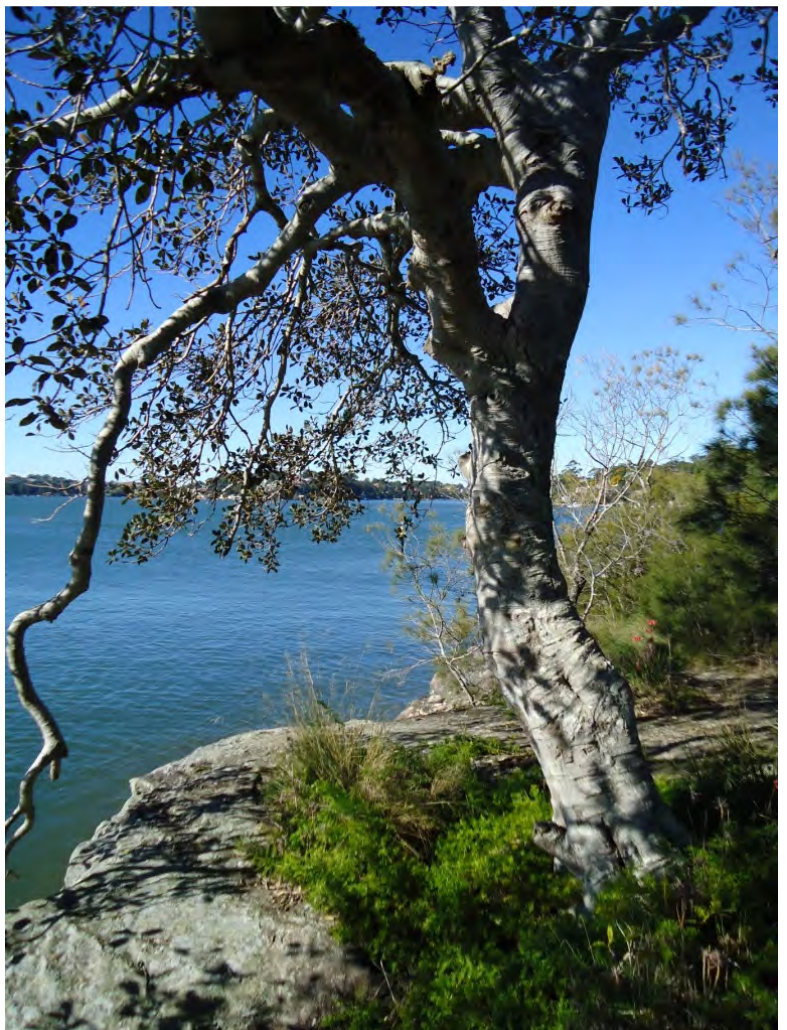




Oatley Point Plan of Management 2010



Prepared by
Kogarah City Council
Department of Assets and Services
Recreation & Urban Landscapes

Plan adopted at the Council meeting of 28th February 2011

Oatley Point Reserve Plan of Management

No prior Plan of Management has been created for Oatley Point Reserve, hereafter referred to as 'The Reserve', therefore the purpose of this document is to classify the land and provide suitable management options in line with the *Local Government Act 1993* and the communities needs while insuring the long term management of the reserve. To ensure that this plan of management is representative of the changing needs of the community it should be periodically reviewed and revised when necessary.

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EXECUTIVE SUMMARY

Kogarah City Council's Department of Assets & Services has prepared the 2010 Oatley Point Reserve Plan of Management. This plan is fundamentally based on the findings of community consultation, best management principals and relevant scientific literature. This plan has been completed to address changing public demands for the management of local open space and our natural areas and natural resources. All policies, strategies and actions are sought to enable Council to meet the needs of the community and address legislative requirements while ensuring the suitability and integrity of the natural assets present within the reserve.

As part of the preparation of the plan of management 70 households were surveyed with 40% responding (28 households). Overwhelmingly the natural aspects of the reserve were noted as the most important value to the respondents (32%) while it was also noted as the highest reason for visitation (46.1%). The respondents indicated that they would be highly likely/ very likely (78%) to use a bushwalking path if available within the reserve. However, the most undesirable facility identified by the survey were; BBQ's, table and chairs, picnic facilities (20%), Buildings or commercial development (inc café) (16.3%) and toilets (11.6%). Desired facilities included: fix and maintain the natural walking track (23.8%), continue bush regeneration - clear out weeds (11.9%) and no need to improve, leave as natural scenery (11.9%).

Due to the community response the plan of management recognises the need to manage the natural resources and natural areas within the reserve and provide a comprehensive program for the protection, rehabilitation, conservation and public education of these resources. The reserve is recognised as having an extensive range of biodiversity which is the most significant feature of the reserve.

The principal recommendations of this plan are:

1. To ensure the sustainability of the reserve's natural resources so as to preserve the reserves ecological systems and subsequent biodiversity for intergenerational equity.
2. To retain the natural aspects of the reserve by limiting development that is not inline with the assigned land categories.
3. To provide and maintain a natural walking track throughout the reserve travelling from Herbert St to Algernon Street to allow safe access while maintaining the ecological and natural integrity of the bushland.
4. In consultation with relevant State and Local Departments revise the zoning of the reserve and reclassify as E2 – Environmental Conservation in any new or revised Local Environmental Plan.
5. Continue monitoring the flora and fauna of the reserve to allow appropriate management and to address relevant environmental legislation.

This plan provides future direction and policies for the planning, management and development of the reserve. However, it should be noted that the implementation of the strategies herein, whether wholly undertaken in one attempt or staged over an extended period of time, will be dependent on the demands made on Council, its preferred priorities in any one financial year and the availability of resources each financial year.

PART 1

INTRODUCTION

1.2 What is a Plan of Management?

A plan of management is a document that identifies issues and can propose developments or changes of use for public parks classified as *Community Land*. A plan of management can also be prepared for State owned Crown land under Council's care, control and management that has been reserved or dedicated for a public purpose and Council appointed Trustee. The purpose of a plan of management is to ensure that the land is managed in the best interest of the public and as part of this process the public is informed of the proposals outlined in the plan. The public then are invited to make written submissions on those proposals and to participate in a public hearing.

1.3 Preparing a Plan of Management

Community Land

With reference to s.36 of the *Local Government Act, 1993* a Council must prepare a plan of management for *Community Land* as shown in map 2. The plan can apply to one or more sites of *Community Land* except as provided by the relevant provisions of the *Local Government Act, 1993*. A plan of management for *Community Land* must identify the following:

- The category of land,
- The objectives and performance targets of the plan with respect to the land,
- The means by which the council proposed to achieve the plan's objectives and performance targets,
- The manner in which the council proposes to assess its performance with respect to the plan's objectives and performance targets, and
- May require the prior approval of the council to carry out any specific activity on the land.

Under s.38 of the *Local Government Act, 1993* a plan of management for *Community Land* must be publicly exhibited and the public invited to make written submissions on the proposals outlined in the draft plan. The public exhibition period must be for a minimum of 28 days but Council is required to receive written submissions for a further 14 days after the date of public notice of the exhibition.

Prior to public exhibition Council must notify and forward a copy of the draft plan of management to other owners of land within the public reserves that are the subject of a plan of management.

Crown Land

Where public reserves are entirely or partly made up of parcels of land that are Crown reserve land then under Division 6, s.112, of the *Crown Lands Act, 1989* entitled "*Plans of Management*" the Minister administering the Act can direct that a plan of management be prepared for the Crown reserve. However, a Trustee to the land can, with the Minister's consent, prepare a draft plan. The Minister may require inclusions or amendment to a draft plan prepared by a Trust. The Minister may refer a

copy of the draft plan (s.113) to a third party, such as the NSW Fisheries, for their consideration.

