of the remnants. Regeneration may however be further aided through other 'assisted natural regeneration techniques' such as the utilisation of the indigenous seed bank of the site whereby seed collection from the remnant and re-seeding or planting the propagated seed plants into the source remnant area can aid its viability and natural regeneration. These techniques also help to maintain habitat for a number of other species, including animal species. Seed collection and plant propagation may also take place for the purpose of planting indigenous species throughout appropriate locations within the City of Randwick thus providing an economic as well as re-vegetation functions.

The need for bush regeneration practices may be appropriate at locations that contain remnant species but are presently managed as reserves that have no remnant species. Changed conditions obviously have an effect on the vegetation that is now present and in many cases, there may be remnants that parks staff are unaware of. Therefore the identification of remnant species must be clear and be followed up by appropriate maintenance of this precious resource.

Fire and Fuel Management

This is important for the long term survival of many of the ecosystems present in the City of Randwick. Heath and certain forest types benefit from fire in a number of ways; fire overcomes seed dormancy factors, allows light to reach the soil surface, promotes health and resilience of the ecosystem and creates a nutrient ash bed for new seedling growth. Fire management regimes must be properly planned and detailed and the State Operational Support Centre - Rescue and Fire Liaison must be contacted. They can also provide assistance. The Randwick Fire Brigade should also be notified. The Environmental Protection Authority (EPA) determine on a daily basis the fire risk for the area and provide a recorded telephone message service to relay this information. The proposed 'Bushland Unit' of the Community Nursery would be the appropriate staff members to undertake this work in consultation and with the co-operation of Council's works staff.

Guidelines for maintenance

As community awareness of the importance of Randwick's remnant bushland is increasing, Council's parks maintenance practice with regard to remnant species must also be improved and made more relevant to the specialised requirements of the species. Communication among parks staff, the Nursery and the landscape design staff is imperative in maintaining the existing remnant species within Randwick City's parks and reserves.



A master map highlighting all remnant areas within the City of Randwick must be provided for the parks maintenance staff. Each ganger should also be provided with detailed maps of the remnants where they are working so that they may clearly identify the location of the remnant and then follow the 'Maintenance Guidelines for Staff' that has been compiled by the Nursery and appended to this generic plan. Each member of staff who is working in or adjacent to a remnant should be provided with the set of guidelines as should the mobile grass gangs.

Spraying chemicals in areas that are close or adjacent to remnants should also be reviewed on a site by site basis. Landscape designs by Council's indoor staff should have regard to the existence of remnants and therefore staff should be provided with a complete list of remnants, maintenance guidelines and their exact locations in order that any designs will avoid damage to the remnant or existing drainage patterns. Priority is then given to the catchments with the largest bushland remnants which have irreplaceable ecological values. Another maintenance method for remnant bushland protection and maintenance is by targeting invasive species which disrupt the natural indigenous reproductive cycle eg. Bitou bush - by not treating all weed species, resources can be allocated to a greater area.

Remnants that are difficult to locate or identify should also be signposted and in some cases protected with post and wire fences. Photographs of remnants at each location should also be taken, filed and provided to those working on the site. Identification will therefore be more immediate and have less reliance on the experts at the Community Nursery. Books and other information is freely available at the nursery for use by all staff.

Issue 5: Visitor Management and Recreation

Community consultation during the COSRPOM process has indicated which activities and facilities are suitable to remnant bushland areas. Table 4 below, is summarised as follows in relation to those activities and facilities that the community representatives saw as appropriate:

- * parking on the perimeter;
- * walking tracks;
- * guided tours; and
- * signage.

Picnic and BBQ facilities that have been identified as 'borderline' in terms of their appropriateness, may be suitable on the perimeter of the less sensitive remnant bushland areas where species may be less susceptible to damage from garbage and intensive use.

Table 3: Suitable and Unsuitable Activities and Facilities Within Remnant Bushland

| Activity/Facility | Score | Assessment |
|----------------------|-------|------------|
| telephones | 5 | unsuitable |
| dogs | 6 | unsuitable |
| leased sports fields | 6 | unsuitable |
| leased indoor sports | 6 | unsuitable |



| Activity/Facility | Score | Assessment |
|------------------------|-------|------------|
| playing fields | 6 | unsuitable |
| cafe's | 6 | unsuitable |
| indoor public centre | 6 | unsuitable |
| playgrounds | 6 | unsuitable |
| bike tracks/lanes | 5 | unsuitable |
| parking | 2 | suitable |
| kiosks | 6 | unsuitable |
| basketball/court games | 6 | unsuitable |
| walking tracks | 0 | suitable |
| roller/skateboard area | 5 | unsuitable |
| picnic/BBQ facilities | 3 | borderline |
| outdoor performance | 6 | unsuitable |
| toilets | 4 | unsuitable |
| special events | 5 | unsuitable |
| markets | 6 | unsuitable |
| guided tours | 0 | suitable |
| signage | 0 | suitable |

Legend: 0 – there were no objections to the facility within this open space type, 6 – all six groups during the COSRPOM community evening (26/7/94) considered the facility to be inappropriate)

This information tells us that more formalised activities and facilities are not acceptable within remnant bushland areas and that activities that are of low impact yet high educational and interpretive value should be encouraged. It must be noted however, that those items identified as appropriate on this table may not be appropriate to every remnant bushland site as they vary in sensitivity. Horses have since been identified as being inappropriate within or immediately adjacent to remnant bushland. Care must be taken to help the community understand the value of these open space areas while at the same time ensuring that the remnants are protected from threats such as those identified earlier in this Section. Car parking facilities and footpath design will require particularly sensitive treatment in regard to personal security and the security of the remnant itself.

Those activities that are inappropriate include trail bike riding, mountain bike riding and horse riding which are also activities that are regularly undertaken in remnant bushland areas and are difficult to police. Signage will therefore play an important role in visitor management, along with other forms of



communication and education methods which explain why certain activities are more appropriate than others.

Visitation levels are another important consideration for the management of remnant bushland areas. Each remnant area has specific characteristics that determine its sensitivity and capacity for recreational enjoyment. Site specific plans of management will therefore determine the optimum number of visitors at any one period and the activity type that is appropriate within each location while still drawing from the above table of suitable and unsuitable activities and facilities. For example some remnant areas will be able to sustain people picnicking and the location of tables and seating, while others may require restrictive fencing preventing access until such a time as it has been returned to a self sustaining remnant that is suitable for public visitation.