A plan of management that includes Crown land must be placed on public exhibition for a period of not less than 28 days (s.113 (2)). Under s.113 (3) The Minister can consider any representation before adopting the plan. However, the Minister may adopt a plan of management without it being amended or can have it amended as the Minister thinks appropriate (s.114).

Legislative Compliance

To ensure legislative compliance where the land consists of both *Community Land* and Crown land or land in the ownership of any other third party Council will consult with and forward a copy of the draft plan to the Minister administering the *Crown Lands Act, 1989*. Any other Minister or party that owns land within the reserve will be invited to make submissions on the proposals in the draft prior to public exhibition.

Under s.114 of the *Crown Lands Act, 1989* once a plan of management for Crown land is adopted then the Trust must implement the strategies and actions in accordance with the requirements of the adopted plan of management.

1.4 Land to which the plan applies

Oatley Point Reserve is approximately 2.8 hectares and is located within the suburb of Oatley, Precinct 10 and is part of the West Ward, refer to map 1 below. All parcels of land that are included in this plan of management are listed in Table 1, significant features and additional information i.e. approximate size is also included.

The 2.8 hectare Reserve is largely covered with natural remnant bushland with the eastern border of the Reserve facing Phipps Street and the remaining adjoining the Georges River.

Table 1.

Land parcel information			
Reserve: Oatley Point Reserve	Significant Feature	Area m2	Owner
			Land and Property Management Authority (Crown)
Lot 7050 DP 1027173	Bushland / Foreshore	11618	Kogarah City Council
Lot 22 Sec 37 DP 4868	Bushland	3766	Kogarah City Council
Lot 22A DP 4868	Bushland	2715	Kogarah City Council
Lot 23 DP 4868	Bushland	1682	Kogarah City Council
Lot 23A DP 4868	Bushland	1801	Kogarah City Council
Lot 24 DP 4868	Bushland	2142	Kogarah City Council
Lot 24A DP 4868	Bushland	2168	Kogarah City Council
Lot 25 Sec 37 DP4868	Bushland	1785	Kogarah City Council
Lot 25A Sec 37 DP 4868	Bushland	1045	Kogarah City Council
Lot 1 Dp: 555799	Water board asset	90	Sydney Water Corporation
Oatley Point Reserve Total m ²		28722	
Oatley Point Reserve Total Hectares		2.8	

Map 1,

LEGEND
 Kogarah Local Government Area
 Oatley Point Reserve



Map Scale 1:40,000 (at A4)

25th August 2010

Oatley Point Reserve in Kogarah LGA

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Rev B

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1.5 Principal Objectives of this Plan of Management

This plan of management takes a holistic approach to the planning, management, development and conservation of the Reserve. The principal objectives of the plan are to:

- Fulfil the requirements of the respective legislation governing the use of the land and is the subject of this plan of management.
- Engage in public consultation to ensure public concerns, issues and preferences are given due consideration throughout the planning process.
- Resolve issues relative to the proposals and recommendations identified during the planning process.
- Identify and reflect community values, visions and aspirations ascribed to the land by the community as a whole.
- Ensure that the existing and future use of the land is accessible and provides for a public benefit.
- Maintain the environmental integrity of the reserve while addressing the planning, management and development of the Reserve.
- Ensure the financial feasibility and resources availability to implement, manage and maintain any of the proposals adopted in the plan by considering Council's existing and future obligations.

1.6 History of the reserve

Prior to European settlement the reserve was in the ownership of the Bediagal Aboriginal Peoples who were part of the greater Dharug language group who together with the Kuringgai and Dharawal groups occupied the Sydney Basin area. There are various registered Aboriginal sites known within the Kogarah LGA and several within Oatley Point Reserve.

The suburb Oatley was named after James Oatley (1770-1839) who arrived in Australia as a convict in 1815. Oatley was a successful watchmaker and in 1821 was granted a conditional pardon. In 1831 Oatley settled on 175 acres of land in the Hurstville district and later received further grants bringing his total acreage in the St. George area to 785 acres.

The area was purchased in 1881 by Griffiths and Co and the land broken into residential lots. At this point an agreement was reached between Council and Griffiths and Co to retain a 100ft wide reserve along the Georges River. In 1910 Council received notice from the Department of Lands that the '...reserve at the foot of Herbert Street, Oatley, has been reserved from sale or lease'. This now makes up nearly half of Oatley Point Reserve and although urbanisation continues within Oatley the same parcel of land remains as remnant natural bushland and fronts the outer boundary of Oatley Point along the Georges River. The majority of the land that makes up Oatley Point was not in Council ownership until the late 1930's and was only officially assigned by the Geographical Names Board as Oatley Point Reserve in November 1973.

In October 1956 the Riverside Motor Boat Club applied to Kogarah Council to construct a Motor Boat Club, jetties and associated facilities in the south of Oatley Point Reserve. This application was subsequently rejected due to the restriction to public access caused by such a facility and a strong objection from local residents. Limited other information can be found regarding the use of the reserve between this time and the early 1970's. This may be due to the high use of the nearby Oatley

Pleasure Grounds which received a high level of use from around 1910 to this time (see plate 1).



Plate 1, Oatley Pleasure Grounds, Oatley Bay was popular on weekends for boating and picnic's.

In the 1970's Sydney Water Corporation installed a road to gain access to their infrastructure located in the north of the site, thought to be the southern extension of Herbert Street. After the road was installed an increase in access and in complaints was recorded. Complaints included people using the road to steal firewood and bush rock and ridding motor bikes and cars into the reserve. Unfortunately some of these issues continue today.

Council records also show that Oatley Point Reserve was used by the local scout groups for weekend camps from 1976-79 which indicates that there may have been significantly less vegetation covering the site compared to current times.

Further on in the 1980's the parking area was sealed and improvements were made to the reserve including fencing and seating. The first record of bush regeneration occurring within the reserve was in 1988 with the first known ecological burn being conducted in 1989 which is thought to be a response to the Ash Wednesday fires that occurred in 1983.

In 2005 the bridge accessing the Fishermans rock (also reported to be known as Barbers Rock) was found to be highly dangerous in terms of public access and was removed. The requirements of meeting safety regulations would severely degrade the natural values of the reserve and therefore it was not replaced. The playground was recently upgraded in 2008/9 and bush regeneration has been conducted from 2007 to 2011.

Map 2,



NORTH
MapScale: 1:1,750 (at A4)

19th August 2010 L:\Workspaces\Lisa C\Harper_Karen_PlanOfManagementMaps\OatleyPoint_CommunityLand_A4P.wor Rev B

Oatley Point Reserve - Land Ownership

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PART 2

GOVERNANCE

2.0 LAND OWNERSHIP

2.0.i Land and Property Management Authority (Crown Land)

The foreshore section to the east of Oatley Point Reserve is owned by Land and Property Management Authority (Crown land), formally the Department of Lands, and Council was appointed the Reserve Trust Manager of the Crown Reserve (45851) gazetted on 11th July 1997, see map 2. Therefore this land is under the care, control and management of Kogarah City Council.

Under s.95 of the *Crown Lands Act, 1989* the Minister responsible for administering the Crown Lands Act may appoint Council to manage a reserve trust. A Trustee must manage Crown Reserves principally through the provisions of the *Crown Lands Act, 1989* and the *Local Government Act, 1993*. Where there are inconsistencies between the two Acts then with reference to s.98 (2) of the *Crown Lands Act, 1989* this Act has precedence.

Relative to these limitations, under s.98 (1A) of the *Crown Lands Act, 1989* a Council that has been appointed a Reserve Trust Manager has no powers to classify Crown Reserve land as either Community or Operational Land as would be the requirement under s.36 of the *Local Governments Act, 1993* for land under Council ownership.

The management of Crown Reserves, although similar in many respects, does differ particularly with regards to leasing and licensing and the types of development permitted on Crown Reserves as opposed to what may be permissible on *Community Land*.

Crown Land Trust Management:

Under the provisions of the *Crown Lands Act 1989* (s.92) the Minister has appointed Council Reserve Trust Manager of Reserve (45851) consisting of Lot 7050 DP 1027173 which forms part of Oatley Point Reserve. As reserve trust manager Council is responsible for the affairs of the Trust and is answerable to the Minister.

A Reserve Trust has the functions conferred on it under the provision of the *Crown Lands Act, 1989* and has responsibilities for the daily care, control and management of the reserves. The Minister cannot direct the Trust as to how it is to manage the reserves, unless the Trust exceeds its powers (acts *ultra vires*). The Minister can only suggest or make representation to the Trust on the question of management.

OBJECTIVES AND PRINCIPLES OF CROWN LAND MANAGEMENT

The *Crown Lands Act, 1989* sets out the objectives and principals for Crown land management in s.10 and 11 of the Act.

The objectives for the management of Crown Reserves are stated in s.10 of the Act and are to ensure they are managed for the benefit of the people of New South Wales and specifically for:

- a) a proper assessment of Crown land,

- b) the management of Crown land having regard to the principles of Crown land management contained in [the] Act.
- c) the proper development and conservation of Crown land having regard to those principles,
- d) the regulation of the conditions under which Crown land is permitted to be occupied, used, sold, leased, licensed or otherwise dealt with,
- e) the reservation or dedication of Crown land for public purposes and the management and use of the reserved or dedicated land, and
- f) the collection, recording and dissemination of information in relation to Crown land.

Section 11 of the *Crown Lands Act, 1989* sets out the Principles for Crown land management referred to in the Objectives of the legislation which states:

- a) that the environmental protection principles be observed in relation to the management and administration of Crown land,
- b) that the natural resources of Crown land (including water, soil, flora, fauna and scenic quality) be conserved wherever possible,
- c) that public use and enjoyment of appropriate Crown land be encouraged,
- d) that, where appropriate, multiple use of Crown land be encouraged,
- e) that, where appropriate, Crown land should be used and managed in such a way that both the land and its resources are sustained in perpetuity; and
- f) that Crown land be occupied, used, sold, leased, licensed or otherwise dealt with in the best interest of the State consistent with the above principles.

Table 2, outlines Council's management initiatives for the Crown land that is the subject of this plan of management relative to the Principles of Crown land.

Table 2.

STATEMENTS ADDRESSING PRINCIPLES FOR CROWN LAND MANAGEMENT	
Crown Land Principal	Council Initiative
That environmental protection principles be observed in relation to the management of Crown land.	To conserve, protect and where appropriate rehabilitate the reserves ecological systems and biodiversity. Also to preserve the historical significance of the land its character, social, economic and environmental benefits.
That natural resources of the Crown land be conserved wherever possible.	To retain, conserve and rehabilitate the natural landscape to ensure the future representation of the character of the land is retained in perpetuity.
That public use and enjoyment of appropriate Crown land be encouraged.	The strategies and actions in the plan will ensure greater public access for persons of varying degrees of physical and mental ability to enjoy the benefits that the land provides.
That where appropriate, multiple use of Crown land be encouraged.	The strategies and actions in the plan will ensure that the land is available for multiple uses as sites for passive recreation, social interaction, education and cultural integration.
That Crown land be used and managed in such a way that both its resources are sustained in perpetuity.	That the land that is the subject of this plan of management is to be used and managed for the benefit of current and future generations by retaining its public purpose for a public benefit.
That the land be managed in the best interest of the State and be consistent with the Principles of Crown land management.	The strategies and actions in the plan comply with the Principles of the Crown land management by ensuring that the use of the land is appropriate to its reservation or dedication and its ascribed public purpose.

Vision Statement & Values

One of the major differences in the management of Crown land and *Community Land* is that the latter is based on the core objectives outlined in one or more of the land categories ascribed to the land as depicted in s.36 of *Local Government Act, 1993*. Crown land, as previously noted, is managed by the Aims, Objectives and Principles of the *Crown Lands Act, 1989* which are further supplemented by Vision and Values Statements that are specific to the land that is the subject of a plan of management.

These complementary Statements provide direction for the management of the land in question while the values identify the significant policies, social, economic, environmental and governance attributes that are to underpin specific policies, strategies, actions and guidelines included in the plan. These Statements further assist in the decision making process for the management of the land.

Vision Statement

To plan, develop and manage public parks and reserves in a manner that fulfils the community's preferences for a diversity of quality recreational opportunities in a variety of environmental settings both natural and man-made.

Value Statement

Table 3 outlines the community values that have been ascribed to the land and its resources. These values establish those qualities sought to be preserved to achieve environmental sustainability and to further ensure that the management of the land provides for intergenerational equity.

Table 3.

VALUE STATEMENTS FOR CROWN LANDS

Value	Value Statement
Recreation	Ensure the local hinterland, foreshore and urban parklands of the Kogarah LGA that are reserved Crown land are preserved as places providing a diversity of high quality passive and active recreational experiences, benefits and opportunities to the diverse community within the City of Kogarah.
Social	The reserved Crown land that is the subject of this plan is valued for the opportunities it provides as a meeting place, a place to interact, socialise and celebrate with others by providing a venue capable of fulfilling individual and group needs for affiliation and the sharing of common interest whether it be recreation, appreciation of the natural environment, the scenic quality or any other leisure or ancillary activity.
Cultural	The Crown land that is the subject of this plan of management is valued as a place of cultural and historical value in terms of both Aboriginal & European culture and defines the relationship between people, place, activity and the environment. The land is valued because it creates a strong sense of identity and cohesion within the local community and throughout the surrounding neighbourhood and across the City.
Natural	The Crown land that is the subject of this plan of management is valued as a place that provides native and indigenous flora & fauna habitat as well as a corridor for the movement of native flora and fauna between the terrestrial open space and marine environments along the Georges Rives and hinterland, intertidal, estuary areas and riparian zones.
Location	The Crown land that is the subject of this plan of management is valued as open space that improves the visual and scenic amenity from the surrounding urban fabric.
Access	Crown land is valued as accessible land that provides equal opportunity to the public, regardless of any physical limitations, capabilities, ethnicity, religion or other factors, to use and enjoy for recreation and socialisation.
Environment	The Crown land that is the subject of this plan of management is valued as a site for conserving, rehabilitating and protecting the natural environment to ensure

VALUE STATEMENTS FOR CROWN LANDS

Value	Value Statement
	biodiversity, ecological sustainability and inter-generational equity.
Management	The management of reserved Crown land has been undertaken by Council because it values the opportunity to improve the environmental, social & recreation opportunities that can be provided to the community and for each of the reserves own intrinsic values as a functioning ecological system.