Issue 6: Education and Participation

Increasing awareness in regard to the existence and specialised needs of Randwick's remnant vegetation is an important area of responsibility for Council. The role extends to raising the profile of remnant bushland, reducing indifference and inaction, advising on and the provision of specialised bush management at all levels from the community, adjoining residents and landowners, through to the Commonwealth Government (owner of Malabar Headland which contains a significant number of remnant species). Council is also responsible for assisting in volunteer bush regeneration, endowing children with an awareness and respect for the bush through activities such as educational outings, and in raising community awareness through leaflets, publicly available published literature and Council documents such as plans of management relating to remnant and indigenous vegetation, guided bushwalks and general participation with the community.

Increasing awareness of the values of remnant bushland such as scenic, natural history, social history, wildlife conservation, science, education and recreation values, is one of the most important commitments for Council's parks, recreation and nursery staff following the protection of those areas that are most threatened. Once these values are recognised by the local community and neighbouring residents, the long term survival of the remnant areas may be more certain.

Other ways of getting information across to visitors of remnant areas is through signage. Interpretive signage in particular is a useful method which has been described as a tool that is used to 'provoke, relate and reveal'. It provides information in an interesting and useful format such as the type of vegetation you are likely to find during any particular time of the year and associated animals that it supports. This method of stimulation should be used to emphasise the attractive and existing points so that people can care about the problems such as weeds, littering etc. Other examples of interpretive methods include: coloured posters, brochures, teacher's kits, information stands, self guided walks, guided walks and night walks.

A network of volunteer bush regenerators is increasing on an annual basis and involves local residents with guidance from Council staff and contracted National Trust bush regeneration teams. The volunteers are also co-ordinated by local residents and at Gordons Bay have made successful funding applications which have enabled them to develop interpretive signs, information brochures and a newsletter. The training of volunteers has been mainly 'on the job' although some have undertaken the National Trust's Certificate of Bushland Management. Council's continuing support is necessary in ensuring that volunteers are both fulfilled and rewarded for their improvement works. All bush regeneration groups,



whether they are contracted or voluntary will be bound by plans of management that have been developed for the site so that they may be accountable for work undertaken and so long term aims may be achieved.

Issue 7: *Funding and Resourcing*

Recommendations within this generic plan of management must have regard to existing and estimated funding sources in order to fulfill the objectives. There are a number of available grants that are in addition to Council funds and Section 94 developer contribution funds. Grants are usually however, tied to specific projects. This plan will therefore require flexible implementation so that as site or works specific funding becomes available, priorities may be revised in order to take advantage of the finance. The review process that is necessary for this and all other generic plans of management within the COSRPOM will enable priorities to be realigned according to the works already completed or underway.

General maintenance works will generally be met within the 'Works Maintenance Budget', while specialised bush regeneration will require additional funding and commitment from Council, grants, loans, Section 94 funds (where located on 'regional' open space) and donations. Another consideration as a funding source is sponsorship. A number of other councils within the Sydney metropolitan area have utilised this source although strict regulations exist and will require careful investigation.



3.2 Action Plan

The key issues that have been presented in Section 3.1 act as an introduction and background to the objectives that have been set out in the following tables and their associated means of achievement, priority level, target implementation date, Council section responsibilities and finally, the means of assessment.

The objectives and related information is presented in a series of tables which are placed under the same headings as those presented in Section 3.1. The table columns are explained as follows:

Table 4: Explanation of Objectives, Priorities and Performance Targets

| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|--|---|--|---|---|
| A specific aim that Council will strive towards in order to address each area of the key issue identified in Section 3.1 | <p>The way or ways in which the objective may be achieved.</p> <p>Each method will have a separate performance target</p> | <p>the financial year period in which this method is to be completed.</p> <p><i>Short term</i> = 1996-2000 <i>Medium term</i> = 2000-2006 and <i>Long Term</i> = 2006-2015 <i>Ongoing</i> = action being carried out throughout the life of this plan of management <i>Undertaken</i> = action already undertaken</p> <p>If funds become available at a time earlier than anticipated eg. through specific grants, performance target dates may be altered via annual budget reviews</p> | <p>The section or department within Council that has the final responsibility for the achievement of this objective by the target dates</p> | <p>The measure by which Council may be accountable to the community - a list of achievements that are ticked as each is fulfilled by its target date.</p> <p>Where targets are not achieved, an explanation should be provided within this column</p> |



Issue 1: Management Planning

| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|--|---|----------------|------------------------|---|
| A) To ensure that funds and other resources are allocated to plans of management and maintenance protection programs prior to their implementation | 1. Allocate funding for the preparation of the plans of management | as appropriate | Manager - Works | <ul style="list-style-type: none"> * funding allocated for site specific plans * works and associated funding identified within annual works program * 'bushland unit' created and running |
| | 2. Allocate works according to their target date, within the respective annual works programs | ongoing | | |
| | 3. Provide a 'Bushland Management Unit' to undertake specific maintenance and management aspects of remnant bushland in Randwick | medium term | | |
| B) To fulfill Council's obligations in respect to current relevant legislation | 1. Compliance with SEPP 19 - Urban Bushland, the Noxious Weeds Act, the Clean Waters Act, Threatened Species Act, Aboriginal Land Rights Act and all other Acts that relate to open space | ongoing | Director - Engineering | <ul style="list-style-type: none"> * number of challenges in court * incorporation of relevant legislation within all decisions affecting remnant bushland and all items written |



| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|---|---|---------------|--|--|
| C) To develop and implement site specific plans of management or maintenance protection programs for remnant bushland | 1. A priority listing of all remnants for plans of management or maintenance protection programs according to their ecological significance, viability and threat to the site from development, pollution, etc. drawn up by a 'Bushland Unit' | short term | Works - Recreation Assistant Manager - Works | * site specific plans of management identified and undertaken as appropriate |
| | 2. The preparation of these plans of management according to their priority rating | short term | | |
| D) To integrate the site specific PoM's and maintenance protection programs | the 'Bushland Unit' to oversee all documents in ensuring management and maintenance recommendations are compatible to the linking of all remnant areas | ongoing | Nursery Manager | * vegetation and wildlife corridors between remnant bushland areas * plans of management and maintenance protection programs that link with one another and feed from this plan of management |
| | linkages such as wildlife and vegetation corridors should be achieved through such integration | long term | | |



| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|--|---|---------------|---------------------------|---|
| E) To review and revise 'natural area' categories within Council's recreation inventory | 1. Change the recreation inventory concerning those remnant open space areas identified on Figure 2 to 'remnant bushland and define on a map each of the boundaries of the following remnants': | short term | Recreation Assets Manager | * recreation inventory reviewed and updated |
| | 2. Map these remnant areas onto Council's base plans so that boundaries of the remnants within other open space types may be distinguished (ie. remnants among beach coastal reserves) | short term | | |
| | 3. Distinguish within inventory, between intertidal and terrestrial remnant areas | short term | | |
| F) To provide an effective means of monitoring performance targets for each site specific plan of management | 1. Identify key indicators for plans of management which can be used to monitor change | ongoing | Works - Recreation | * key indicators identified * reviews undertaken in relation to works underway |
| | 2. Provide flexible performance indicators for objectives in each plan of management | ongoing | | |
| | 3. Annual review of performance indicators via annual works programs - any significant changes must be formally assessed by Council | ongoing | | |



Issue 2: Values of Remnant Bushland

| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|--|--|---------------|--|--|
| A) To utilise the educational and scientific values of remnant bushland | 1. Allow academic and scientific organisations access to remnant bushland as seen fit by the Community Nursery. | ongoing | Recreation Assets Manager Nursery Manager | <ul style="list-style-type: none"> * rules for the protection of the remnant set out and presented to organised groups * standard agreement drawn up and used as appropriate * educational programs for schools developed |
| | 2. Draw up a number of rules for the remnant's protection by which educational and scientific groups must operate | short term | | |
| | 3. Ensure research undertaken is made available to Council under a standard agreement with researchers | ongoing | | |
| | 4. Develop a series of educational aids for school groups to utilise within specific remnant bushland areas | long term | | |
| B) To maintain the unique visual qualities of remnant bushland | 1. Identify within each plan of management the visual qualities that exist and ensure these are retained or sensitively adapted within any new changes | long term | Recreation Assets Manager Nursery Manager Manager-Parks and Recreation | <ul style="list-style-type: none"> * visual qualities identified as appropriate within each plan of management |



| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|--|--|----------------|---|--|
| C) To increase awareness of the cultural and heritage values of remnant bushland | 1. Undertake broad based historical research within each plan of management process | long term | Recreation Assets Manager | <ul style="list-style-type: none"> * historical research at each location undertaken * significance of remnant bushland determined * research incorporated into site specific plans of management |
| | 2. To determine the significance of remnant bush areas and individual species, utilise information from the National Herbarium, local universities and local experts | ongoing | Nursery Manager Manager - Parks and Recreation | |
| | 3. Incorporate research as appropriate into site specific plan recommendations | as appropriate | | |



Issue 3: Protection

| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|--|--|---------------|---|--|
| A) To retain all areas that contain remnant remnant bushland | 1. No further decrease in the extent of this vegetation including areas that have a potential for regeneration through the presence of a soil that contains remnant seeds | short term | Works Division Nursery Manager Manager - Parks and Recreation | <ul style="list-style-type: none"> * no further loss of remnant vegetation * maintenance and protection measures taken as necessary * parks staff fully aware of location and maintenance methods for remnant vegetation * photo library of remnant vegetation housed at Nursery |
| | 2. Where necessary provide physical barriers and interpretive information beside remnant that are in particular danger eg. re-routing paths and other means of encouraging people <i>around</i> the remnant area | short term | | |
| | 3. Identify and map rare or threatened species for parks staff | ongoing | | |
| | 4. Update remnant protection guidelines for works staff and provide guidelines specific to certain species if necessary | ongoing | | |
| | 5. Photograph remnants regularly and maintain a comprehensive photo collection within the Nursery | ongoing | | |



| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|---|---|---------------|--|---|
| B) To protect rare or threatened flora and fauna species | 1. Evaluation of the protection of those species that have been considered locally or regionally 'rare or threatened' may be undertaken | short term | Works Manager Nursery Manager Manager - Parks and Recreation | <ul style="list-style-type: none"> * evaluation undertaken * experts consulted * habitats conserved where possible * education running hand in hand with protection methods |
| | 2. By inviting experts to comment on the protection of identified species | medium term | | |
| | 3. By conserving the habitat in which the rare or threatened species are located | short term | | |
| | 4. By ensuring communication objectives relating to education are integrated with the protection of remnants | ongoing | | |
| | 5. By utilising the appropriate legislation highlighted in Issue 1 | ongoing | | |
| | 6. By ensuring that bushland areas are protected from 'knee-jerk' of vegetation removal through appropriate maintenance, signage and path routing | ongoing | | |



| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|---|--|---------------|-----------------|--|
| C) To encourage appropriate remnant seed collection | 1. Ensure the sensitive collection of seeds so that minimal damage occurs to the plant and so that over-collection does not occur (Greening Australia's guidelines of 20% collection can in some cases be used as a rule of thumb) | ongoing | Nursery Manager | <ul style="list-style-type: none"> * plant viability sustained following seed collection * data base maintained and utilised * appropriate collection by third parties * landowners consulted and in favour of collections on their land |
| | 2. Maintain a comprehensive data base that includes flowering and fruiting times and records of collected seeds and locations | ongoing | | |
| | 3. Nursery staff to supervise collection by other parties until satisfied correct and sensitive collection methods are undertaken | ongoing | | |
| | 4. Contact the appropriate landholder before each seed collection trip on their land | ongoing | | |



| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|--|---|---------------|---|--|
| D) To minimise pollution and its effects on remnant vegetation | 1. Investigate the local hydrology affects including stormwater quality and any other sources of pollution | short term | Recreation Assets Manager | <ul style="list-style-type: none"> * local catchment management principles adopted * pollution controls adopted where appropriate and where viable * community education programs in place * no dog zones determined and enforced * rubbish dumping minimised |
| | 2. Place pollution controls on development on, adjacent to or uphill from a remnant as recommended in the Greening Australia handbook: 'Local Greening Plans' | ongoing | Nursery Manager Manager - Parks and Recreation | |
| | 3. Educate the community about the effects of pollution on remnants | ongoing | | |
| | 4. Install trash collectors where necessary | medium term | | |
| | 5. Determine and enforce 'no dog zones' within the larger remnant bushland areas such as Glebe Gully | ongoing | | |
| | 6. Prevent rubbish dumping by locating car parks away from remnant areas | long term | | |



| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|---|--|----------------|---|--|
| E) To protect existing landforms such as existing drainage lines, water courses and foreshores upon which remnants are located | 1. Utilise old photographs and interview locals in determining any changed landscape conditions | short term | Works Division | <ul style="list-style-type: none"> * historical information used to help protect existing landforms, etc. * indicators used to further protect sites * appropriate materials and species used |
| | 2. Use markers on site to show areas that should not be further disturbed | as appropriate | Nursery Manager | |
| | 3. Use materials and vegetation species that will not disturb drainage lines, soil type or features that are significant to the remnant area | long term | Manager - Parks and Recreation | |
| F) To maintain the unique visual qualities of remnant bushland | 1. Identify within each plan of management the visual qualities that exist and ensure these are retained or sensitively adapted within any new changes | long term | Recreation Assets Manager Nursery Manager Manager- Parks and Recreation | <ul style="list-style-type: none"> * visual qualities identified as appropriate within each plan of management |