Case Law

The Land & Property Management Authority has advised of other considerations that need to be taken into account in the management of Crown land. These considerations include judgments derived from case law concerning public recreation as well as provide guidance for Council's who are appointed as Trustees of Crown land. As an example these are:

- Where Crown land has been reserved or dedicated for a public purpose then any development or improvements must be ancillary to the public purpose of the reservation.
- A Trust may impose reasonable entry fees.
- Access to cross Crown land should be freely available as of right.
- The use of reserved Crown land must be consistent with the public purpose e.g. activities or uses that are supportive of the recreational use of land reserved for public recreation.
- The terms and conditions of use outlined in a lease or license must be consistent with the public purpose of the reserved land.

Where Council has been appointed Trustee it is obliged to take into consideration judgments arising from case law that may in the future impact on the management of land.

LEASING & LICENSING CROWN RESERVE LAND

The licensing and leasing of Crown Reserve's must be in accordance with the objectives and principles for Crown land management as specified under s. 10 and 11 of the *Crown Lands Act, 1989*. Section 10, entitled "*Objects of the Act*" for the management of Crown reserve land in part stated as:

- ...b. the management of Crown land having regard to the principles of the Crown land management contained in the Act,
- c. the proper development and conservation of Crown land having regard to those principles...
- e. the reservation or dedication of Crown land for public purposes and the management and use of the reserved or dedicated land...

While section 11 of the Act entitled *Principles of Crown land management* in part states:

- a. that environmental protection principles be observed in relation to the management and administration of Crown land;
- b. that the natural resources of Crown land (including water, soil, flora, fauna and scenic quality) be conserved wherever possible;
- c. that the public use and enjoyment of appropriate Crown land be encouraged...

Furthermore, with reference to s.102 of the *Crown Lands Act 1989* a Council, if it is appointed reserve trustee cannot sell, lease or mortgage land or grant an easement or a licence except a temporary licence over any part of Crown Reserve land without the Minister's responsible for administering the *Crown Lands Act 1989* consent. The trustee may not give consent for a licence or lease for a term exceeding 5 years or a lease for a term that by the exercise of an option exceeds five years without advertising and obtaining prior written consent from the Minister. As part of the consent the Minister may choose to impose terms and conditions within the proposed lease agreement. Under s.108, of the *Crown Lands Act 1989* a reserve trustee may issue a temporary licence for all or any part of a reserve for a prescribed purpose that is in accordance with the reservation or public purpose of the land.

Reserve Trust Land

There is only one parcel of land that is Crown Reserve within Oatley Point Reserve (Lot 7050 DP 1027173) shown in Map 2 below. This parcel is approximately 1.1 hectares and is solely covered in natural remnant vegetation and is freely available to the public at all times. There are no licence or lease agreements for the use of this land within Oatley Point Reserve.

No exclusive use can be obtained for this land as it is classified Crown Reserve (45851) 'public recreation' and covered with remnant vegetation. Permission for alternate use can be obtained by way of Council issuing a temporary licence. These licences are assessed on individual merit and take into consideration the principals of the *Crown Lands Act 1989* and the potential damage to the area. Where a licence is issued a damage deposit may be required in accordance with Council's management plan if the activity is or is likely to cause damage to any asset either natural or man made within the Reserve.

Proceeds Derived From Trust Crown Reserves

Proceeds generated from lease or licence agreements of Crown Reserves within Oatley Point Reserve must be spent within the reserve from which the lease or licence applies. Council as the Reserve Trust Manager must separately account for all the proceeds from activities in the reserve. The Minister (and the community) may request such information at any time.

Under Section 106 of the *Crown Lands Act, 1989*, net proceeds from a sale, lease, easement or licence (including a temporary licence) on any of the reserves will apply in accordance with any directions given by the Minister for Lands. This may include but not be limited to:

- a. Direction that proceeds are to be paid to another reserve trust to be applied to the care, control and management of another trust's reserve.
- b. Direction to Consolidated Funds or to the Public Reserve Management Fund under the *Public Reserves Management Act, 1987*. In the absence of a direction from the Minister the proceeds from any of the Crown Reserves, shown in Map 2, shall be invested or applied for the general purpose of the Reserve Trust. Under Section 122 of the *Crown Lands Act, 1989* reserve trust must report on their activities on the reserves as detailed in Clause 33 of the Act.

CROWN LAND RESERVE TRUST REPORTING

Reserve Trust Accountability

The *Crown Lands Act Regulation (2001)* specifies the accountability of the reserve trust in terms of the management of the reserve. Clause 33 directs that the reserve Trust reports must be prepared annually detailing the income, expenditure, assets, liabilities and improvements of the reserve as well as the details of any leases or licences granted by the Trust. Clause 34 directs that the Trust must keep the following records in Schedule 4 of the Regulations. Relative to Local Governments appointment as Reserve Trust Managers they are required to:

...keep separate records to permit analysis of monetary details for each reserve. The account must, among other things detail revenue and expenditure, improvements carried out on the reserves, and list all leases and licences granted or in force.

List business or commercial operations currently existing within the Reserve. It is crucial that the Trust adopt economically sustainable management principles with the aim to make the reserve self-sufficient financially.

Reserve Trust Capital Improvement

No major capital improvements have or will be conducted with the Crown Trust Land within Oatley Point Reserve, as the land is covered by natural remnant vegetation. Funding has been provided to conduct bush regeneration activities to manage the land including the threat to biodiversity created by invasive plant species.

2.0.ii Sydney Water Corporation Land

A small parcel of land in the north of the reserve is owned by the Sydney Water Corporation (Lot 1: Dp 555799). Kogarah City Council does not have any jurisdiction regarding the control and management of those portions of land occupied by the Sydney Water Corporation. This includes sewage infrastructure and sites where underground sewage pumping stations are located which all remain the responsibility of Sydney Water Corporation.

However, the Corporation's land is managed in accordance with the objectives and principals of the *Sydney Water Act 1994* and the *Sydney Water Catchment Act, 1998* s, 14 that in part states:

(a) to insure that the catchment and the catchment infrastructure works are managed and protected so as to promote water quality, the protection of public health and public safety, and the protection of the environment.

Council has no jurisdiction over the management of such land and must confer and comply with Sydney Water Corporations policy, directives and guidelines in accordance with the respective governing Acts.

A letter received from Sydney Water on the 31st July 2000 states that '...An easement of approximately 5.18m wide exists through the part of the reserve known as "R45851 from sale, R45852 from lease generally for public recreation notified by Government Gazette of 12/10/1910". No restrictions apply on Title other than "Land Excludes Minerals"...' It is also stated in the letter that '...(this) site is an integral part of Sydney

Water's infrastructure and...that Sydney Water would need unrestricted access....and requests that no structures be built over Sydney Water land'.

2.1 POLICIES & LEGISLATION

2.1.i Ecologically sustainable development

Ecologically sustainable development seeks to provide economic, social and environmental benefits in the long term, meaning that any activity carried out should not degrade or deplete the environment so much that a society or community will not be able to meet their needs in the future (Beder, 1996).

An objective of Kogarah Local Environment Plan (LEP) is to ensure that any development, in this case on Community Land or Crown Reserve, must consider ecological sustainability as part of the development process. The LEP cites the following criteria:

That Council must not grant consent to the carrying out of development unless it has given consideration to the following principles of ecologically sustainable development in so far as they are relevant to the proposed development:

- a. *conservation of natural resources,*
- b. *optimisation of the use of natural features,*
- c. *optimisation of energy efficiency,*
- d. *maintenance or improvement of air, water and soil quality,*
- e. *reduction of car dependence, and*
- f. *waste avoidance, waste minimisation and cleaner products.*

These core principles should form the basis for guiding any future development, alterations or additions to the built environment as well as landscape works that may take place within the study area.

2.1.ii Biodiversity

Biological diversity (biodiversity) is the variety of forms of life and ecological systems that inhabit the earth. Biodiversity is considered at three levels, ecosystem, species and genetic diversity. These three levels are interrelated in that genetic diversity contributes to species variation while species variation interacts within ecosystems. This provides living and non-living aspects within the environment, which sustain and evolve genetic and species diversity.

The benefits of biodiversity conservation to all living systems are too numerous to list here as all life is dependent on it by providing the primary source for fulfilling an array of needs essential to all life. Biodiversity provides for basic subsistence, medical resources and health benefits. As well as maintaining hydrological cycles, watershed protection, buffers against extreme events, climate regulation, soil production, erosion protection, nutrient storage and cycling, pollutant breakdown and adsorption are some of the more important functions of biodiversity (Huston, 1998).

Local Parks, as places for planting and regenerating native plant species, have a role in the conservation of Kogarah's biodiversity principally because their vegetation contributes to the break down and absorption of urban pollutants. They also play a vital role in providing sustenance for native fauna and contribute to the aesthetic,

cultural and economic values that give the Kogarah LGA its unique environmental status within the metropolitan area.

Federal legislation including the *Environmental Protection & Biodiversity Conservation Act 1999*, the Intergovernmental Agreement on the Environment (IGAE), Agenda 21, State government legislation including the *Local Government Act 1993*, *Environmental Planning & Assessment Act 1979*, *Threatened Species Conservation Act 1995*, *Fisheries Management Act 1994*, State Environmental Planning Policies (SEPP) such as SEPP, 19 and specific policies prepared by Kogarah City Council in its LEP's and DCP's are the means by which Council protects and conserves biodiversity within the City.

Briefly, the following short list highlights some of the principal guidelines and planning controls applied by Council in conserving local biodiversity. Further reference to Federal and State Government legislation including those listed in the plan can be accessed via the internet at www.austlii.edu.au.

- **Green Web-Sydney**

Green Web – Sydney is a metropolitan wide initiative to establish a green web of native vegetation and habitat corridors. Its principal objectives are to establish habitat corridors so as to provide links between fragmented sections of urban native bushland as well as to protect, conserve and enhance the remaining bushland in the Sydney region (Seidlich,1997). The aim of the project is to facilitate the migration of wildlife and the natural dispersal of native plants (Seidlich, 1997). Large open spaces, such as parklands, can make a significant contribution to these ideals without undue impact on their existing use or conflict with core objectives for such use.

With reference to the Green Web –Sydney scheme, Oatley Point Reserve has been designated by Council as an *Existing Habitat Corridor*. As a consequence, Council requires appropriate management of the native trees and vegetation present on site to continue a green web link to provide for migrating birds and habitat opportunities.

- **Southern Sydney Catchment Blueprint Policy**

The Minister for the Department of Land & Property Management Authority has notified Council of the Southern Sydney Catchment Blueprint Policy. The Policy outlines a number of strategies to achieve a healthy, productive and diverse catchment. The Blueprint Policy is consistent with the environmental plans previously prepared by the former Catchment Management Committee for Southern Sydney. It also gives consideration to other planning instruments and documents prepared by State and Local government as well as organisations such as the Southern Sydney Regional Organisation of Council's of which Kogarah City Council is a member. The plan states as its vision for catchment management as:

A sustainable Southern Sydney Catchment which recognises cultural and heritage values and is the responsibility of the whole community.

A number of management targets and actions have been identified that have relevance and should be referred to as part of Oatley Point Reserve plan of management. The targets and actions of the Southern Sydney Catchment Blueprint that are relevant will form part of the strategies to be undertaken as part of this plan.

- **State Environmental Planning Policy No.19 Bushland in Urban Areas**

The general aims and objectives of *State Environmental Planning Policy No.19 – Bushland in Urban Areas (SEPP 19)* as it applies to the Kogarah LGA is to protect and preserve bushland.

SEPP 19 recognises the value of native bushland to the community as part of the natural heritage. It also recognised the aesthetic value of bushland as a means of softening the urban fabric. Natural bushland areas are also valued as recreational, educational and for their scientific value to the community. SEPP 19 outlines specific aims some of which are:

- a) To protect the remnants of plant communities which were once characteristic of the land.
- b) To retain bushland in parcels of a size and configuration that will enable the existing plant and animal communities to survive in the long term.
- c) To protect rare and endangered flora and fauna species.
- d) To protect habitats for native flora and fauna.
- e) To protect wildlife corridors and vegetation links with other nearby bushland...

Future reference should be made to this policy when any development is proposed that could impact on the bushland within Oatley Point Reserve.

- **Oatley Bay Estuary Management Study and Oatley Bay Estuary Management Plan**

Oatley Bay catchment is located in the western part of the Kogarah LGA and includes Oatley Point Reserve as well as other prominent reserves including Moore Reserve, Oatley and Poulton Park, Hurstville Grove. The Oatley Bay Estuary Management Study and Plan identifies the estuaries management issues and potential management strategies. The strategies account for the wider catchment area and addresses issues such as water quality, sewage effluent and urban runoff. It is important to address the recommendation made within this plan as many environmental issues that impact on smaller urban reserves need to be managed on a larger landscape scale to be effective.

2.1.iii Threatened Species Conservation Act 1995

The *Threatened Species Conservation Act 1995 (NSW)* (TSC Act 1995) is administered by the Department of Environment, Climate Change and Water and is aimed at protecting terrestrial threatened species, populations and ecological communities. The conservation of biodiversity, and in particular threatened species, is an important part of protecting our natural heritage and maintaining sustainable, productive landscapes. In NSW more than 1000 native species, populations and ecological communities are threatened with extinction (DECC, 2010).

The National Parks and Wildlife Services, Wildlife Atlas lists the following fauna species as occurring in the Kogarah LGA that are covered under the TSC Act 1995, Gang-Gang Cockatoo, Major Mitchell's Cockatoo, Kola and the Greg-headed Flying-Fox. The Flora Biodiversity Study (TEC, 2009) did not record any of flora species as being present at Oatley Point Reserve that are currently listed under the TSC Act 1995. However, it is important to remember that ecosystems are fluid and evolving systems and therefore continual efforts must be made to sample and understand the species that are present on site. The absence of a species during sampling does not necessarily indicate a true absence of the species on site and the precautionary

approach should always be considered when referring to species potential use and/or present in the reserve.

2.1.iv Climate Change

Possible Impacts of Climate Change

The Garnaut Climate Change Review Final Report (2008) notes that weather patterns in Australia are affected by the El Nino – Southern Oscillation and the Southern Annular Mode, which are described as the dominant drivers that influence climatic conditions. Changes to these systems by the influence of greenhouse gas emissions are believed to be impacting on both temperature and rainfall patterns across the continent with other climatic influences occurring at a more intense rate potentially including cyclones, severe storms and bushfires. Possible impacts highlighted include:

- Temperature
- Rainfall (Rain frequency, severity and seasonality)
- Sea Level Rise
- Impacts on Biodiversity
- Overland flooding

Council's Response to Climate Change

In a report to the Council meeting of 22nd March 2010 Council's Climate Change Adaptation (CCA) Working Group recommended that Council adopt the A1F1 climate change scenario which predicts a future where *"emissions remain high due to limited efforts in greenhouse gas emissions reduction and the climate's response is more significant."*

The key climate change impacts that pose the highest risk to Council's operations were identified in the report as deriving from:

- a. Impacts on Kogarah's foreshore and coastal areas as a result of sea level rise, increase watertable and foreshore erosion.
- b. Impacts derived from flooding and overland flows because of increase in the quantity , frequency and severity of rainfall events and the failure of stormwater infrastructure to manage the increase volumes.
- c. Impacts of increasing frequency of extreme weather and storm events resulting in increase in the severity of storms and droughts.
- d. Impacts of higher temperatures on Council's operations, services and community including affects on recreation facilities, biodiversity management, community health and infrastructure, etc.