Issue 4: Rehabilitation and Maintenance

| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|---|---|---------------|--|--|
| A) To rehabilitate bushland remnants using Assisted Natural Regeneration Techniques where possible | 1. Identify the extent of remnant vegetation | short term | Nursery Manager Manager - Parks and Recreation Nursery Manager | <ul style="list-style-type: none"> * appropriate rehabilitation methods chosen * propagated seed stock used where necessary * long term resources made available for future regeneration of remnants * qualified and appropriately trained staff used to direct work * flowering, fruiting, germination, presence of juvenile growth stage and seeding are all signs that regeneration is occurring * species richness, abundance and distribution * fire regime management guidelines developed for specific sites |
| | 2. Determine within a site specific plan of management, management zones and the order and methods for rehabilitation | medium term | | |
| | 3. If necessary, revegetate using seed stock propagated from plants indigenous to Randwick City only | medium term | | |
| | 4. To provide resources for the long term maintenance of remnants | long term | | |
| | 5. All regeneration restoration works in remnants to be under the supervision of a qualified person that has passed the TAFE Bush Regeneration Certificate, worked a minimum of 1000 hours under another such qualified person and has an understanding of the ecological processes of the Sydney Basin flora | ongoing | | |
| | 6. Develop and use where and as appropriate, a set of fire regime management guidelines on a site by site basis and implement in compliance with the Rescue and Bushfire Liaison section of the State Operational Support Centre. | medium term | | |



| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|---|--|---------------|---|---|
| B) To return the remnant to a level of species diversity that resembles its former existence | 1. Identify as far as possible those species that once formed the vegetation of the remnant area | short term | Nursery Manager Manager - Parks and Recreation | <ul style="list-style-type: none"> * original (pre-European) species identified * program for propagating viable species undertaken * natural regeneration occurring in a number of remnants |
| | 2. Determine which species may be re-introduced and thrive under the changed conditions | medium term | | |
| | 3. Propagate those species from a nearby source in Randwick City Council if available and plant into the remnant | medium term | | |
| C) To maintain a seed bank that ensures the planting requirements of the City's indigenous vegetation programs are met | 1. Ensure clear communication between the parks design staff and the Nursery concerning future planting proposals | ongoing | Nursery Manager | <ul style="list-style-type: none"> * improved communication regarding species needs * improved supply of necessary species |
| | 2. Nursery to collect required species as they become available and set aside for Council propagation and planting program | ongoing | | |
| | 3. Program implementation of planting works to depend on availability of already propagated plants, remnant species, propagation and growth time | ongoing | | |



| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|--|--|---------------|---|--|
| D) To ensure that parks staff are provided with information and training that is appropriate to the maintenance of areas within and adjacent to remnants | 1. Nursery to provide all relevant parks staff, including design staff with remnant maps, photographic records and sheet of information titled: 'Maintenance Guidelines for Staff' | short term | Nursery Manager Manager - Parks and Recreation | <ul style="list-style-type: none"> * sufficient and appropriate information provided * information and guidelines reviewed as necessary * signposting implemented where necessary |
| | 2. Guidance and information to be reviewed on a regular basis by Nursery staff according to changed circumstances | ongoing | | |
| | 3. Signposting of remnants that are difficult to locate or identify from non remnants should take place | short term | | |



Issue 5: Recreation and Visitor Management

| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|--|---|---------------|--|--|
| A) To allow a level of visitation that does not degrade the remnants | 1. Walking access only into the remnant unless it is large enough to maintain vehicles being used during maintenance periods | short term | Recreation Assets Manager Nursery Manager | <ul style="list-style-type: none"> * level and type of access appropriate to the remnant site * appropriate location of car parks * visitation creating minimal impacts on remnants * visitor numbers limited to that which has been determined as appropriate |
| | 2. Paths to be wide enough for wheelchairs and strollers where appropriate and have a surface that is well suited to the remnant area | medium term | Manager - Parks and Recreation | |
| | 3. Car park capacity to be limited bearing a relation to specific remnant characteristics | long term | | |
| | 4. Public or shared transport use to be encouraged wherever possible | ongoing | | |
| | 5. Available facilities and open area size designed to allow optimum numbers of visitors for the remnant area | long term | | |



| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|---|---|---------------|--|--|
| B) To permit facilities, opportunities and experiences that are appropriate to remnant bushland areas | 1. Adopt, where appropriate for each site, facilities and amenities identified in Section 3.1 'suitable unsuitable uses' such as * interpretation signage, seating, pathways and points of interest | short term | Recreation Assets Manager Manager - Parks and Recreation Nursery Manager | * appropriate recreational opportunities made available within remnant bushlands |
| | 2. Monitor change in recreational trends relating to remnant bushland areas | ongoing | | |



| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|--|--|---------------|--|--|
| C) To prevent recreation activities that are not suited to the overall values of remnant open space areas | 1. Prohibit buildings of any kind in remnant bushland areas | ongoing | Manager - Statutory Planning Recreation Assets Recreation Assets Manager Manager - Works | <ul style="list-style-type: none"> * inappropriate buildings, recreation activities and facilities not permitted in remnant bushlands * reduced number of horses and dogs, bicycles and trail bikes on remnant bushlands * controlled sections of exotic grasses and open areas |
| | 2. Erect signs to prohibit inappropriate recreational activities that are not permissible | ongoing | | |
| | 3. No dogs or horses are to use remnant bushland areas | ongoing | | |
| | 4. Bicycles and trail bikes are inappropriate within remnant areas and measures to deter them should be undertaken | ongoing | | |
| | 5. Large areas of open turf are not appropriate and should be avoided as they would encourage ball games (incl. golf practice), archery, the exercising of dogs and exotic grass may invade the remnant vegetation | ongoing | | |