Essentially, Council resolved to adopt the A1F1 Climate Senario as the basis for Council's Climate Change Adaptation work, recognised the key climate change risk to the City and to continue to work towards maintaining its ability to deliver its services to the community over the next 20 years to 2030 and minimising climate change impacts wherever feasible.

2.1.v Native Title

Both Commonwealth and State legislation govern Native Title within NSW, being administered through the *Native Title Act 1998 (Cwlth)* and the *Aboriginal Land Rights Act 1983 (NSW)*. Due to the presence of Crown land and items of historical

indigenous importance it is necessary to give consideration to the possible impact of Native Title on this land.

Native Title may exist in places where native and indigenous people continue to follow their traditional laws and customs and have maintained a link with their country and where it has not be extinguished (refused recognition) because of acts done, or allowed by government. Areas where native title may exist include:

1. Vacant Crown Land (or unallocated state/Crown land)
2. Some reserve land
3. Some types of pastoral leases
4. Some land held by of for Aboriginal people or Torres Strait Islanders
5. Beaches, oceans, seas, reefs, rivers, creeks, swamps and other waters that are not privately owned.

Table 4 outlines previous and current Native Title claims as of January 1994 to October 2009 in the Kogarah Local Government Area and the status of those claims to that date.

Table 4.

FEDERAL - NATIVE TITLE TRIBUNAL ABORIGINAL LAND CLAIMS

Date Filed	Application Name	Application Type	Status	Tribunal File No.	Federal Court File No.
13/06/1995	NSW Government #5	Non-claimant application	Finalised Dismissed	NN95/11	Not applicable
5/01/1996	NSW Government #18	Non-claimant application	Finalised Dismissed	NN96/1	Not applicable
26/06/1996	Gundungura	Claimant application	Finalised Rejected	NC96/21	Not applicable
12/05/1997	Darug Tribal Aboriginal Corporation	Claimant application	Active	NC97/8	NSD6061/98
1/05/06	Eora People	Claimant application	Finalised dismissed	NC98/10	NSD6099/98

Aboriginal Land Rights Act 1983 (NSW)

The NSW Government has introduced the *Aboriginal Land Rights Act 1993*. Section 36 *Claims to Crown Lands*. Unlike Native Title, land rights are a grant created by the NSW State Government rather than the Courts. The assessment of a claim is fundamentally based on whether the Minister administering the *Aboriginal Land Rights Act 1983* determines that the lands are needed, or likely to be needed, for an essential public purpose, at the time the claim is made, if the whole of the lands claimed is claimable Crown lands or only part on the lands is claimable.

The Land & Property Management Authority advised on the 23rd November 2006, then the Department of Lands, that there is currently one Aboriginal Land claim affecting the Kogarah LGA. The claims and status are listed in table 5 that notes the claim is incomplete at the time of the preparation of the plan.

Table 5.

STATE ABORIGINAL LAND CLAIMS AFFECTING KOGARAH LGA

Claim No.	Affected Lands/Waters	Lodgement Date	Aboriginal Land Council	Parish	County	Status
6735	Georges River Cooks River Wooko Creek Muddy Creek	19/6/ 2002	Metropolitan	St Peters	Cumberland	Incomplete

2.1.vi HERITAGE CONSERVATION

Local Heritage Significance refers to a place, site, item or thing of heritage value to the local community in terms of its aesthetic, historic, scientific, cultural, social, archaeological, natural or aesthetic value for present and future generations.

Section 17 of the *Kogarah LEP, 1998* makes provision for the conservation of both non-Aboriginal and Aboriginal significant heritage sites within the Kogarah LGA. Oatley Point Reserve is listed under the *Kogarah LEP, 1998* as a locally significant item due to its social, aesthetic and historical values.

Information from the Department of Environment, Climate Change and Water's (DECCW) Aboriginal Heritage Information Management System has identified several items of Indigenous heritage value within the Reserve. All the items identified are located within Crown land as identified in map 2. These items are to be protected and managed under both the *National Parks and Wildlife Acts 1974* and the *Environmental Planning and Assessments Act 1979* and any relevant subsequent heritage policies intended for the protection of sites of heritage significance. Additionally the *Kogarah LEP, 1998* makes provision for consideration of potential sites of Aboriginal Heritage significance (s.17D KLEP, 1998).

2.1.vii ENVIRONMENTAL PLANNING & ASSESSMENT ACT, 1979

Local Environmental Plans (LEP's) and Development Control Plans (DCP's) are prepared by Council in accordance with Division 4 of the *Environmental Planning & Assessment Act, 1979*. LEP's provide a guide to Council in its planning decisions for the LGA it administers. Through the provision of planning zones and development controls Council manages the way land is developed within the various planning zones.

2.1.viii STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007

The *State Environmental Planning Policy (Infrastructure) 2007* (SEPP (Infrastructure) 2007) applies to Crown Reserve land that Council has been appointed Trustee under the provisions of s.92 of the *Crown Lands Act, 1989*. The principal aims of SEPP (Infrastructure) 2007 is to facilitate the effective delivery of infrastructure across the State. Conditionally, SEPP (Infrastructure) 2007 has precedence over any other environmental planning instruments.

Development Permitted Without Consent

Division 12 entitled "*Parks and other reserves*", Clause 65(d) of SEPP (Infrastructure) 2008 states that development for any purpose may be carried out without consent if

the land is a reserve within the meaning of Part 5 of the *Crown Lands Act, 1989*, by or on the behalf of the Director General of the Department of Lands and an appointed trustee of a reserve under s.92 of the *Crown Lands Act, 1989*. Council is the appointed Trustee of the Crown reserves cited within this plan of management. The policy also states that if the development is for the purpose of implementing a plan of management adopted for the land under the Act then Clause 65(d) also applies.

Clause 65, Part 3 permits development for any of the following purposes which may be carried out or on behalf of a Council without consent on a public reserve under the control of or vested in the Council:

- (a) roads, cycleways, single storey car parks, ticketing facilities and viewing platforms,
- (b) outdoor recreational facilities, including playing fields, but not including grandstands,
- (c) information facilities such as visitors' centres and information boards,
- (d) lighting, if light spill and artificial sky glow is minimised in accordance with AS/NZ 1158:2007, *Lighting for Roads and Public Spaces*,
- (e) landscaping, including irrigation schemes (whether they use recycled or other water),
- (f) amenity facilities,
- (g) maintenance depots,
- (h) environmental management works (SEPP (Infrastructure) 2007).

To provide consistency throughout the Reserve these works are only permitted in areas categorised as 'General Community Use' or if works are consistent with the zoning of the land with reference to the objectives and the assigned land category or Crown land principals.