Issue 6: Education and Participation

| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|---|--|---------------|---|--|
| A) To promote co-operation between landowners adjacent to remnant bushland and Council as bushland manager | 1. Involve the community in any improvements works where appropriate through notification and inviting them to participate in improvements works | ongoing | Recreation Assets Manager Nursery Manager Assistant Manager - Works | <ul style="list-style-type: none"> * improved co-operation through improved participation * distribution of information to adjacent residents, landowners and other community members * seminars investigated and undertaken if feasible * improved access to information at the Community Nursery |
| | 2. Provide educational material for adjacent residents and Council Nursery contact numbers on leaflets | medium term | | |
| | 3. Investigate the feasibility of providing annual seminars on bushland protection for all residents of Randwick City | long term | | |
| | 4. Provide access to information on indigenous flora found in the Randwick Local Government Area at the Community Nursery Library | ongoing | | |



| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|--|---|---------------|--|--|
| B) To increase community and Council awareness as to the value of local remnants | 1. Provide appropriate information within the local libraries such as bushland plans of management, species lists, displays, volunteers information and applications and 'before' and 'after' photographs | ongoing | Recreation Assets Manager Nursery Manager | * information provided as required for the community, Council and school children * installation of suitable interpretive and information signage |
| | 2. Provide co-ordinated and informative interpretive signs within each improved remnant area that includes emergency and Nursery contact numbers | medium term | | |
| | 3. Develop a program on indigenous vegetation in line with the school curriculum for teachers of a specific age group and allocate a Council officer to visit each school once a year | medium term | | |
| | 4. Advise ordinance inspectors, other Council staff and Councillors on the value and necessary pro-active measures for the protection and improvement of remnant bushland | short term | | |



| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|---|--|---------------|-----------------|--|
| C) To build up and maintain a pool of community voluntary bush regenerators | 1. Council to employ a qualified bushland co-ordinator who will train volunteers on site when the volunteer base increases to a number that will necessitate this | medium term | Nursery Manager | <ul style="list-style-type: none"> * appropriate guidance and training made available * acknowledgement of voluntary services * communication between Council and other parties improved * plans of management recommendations partially fulfilled by volunteers |
| | 2. Incorporate the National Trust Bushland Management training for volunteers with experience on some of Randwick's projects and continue informal training of keen residents for where feasible | ongoing | | |
| | 3. Ensure services provided by volunteers are gratefully acknowledged | ongoing | | |
| | 4. Council and groups to liaise regularly through contact representatives where advice and information can be exchanged | ongoing | | |
| | 5. Voluntary groups to be working towards the implementation of a plan of management | ongoing | | |



| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|---|---|---------------|--|--|
| D) To utilise the educational and scientific values of remnant bushland | 1. Allow academic and scientific organisations access to remnant bushland as seen fit by the Community Nursery | ongoing | Recreation Assets Manager Nursery Manager | <ul style="list-style-type: none"> * rules for the protection of the remnant set out and presented to organised groups * standard agreement drawn up and used as appropriate * educational programs for schools developed |
| | 2. Draw up a number of rules for the remnant's protection by which educational and scientific groups must operate | short term | | |
| | 3. Ensure research undertaken is made available to Council under a standard agreement with researchers | ongoing | | |
| | 4. Develop a series of educational aids for school groups to utilise within specific remnant bushland areas | long term | | |



| OBJECTIVE | MEANS OF ACHIEVEMENT | TARGET PERIOD | RESPONSIBILITY | MEANS OF ASSESSMENT |
|---|--|----------------|---|--|
| E) To increase awareness of the cultural and heritage values of remnant bushland | 1. Undertake broad based historical research within each plan of management process | long term | Recreation Assets Manager | <ul style="list-style-type: none"> * historical research at each location undertaken * significance of remnant bushland determined * research incorporated into site specific plans of management |
| | 2. To determine the significance of remnant bush areas and individual species, utilise information from the National Herbarium, local universities and local experts | ongoing | Nursery Manager Manager - Parks and Recreation | |
| | 3. Incorporate research as appropriate into site specific plan recommendations | as appropriate | | |



Issue 7: Funding and Resourcing

| OBJECTIVE | MEANS OF ACHIEVEMENT | PERFORMANCE TARGET | RESPONSIBILITY | MEANS OF ASSESSMENT |
|--|--|--------------------|--------------------|--|
| A) To ensure that recommendations within this plan that have cost implications are incorporated in Council's Management Plan and the annual works program | 1. Allocate funds according to level of priority and target implementation year | ongoing | Manager - Works | <ul style="list-style-type: none"> • funds allocated as required within this and subsequent site specific plans of management • alternative sources of funding sought and secured as appropriate |
| | 2. Priorities to be included within the specified target year's annual works program | ongoing | | |
| | 3. Seek capital assistance from state government agencies and other sources | ongoing | | |
| | 4. Prepare quality funding submissions based on existing plan of management recommendations | ongoing | | |
| | 5. Secure ongoing funding to ensure the completion of works | ongoing | | |
| B) To explore the opportunities for sponsorship of information or improvements within remnant bushland areas | 1. Ensure any sponsorship agreements adhere to any regulations placed on Councils by the ICAC or other authorities | ongoing | Corporate Services | <ul style="list-style-type: none"> * sponsorship potentials investigated and implemented where successful according to ICAC guidelines |



| OBJECTIVE | MEANS OF ACHIEVEMENT | PERFORMANCE TARGET | RESPONSIBILITY | MEANS OF ASSESSMENT |
|--|---|--------------------|-----------------|---|
| C) To produce maps and other resources that increase people's education and protection of bushland | 1. By mapping all Council controlled remnant bushland areas for use in the State of the Environment Report, for development application information and for use by education institutes and Council maintenance staff | short term | Nursery Manager | * maps for all identified remnants having been produced |
| D) To have an appropriately skilled 'bushland unit' | 1. Council to provide a team of TAFE qualified bush regenerators with suitable experience who will be based at the nursery. The team will become the 'bushland unit' and will increase gradually to five people. | long term | Manager - Works | * bushland unit team of five employees formed. |



3.3 Indicative Time Frame

Issue 1: Management

Issue 1:

Management

| WORKS | COMMENTS | FINANCIAL YEAR | | | ONGOING (annual review) |
|-------|---|----------------|-------------|-------------|----------------------------|
| | | SHORT TERM | MEDIUM TERM | LONG TERM | |
| | | 1996 - 2000 | 2000 - 2006 | 2006 - 2015 | |
| A1 | allocate funding for PoM preparation as appropriate | | | | |
| A2 | | | | | |
| A3 | | | | | |
| B1 | | | | | |
| C1 | | | | | |
| C2 | | | | | |
| D1 | | | | | |
| D2 | | | | | |
| E1 | | | | | |
| E2 | | | | | |
| E3 | | | | | |
| F1 | | | | | |
| F2 | | | | | |
| F3 | | | | | |



Issue 2: Values of Remnant Bushland

| WORKS | COMMENTS | FINANCIAL YEAR | | | ONGOING (annual review) |
|-------|--|--|----------------------------|--------------------------|----------------------------|
| | | SHORT TERM 1996 - 2000 | MEDIUM TERM 2000 - 2006 | LONG TERM 2006 - 2015 | |
| A1 | | academic access to remnant bushland areas | | | |
| A2 | | guidelines for academic and scientific access | | | |
| A3 | | research to be made available to Council under a standard agreement | | | |
| A4 | | develop a series of educational aids for schools relating to remnant bushland areas | | | |
| B1 | | identify within site specific plans of management the visual qualities that must be retained | | | |
| C1 | | undertake broad-based historical research within each plan of management | | | |
| C2 | | utilise information and advice from other expert sources | | | |
| C3 | incorporate any new research into site specific plans as appropriate | | | | |



Issue 3: Protection

Issue 3: Protection

| WORKS | COMMENTS | FINANCIAL YEAR | | | ONGOING (annual review) |
|-------|----------|---|-------------|-------------|----------------------------|
| | | SHORT TERM | MEDIUM TERM | LONG TERM | |
| | | 1996 - 2000 | 2000 - 2006 | 2006 - 2011 | |
| A1 | | no further decrease in remnant vegetation | | | |
| A2 | | protection measures including barriers, signs, path re-routing | | | |
| A3 | | identify and map species for staff | | | |
| A4 | | update guidelines for the protection of remnant vegetation for staff | | | |
| A5 | | photograph and make available photo's for staff | | | |
| B1 | | undertake inventory of 'rare or threatened' species in the Randwick LGA | | | |
| B2 | | gain advice on protection of species | | | |
| B3 | | conserve habitat | | | |
| B4 | | communication and education integrated with protection | | | |
| B5 | | utilise the appropriate legislation highlighted in Issue 1 | | | |
| B6 | | ensure bushland areas are protected from 'knee-jerk' vegetation removal actions | | | |
| C1 | | sensitive seed collection | | | |
| C2 | | maintain comprehensive data base of flowering and fruiting and collection times | | | |
| C3 | | Nursery staff to supervise initial collection by other parties | | | |
| C4 | | contact appropriate landholder prior to each seed collection trip | | | |



| WORKS | COMMENTS | FINANCIAL YEAR | | | | ONGOING (annual review) |
|-------|---|--|-------------|-------------|--|----------------------------|
| | | SHORT TERM | MEDIUM TERM | LONG TERM | | |
| | | 1996 - 2000 | 2000 - 2006 | 2006 - 2012 | | |
| D1 | | investigate local hydrology patterns | | | | |
| D2 | | pollution controls placed on development uphill and adjacent to remnants | | | | |
| D3 | | educate community regarding affects of pollution on remnants | | | | |
| D4 | | installation of trash collectors | | | | |
| D5 | | enforce 'no dog zones' | | | | |
| D6 | | locate car parks away from sensitive remnant areas | | | | |
| E1 | | utilise historic information | | | | |
| E2 | use markings to determine areas that must not be disturbed as appropriate | | | | | |
| E3 | | use materials and vegetation that will not disturb drainage patterns and natural features | | | | |
| F1 | | identify and retain or sensitively utilise the unique visual qualities within remnant bushland | | | | |



Issue 4: Rehabilitation and Maintenance

| WORKS | COMMENTS | FINANCIAL YEAR | | | | ONGOING (annual review) |
|-------|---|----------------|-------------|-----------|--|----------------------------|
| | | SHORT TERM | MEDIUM TERM | LONG TERM | | |
| | | 1996 - 2000 | 2000 - 2006 | 2006-2015 | | |
| A1 | Identify extent of remnant | | | | | |
| A2 | determine management zones for each remnant | | | | | |
| A3 | revegetate using indigenous seed stock | | | | | |
| A4 | provide long term resources following restoration | | | | | |
| A5 | all staff to be suitably qualified | | | | | |
| A6 | develop and implement as appropriate fire regime management guidelines | | | | | |
| B1 | identify original species prior to modern settlement at each site | | | | | |
| B2 | determine which may be re-introduced | | | | | |
| B3 | propagate plants from a nearby source if available | | | | | |
| C1 | ensure clear communication between maintenance staff and Nursery | | | | | |
| C2 | Nursery to collect seeds which can be used for a range of planting programs | | | | | |
| C3 | program planting works according to seed stock | | | | | |



| WORKS | COMMENTS | FINANCIAL YEAR | | | |
|-------|--|---|-------------|-----------|----------------------------|
| | | SHORT TERM | MEDIUM TERM | LONG TERM | ONGOING (annual review) |
| | | 1996 - 2000 | 2000 - 2006 | 2006-2015 | |
| D1 | Nursery to provide all relevant staff with remnant maps, photographic records and "Maintenance Guidelines for Staff" | | | | |
| D2 | | Guidance and information to be reviewed regularly | | | |
| D3 | | Signpost remnants that are difficult to locate | | | |