Exempt Development

Clause 66 of the policy entitled *Exempt development* states that development for any of the following purposes is exempt development if it is carried out by or on behalf of a public authority, such as Council, in connection with a public reserve or on land referred to in Clause 65 (1) and if it complies with Clause 20 (2) (Exempt development) of then the policy states that:

- (a) construction, maintenance and repair of:
 - i. walking tracks, boardwalks and raised walking paths, ramps, minor pedestrian bridges, stairways, gates, seats. Barbecues, shelters and shade structures,
 - ii. viewing platforms with an area not exceeding 100m², or
 - iii. sporting facilities, including goal post, sight screens and fences, if the visual impact of the development on the surrounding land uses is minimal, or
 - iv. play equipment where adequate safety provisions (including soft landing surfaces) are provided, but only if any structure is at least 1.2m away from any fence.
 - (b) routine maintenance (including earthworks associated with playing field regrading or landscaping and maintenance of existing access roads).
- (2) Development of a kind referred to in subclause (1) is exempt development if it is carried out on land referred to in Clause 65(2) by or on behalf of Council if the development:
- (a) complies with clause 20(2) (Exempt development), and
 - (b) involves no greater disturbance of native vegetation than necessary, and

- (c) does not result in an increase in stormwater run-off or erosion, and
- (d) for the purpose of implementing a plan of management adopted for the land under the *Crown Lands Act, 1989*(SEPP (Infrastructure) 2007).

When considering specific development on Crown Reserve land that Council has been appointed trustee under s.92 of the *Crown Lands Act, 1989* and where a plan of management has been adopted under s.143 of the cited Act then relative to SEPP (Infrastructure) 2007 such development may be permitted without development consent or may be exempt development.

Further reference will need to be made to SEPP (Infrastructure) 2007 for other specific development proposals that may take place in public reserves such as stormwater management systems, etc. Further reference needs to be made to the policy when Council is considering development works on Crown Reserve land that it has been appointed Trustee.

To provide consistency throughout the Reserve these works are only permitted in areas categorised as 'General Community Use' or if works are consistent with the zoning of the land with reference to the objectives and the assigned land category or Crown land principals.

2.1.ix STATE ENVIRONMENTAL PLANNING POLICY (EXEMPT & COMPLYING DEVELOPMENT CODES) 2008

The *State Environmental Planning Policy (Exempt and complying development codes) 2008* (SEPP (E&CDC) 2008) applies to both Crown Reserve and dedicated land that Council has been appointed Trustee under the provisions of s.92 of the *Crown Lands Act, 1989* and *Community Land*. The policy aims to streamline the assessment process for development that complies with specified development standards.

The State Environmental Planning Policy (E&CDC) 2008 has precedence over the provisions of Council's Development Control Plan No.26 – *Exempt & Complying Development* (DCP). The DCP will retain only those developments of an exempt and complying nature that are not included in SEPP (E&CDC) 2008.

To be exempt or complying development the proposed development must not be carried out on land that is an environmentally sensitive area (i.e. high Aboriginal cultural significance or high biodiversity significance or land that is reserved or dedicated under the *Crown Lands Act, 1989* for these purposes)

Exempt development is development that satisfies pre-specified standards and does not require development consent. Relative to parks and for further clarification, further reference should be made to SEPP (E&CDC) 2008.

Complying development through SEPP (E&CDC) 2008 allows for development for a specific purpose. General requirements include that works must be permissible, with consent, in the land use zone in which it is carried out and there must be prior approval, if required by the *Local Government Act, 1993* for example for an on-site stormwater drainage system... SEPP (E&CDC) 2008. There are other requirements under this SEPP which should be referred to for clarification.

2.2 MANAGEMENT INITIATIVES

2.2.i Asset and Risk Management

It is important that Council continues to monitor and report on its assets and ageing infrastructure. The information provides the means for Council to evaluate and make decisions relative to the allocation of scarce resources and the need for repairing, renewing, replacing or disposing of an asset. A comprehensive LGA wide asset management plan for bushland reserves would therefore be beneficial for managing these assets.

Standards Australia notes that:

“Risk management is recognised as an integral part of good management practice”. (AS/NZS 4360:2004)

As such Council will need to prepare a hazard identification and risk management plan for its local parks. Any risk management plans should be prepared by appropriately qualified persons and in accordance with Australian Standard AS/NZS 4360:2004.

Additionally, to be able to create an accurate and effective Asset and Risk Management Plan the values of the reserve must first be calculated. Numerous studies have been carried out worldwide attesting to the economic contribution of urban parks within a community. Studies by Harnik & Welle (2009), Wolf (2004), Crompton (2001) and others have identified seven community values that various types of parks provide. The following summarises these values and the benefits to the community.

- Community economic value, which includes:
 - Hedonic (Property) Value:
The positive impact on nearby residential property values.
 - Direct User Value:
The amount of expenditure residents save by not having to travel to parks to engage in recreation and leisure activities
 - Health Value:
The health benefits of free engagement in outdoor physical exercise, sport and recreation.
 - Community Cohesion Value:
The value and cost savings created by the social cohesion encouraged through shared open spaces.
 - Parks as Cost Effective Urban Stormwater Management Systems
The savings in the construction of stormwater infrastructure due to addressed overland flow within the park.
 - Parks as Cost Effective Air Pollution Mitigates
Cost savings created by the filtration that vegetation provides (i.e removing air pollutants such as nitrogen dioxide, sulphur dioxide, carbon monoxide and other particle matter).
 - External Park Visitation Spending
The commercial benefit to local businesses created by the community's use of local green spaces and Reserves.

2.2.ii Park Asset Service Levels

In February 2009 Council adopted the *Kogarah Council Infrastructure Assets Service Levels* which specified the maintenance service levels that would apply across all of

Council's capital and natural resource assets. The plan briefly reviews three of the most significant maintenance issues relevant to Local Parks as listed below:

- Parks & Reserves General
- Playgrounds
- Public Trees

As an example, the current service levels for playgrounds have been included below.

Table 6.

PLAYGROUNDS		
Category 1	Category 2	Category 3
Market Catchment predominately described as Regional or District	Market Catchment predominately described as District or Local	Market Catchment predominately described as Local
High Usage	Medium Usage	Low Usage
Generally has access to nearby public transport and provision for off street visitor parking.	Generally has access to nearby public transport and limited or no off street visitor parking.	Generally has low access to public transport and limited or no off street visitor parking.
Response Extreme / High Risk 24-48 hours Substantial / Medium Risk 7 days Moderate to Low Risk 6 months.	Response Extreme / High Risk 24-48 hours Substantial / Medium Risk 7 days to 3 months Moderate to Low Risk 6 months.	Response Extreme / High Risk 24-48 hours Substantial / Medium Risk 3 months Moderate to Low Risk 12 months.

Further reference should be made to the *Kogarah Council Infrastructure Assets Service Levels* plan for a comprehensive review of maintenance and service levels to be provided for each asset class.

2.2.iii Natural Resource Management

Ecosystem processes have been altered since European settlement of Australia with the development of urban areas and agricultural lands (Hazell *et al*, 2003; Hamer & McDonnell, 2008; McKinney 2006, 2008). These changes in land use have resulted in altered ecosystem conditions which have led to changed vegetation species composition and structure by allowing the emergence of invasive plant species (Hamer & McDonnell, 2008, McKinney 2006). These invasive species infest large areas and reduce native flora cover and diversity within an urban system (Hamer & McDonnell, 2008). They have significant impacts on smaller areas of native vegetation found within local reserves as recovery is low after disturbance.

As the native fauna and flora of the region have developed alongside each other they become dependant on the other for survival including food, shelter, seed dispersal, germination and pollination. The changes that have been made to the natural environment through the development of urban areas disrupted the balance of natural systems which in turn threatens the survival of the species found within the reserve.