Issue 5: Recreation and Visitor Management

| WORKS | COMMENTS | FINANCIAL YEAR | | | |
|-------|--|----------------|-------------|-----------|----------------------------|
| | | SHORT TERM | MEDIUM TERM | LONG TERM | ONGOING (annual review) |
| | | 1996 - 2000 | 2000 - 2006 | 2006-2015 | |
| A1 | walking access only into remnant | | | | |
| A2 | suitably designed footpaths | | | | |
| A3 | limited car parking | | | | |
| A4 | public and shared transport encouraged | | | | |
| A5 | facilities and open areas to be suited to remnant size and sensitivity | | | | |
| B1 | adopt facilities and amenities as appropriate for each site | | | | |
| B2 | monitor change in recreational trends relating to remnant bushland areas | | | | |



| WORKS | COMMENTS | FINANCIAL YEAR | | | |
|-------|--|----------------|-------------|-----------|----------------------------|
| | | SHORT TERM | MEDIUM TERM | LONG TERM | ONGOING (annual review) |
| | | 1996 - 2000 | 2000 - 2006 | 2006-2015 | |
| C1 | prohibit buildings | | | | |
| C2 | erect signs to prohibit inappropriate recreational activities that are not permissible | | | | |
| C3 | no dogs or horses are allowed to enter remnants | | | | |
| C4 | bicycles and trail bikes will be prohibited | | | | |
| C5 | large areas of open turf are inappropriate | | | | |

Issue 6: *Education and Participation*

| WORKS | COMMENTS | FINANCIAL YEAR | | | |
|-------|--|----------------|-------------|-----------|----------------------------|
| | | SHORT TERM | MEDIUM TERM | LONG TERM | ONGOING (annual review) |
| | | 1996 - 2000 | 2000 - 2006 | 2006-2015 | |
| A1 | involve the community in improvement works | | | | |
| A2 | provide educational material for residents and others | | | | |
| A3 | investigate feasibility of putting on annual seminars | | | | |
| A4 | provide Council with ease of access to information material | | | | |
| B1 | promote a range of educational material within libraries | | | | |
| B2 | provide co-ordinated and informative interpretive signage | | | | |
| B3 | develop school programs | | | | |
| B4 | advise ordinance inspectors, other Council staff and Councillors on measures to protect and improve remnant bushland | | | | |



| WORKS | COMMENTS | FINANCIAL YEAR | | | |
|-------|---|--|-------------|-----------|----------------------------|
| | | SHORT TERM | MEDIUM TERM | LONG TERM | ONGOING (annual review) |
| | | 1996 - 2000 | 2000 - 2005 | 2005-2015 | |
| C1 | | employ a qualified bushland co-ordinator to work with volunteers | | | |
| C2 | | Incorporate National Trust training into voluntary work | | | |
| C3 | | ensure volunteer services are gratefully acknowledged | | | |
| C4 | | Council and groups to liaise regularly | | | |
| C5 | | voluntary groups to implement plan of management recommendations | | | |
| D1 | | allow academic and scientific access to remnant bushland | | | |
| D2 | | define parameters by which educational and scientific groups should operate | | | |
| D3 | | ensure that research undertaken is made available to Council under a standard agreement with researchers | | | |
| D4 | | develop a series of educational aids for school groups in relation to remnant bushland areas | | | |
| E1 | | broad based historical research to take place | | | |
| E2 | | determine the significance of remnant bush areas with info. from other sources | | | |
| E3 | incorporate research as appropriate into site specific recommendations as appropriate | | | | |



Issue 7: Funding and Resourcing

| WORKS | COMMENTS | FINANCIAL YEAR | | | | ONGOING (annual review) |
|-------|--|----------------|-------------|-----------|--|----------------------------|
| | | SHORT TERM | MEDIUM TERM | LONG TERM | | |
| | | 1996 - 2000 | 2000 - 2006 | 2006-2011 | | |
| A1 | allocate funds according to priority of action | | | | | |
| A2 | actions to be included in relevant annual budget | | | | | |
| A3 | seek capital assistance from other government agencies and sources | | | | | |
| A4 | prepare quality funding submissions | | | | | |
| A5 | secure ongoing funding | | | | | |
| B1 | ensure any sponsorship is in accordance with ICAC guidelines | | | | | |
| C1 | map all Council controlled remnant bushland areas | | | | | |
| D1 | provide a team of qualified bush regenerators | | | | | |



4. REFERENCES

- McGloughlin-Rawling Publications Brochure *'Urban Bushland Management Inc.'* (1992)
- Greening Australia (NSW) *'Collection Agreement; Seed Collection for Greening Australia'* (circa. 1993)
- McNair and Anderson *Randwick Community Needs Survey* (1986)
- RCC COSRPOM *Community Survey* (1995)
- RCC *State of the Environment Report* (1993 and 1995)



5. APPENDICES

Appendix A

Schedule of Council Owned Remnant Bushland

| NAME | REFERENCE No. | LOCATION | DEDICATION | COMMENTS |
|-------------|---------------|------------------------|---|------------|
| Gordons Bay | A/5-494-01 | Major street Coogee | Govt.Gazette notices: Acquisition date 22/9/49 | DEED No.31 |
| Glebe Gully | A/5-330-01 | Glen Avenue Coogee | Govt.Gazette 52 11/3/88 L.E.A 58 Gazettal | DEED No 93 |



Appendix B

Results of the COSRPOM Community Survey

A total of 8,000 surveys were distributed throughout the Randwick City LGA. The delivery team used the census collector district boundaries (CCD's) within which there are an average of 200 dwellings. By delivering an average of 37 survey forms within each of the 216 collector districts, the 8,000 household deliveries were achieved. For the survey results to be significant, a return of 600 was required although 800, or 10% was aimed for. In the event, the return used in the calculations below was from 640 people, although surveys were still being returned almost a month after the close date.

(Respondents were required to respond to three of up to eleven statements within each of questions 1-8. If, for example, 640 people addressed a question, the statistics will show the percentage of that total number of people who responded positively to each of the three most popular statements.)

Question 1:

When asked *which facilities or amenities did people require more of*, 282 people out of 611 who responded to the question, (46.2%) indicated that shade structures were necessary, followed by the provision of coastal walking trails at 44.6% and bike lanes at 37% of respondents

Question 2:

The 1986 recreation needs study indicated that 70% of the 600 respondents were in favour of additional landscaped parklands being provided. In 1995 we asked the question slightly differently: *'If Council were to buy more land for open space purposes, what type of open space should it be for?'* A significant 71.7% of respondents indicated that land to extend the coastal walkway was necessary and 51.9% of respondents indicated that land containing threatened plants and/or wildlife should be purchased.

Question 3:

When asked *which three options will best improve the general appearance of the City's open space area*, of the 622 people that answered this question, the highest response was to provide native plants (53.3%), followed closely by demolishing/refurbishing unsightly buildings and designing new buildings to be in keeping with the open space location (54.2%) and providing attractive park furniture (49.2%) indicating that a reasonably equal aesthetic emphasis should be placed on all elements: the natural; built; and 'comfort' values of the City's open spaces.

Question 4:

When asked *what people consider to be the most effective ways that Council can raise people's awareness of the natural environment* a significant 57% of the 622 respondents saw interpretive signage as the best way, followed by the provision of school kits (54.5%) and the provision of an environment centre (41.6%). Clearly, the most favoured method is not necessarily the most expensive method of raising environmental awareness.

Question 5:

The most favoured areas of open space where maintenance practices seen as necessary to be increased include beach areas where a tremendous 90.7% of the 623 respondents for the question saw this area as important for maintenance, followed by playgrounds indicated by 51.0% and sports parks at 37%.

Question 6:

When asked *which type of maintenance required more attention within open space areas* the removal of litter was the most popular at 66.3%, followed by the removal of graffiti (56.5%) and the maintenance of amenities buildings (44.0%) of the 623 respondents.

Question 7:



A health and safety question requiring people to indicate *which areas of health and safety should have the highest priority* found that out of the 612 respondents, 70.9% saw glass and needles removal as a priority, 61.6% saw rubbish removal as a priority and 49.2% saw policing of open space areas against anti-social activity as a priority.

Question 8:

Addressed the question of *how Council may best inform residents of improvements or plans to improve open space areas*. Of the 626 respondents, 74.6% considered notifications in newspapers was one of the best ways, the next popular being notification through a newsletter delivered to people's homes (51.0%), followed by display of posters and brochures in public areas at 43.1%.

(Questions 9-11 use the Likert Scale technique whereby respondents grade their answers according to whether they agree or disagree, with 1= strongly disagree, 2=disagree, 3= not sure, 4= agree and 5= strongly agree.)

Question 9:

This question asked whether *respondents agreed that a joint venture between Randwick City Council and its neighbouring councils to provide a multi-recreational indoor facility-* from the total 617 people who responded to this question 45.2% strongly agreed, while 5.0% disagreed indicating fairly strong support for this concept although further investigation as to community perceptions will be necessary.

Question 10:

The statement offered in this question was *Council should look at re-designing road space in low volume traffic areas to provide safer play areas for local children* both the 'strongly disagree' result (9.5%) and the 'disagree' result (9.4%) showed quite a high resistance to this idea, while the 'strongly agree' result of 42.6% also means there is reasonable community support for this concept. Again, this will need to be researched further on an specific basis.

Question 11:

The question of whether *park users should share buildings in order to minimise the loss of open space* (by not needing to provide more buildings) was strongly agreed with by 44.1% of the total 610 respondents while only 3.6% strongly disagreed with the statement.

Question 12:

When asked *which one group of people required more open space facilities suitable to their needs*, out of the 10 choices respondents were offered, the most popular response at 24.5% was for 'families' to be provided with more facilities followed by 'young people' at 23.3% and people with disabilities at 20.0%.

Question 13:

This provides Council and the community with interesting results of the *appropriate (non traditional) facilities in well used parks*. People were able to tick any activity they wanted and therefore were not restricted to any number of answers. Responses offered showed the following to be appropriate from a total of 623 respondents:

| | |
|----------------------|---|
| Occasional concerts | 62.0% of people responded positively to this option |
| Outdoor plays/cinema | 47.5% |
| Coffee Shops | 44.5% |
| Kiosks | 43.2% |
| Arts & Crafts fairs | 41.4% |



Question 14:

Respondents were asked *which one area aimed at protecting the environment of the City of Randwick, should be given the highest priority* - pollution control was a convincing first place at 62.4% of the 604 respondents for this question. Further assessment and information derived from other community consultative methods has shown that the community considers stormwater pollution control should feature heavily in the area of Council's pollution control efforts.

Question 15:

Of the 352 people who said they *would like to be involved in helping to improve parks, beaches and recreation in the City of Randwick*, an encouraging 51.7% responded that they would get involved in the 'Community Street Tree Planting Project', 50% said they would notify Council of any problems or necessary maintenance and 31.4% said they would join a consultative group that would recommend improvements to a specific open space area close to their home.

Question 16:

This was an open ended question that asked *which presently unavailable leisure/sporting activities and/or open space facilities would you like to see provided in the City of Randwick* - 29 different categories were derived from the many responses with the most popular being bike lanes and a cycleway at 21.5% of respondents, the coastal walk link and walking tracks associated with it at 14.2%, basketball facilities and an indoor pool each representing 12.4% of respondents and an indoor sports centre that was identified as necessary by 10.7% of respondents.

Question 17:

In terms of who actually responded to the survey, not all people filled in the five elements of this question, but for those who did; 55.2% *were female*, reflecting reasonably balanced gender mix (Randwick LGA comprises 50.2% female and 49.8% males).

The age of respondents was dominated by young to middle aged adults; 41.1% and 30.7% respectively (actual Randwick total of these age groups; 52.5%), *full-time employed and retired people made up a total of 65.4%* of respondents with representation from the unemployed being the lowest at 2.5%.

The \$20,000 - \$40,000 income bracket was most highly represented at 33% followed by those earning \$40,000 - \$70,000 at 21.7% and a reasonably even representation from all income earners in the brackets below these, while full time workers dominated the occupation type at 44.9% of the 602 respondents.

The highest response rate was from those who reside in the Coogee postcode area 28.5% followed closely by the Randwick/Clovelly and Maroubra postcode areas respectively at 24.8% and 20.4% which can be said to reflect the population densities within the City of Randwick.



APPENDIX C

Maintenance Guidelines for Staff

1. *No mowing into remnants* - regenerating seedlings and mature shrubs are easily damaged by mowers and whipper snippers (all remnants should be fenced to make the boundaries more obvious)
2. *No dumping of lawn clippings or other 'mulching' materials into remnants* - these add nutrients to the very low nutrient soils, reducing the vigour of plants adapted to these soils and encouraging weed invasion.
3. *Only enter remnants when absolutely necessary* - it is very easy to trample and destroy seedlings which are important to the remnants survival.
4. *No planting into remnants* - exotic and non-indigenous native plants may act like weeds and compete with the remnant species.
5. *Do not add fertiliser to the remnants* - extra nutrients encourage weed growth and degrade the remnant vegetation.
6. *Do not use any chemicals on the remnants including pesticides and weedicide* - these will adversely effect the remnant vegetation and beneficial soil organisms.
7. *Prevent changes in natural drainage patterns around the remnants* - directing water towards remnants or draining boggy sites will lead to the degradation of the remnant and possible loss of species.