Natural areas, whether large or small in local parks and reserves provide one of the only remaining habitats for many of our native plants and animals within urban areas. Many of our existing urban reserves play an important role in providing habitat and refuges for permanent and migrating fauna such as the White-faced Heron, Great Egret and the Royal Spoonbill within the Kogarah LGA. They provide a crucial link to the pre European state of our environment and are a source of local genetics for both flora and fauna.

These natural assets need to be actively managed and dealing with the source of the disturbance is the key issue. Elements such as excess water and nutrients, dumping of waste, removal of tree and vegetation for personal gain, invasion of exotic and feral flora and fauna and vegetation fragmentation are some of the main elements that degrade the habitat potential and existing biodiversity within these reserves. Activities that remove the source of the disturbance are preferable followed by minimising the effects of the disturbance such as restricting water flow and minimising its effects on the surrounding soil and vegetation.

Care needs to be taken to understand natural systems as some disturbances are a natural process and are crucial for ecosystem health. Some natural disturbances such as fire and the accumulation of leaf litter and logs for habitat have been seen as 'untidy and unnecessary' in the past and due to this the systems have suffered. Natural resource management programs need to be built on an understanding of each individual system and provide the means for this system to be self functioning. This method is beneficial for both the environment and the managing authority as without human disturbances ecosystem are able to care for themselves and require little financial input.



Plate 2, Vegetation within Oatley Point Reserve

2.3 COMMUNITY LAND CLASSIFICATION

What governs the use and management of Reserves?

2.3.i Community Land Classification

Under the provisions of the *Local Government Act, 1993* Council has previously resolved to classify the land in its ownership in the reserve as 'community land'. Essentially, the purpose of this classification is to identify land that should be kept for use by the general public.

2.3.ii Community Land Categorisation

The land included in the study is a multifunctional reserve providing a range of passive recreational opportunities. Generally the reserve consists of natural bushland areas, a playground, two small car parks and no amenity buildings or facilities. There are also known sites of Aboriginal cultural heritage located on site.

The *Local Government Act, 1993* requires the classification of Council owned land into 'Community' or 'Operational' land. The classification 'Operational' land does not apply to the study area. The purpose of classifying the land 'Community Land' and then proceeding to categorise the land into management units is to assign core objectives. This then provides clear direction in the management and use of the various types of landscapes and their resources within the reserve.

The varying land uses within the reserve require different methods of management to sustain and complement the purpose, function and quality of that land. Therefore land must be delineated into its own category, allowing best practice management for the appropriate land management category for its current and future use. Map 3 identifies the boundaries of the various proposed categories of community land within the reserve which are as follows;

- General Community Use
- Park
- Natural Area – Watercourse
- Natural Area – Bushland
- Natural Area - Escarpment

Of which, table 7 provides the reasoning for the selected Community land category for the various portions of reserve in Council ownership.

Table 7

Land Category Assessment

Category	Assessment
General Community Land	<p>The category 'General Community Use' applies to that areas of reserve in Council 's ownership that is marked as 'General; Community Use' in map 3 and generally includes the following;</p> <p style="padding-left: 40px;">Access Routes</p> <ul style="list-style-type: none"> • The public car park in Oatley Point Reserve off Herbert Street. • The public car park in Oatley Point Reserve located at the corner of Algernon and Phipps Street. • Any other service roads into the reserve. <p>Relative to the attributes of the land the infrastructure on the land, its use or potential use as multi-purpose recreational or a community venue and the ancillary services or opportunities they provide this category is considered the most valid.</p>
Park	<p>The category 'Park' applies to that areas of reserve owned by Council marked 'Park' in map 3 and generally included the following:</p> <p>The area of the reserve depicted in map 3 that include landscaped lawns, playground areas set aside for the purpose of enhancing social and cultural passive recreational activities and is considered valid for these sites.</p>
Natural Areas - Watercourse	<p>The category 'Natural Area – Watercourse' applies only to those areas of reserve identified in map 3 which are situated on Community Land. Namely to the open drainage swale present on site running from the stormwater pipe at the end of Algernon Street. Both natural and artificial watercourse's can be included under this category.</p>
Natural Area- Bushland	<p>The category 'Natural Area – Bushland' applies to that area of reserve marked in map 3 which generally include the following:</p> <p>All of these areas within the reserve where there is present the relatively undisturbed or regenerated bushland consisting of a range of native and indigenous plant species that comprises the substrata and upperstrum. Included is the natural rock outcrops and sandstone ridges that are predominant throughout the centre of the reserve and are not included in the Natural Area – Escarpment category.</p>
Natural Area- Escarpment	<p>The category 'Natural Area – Escarpment' applies to that area of reserve marked in map 3 which generally includes the following:</p> <ul style="list-style-type: none"> • The escarpment running west to east approximately parallel to Herbert Street and the adjoining car park.

Map 3,



2.3.iii Existing Planning Controls

In accordance with the *Kogarah Local Environmental Plan 1998* (LEP) the reserve has been zoned **Open Space 6 (a) – Open Space (Public) Zone**. The objectives of this zone are stated as follows:

- a. to recognise publicly owned land used or capable of being used for local public recreation, and
- b. to identify and protect land intended to be acquired for local public open space.

The planning zone applies to all the land including that which is in the ownership of State authorities. The zoning permits certain activities and development to take place in the reserve, some of which may be undertaken without development consent (drainage, playground equipment, lighting, signage etc). Any other structures/development not listed in the '*without development consent*' category or '*only with development consent category*' are prohibited.

Clause 21 (Development in the Special Uses 5(a) zone or Open Space 6(a) zone) also applies and identifies matters that Council must take into consideration prior to granting consent to the carrying out of development on publicly owned land within the 6(a) zone. One of these matters includes *whether the proposed development is consistent with any plan of management adopted by Council*.

NSW Government Planning Standard Instrument

Local environment plans (LEP's) are designed to guide planning decisions for local governments through zoning and development controls to manage the ways that land is used (DOP, 2010). In 2006, the NSW Government gazetted a standard instrument (know as the Standard LEP). The Standard LEP provides consistent objectives and zonings which all Councils have to incorporate into their LEPs. As part of this plan of management, recommendations for future land zoning under the NSW Governments standard instrument have been included.

PART 3

WHOLE OF RESERVE STRATEGIES & ACTIONS

3.0 WHOLE OF RESERVE STRATEGIES & ACTIONS

The following whole of reserve strategies and actions apply across the entire reserve and includes both Community Land and Crown land. These strategies should not conflict with the objectives of the respective land categories or where the land is Crown land with the principals of the *Crown Lands Act, 1989* or the relevant legislation, policies or directives from the Land and Property Management Authority in which case the latter have precedence.

3.1 Principals for licensing and leasing or other estates of community land

In accordance with s. 47B of the *Local Government Act, 1993* a lease, licence or other estate cannot be granted over Community land categorised Natural Area for a building or structure that is not a building or structure prescribed by the Act or Regulations. It is the intention of this plan of management not to permit leasing of any natural areas within the reserve but seeks the protection and conservation of these areas for future generations. As such only the issuing of licences on the Community land subject to the general and specific conditions of uses set out in this plan will be permitted.

Table 8 outlines the governing principles for licensing and leasing the reserve.

Table 8

Principles for Leasing & Licensing

Policies, Strategies & Actions	Principles
Lease agreements	No lease agreements are to be made for Oatley Point Reserve.
Permitted Uses	<p><i>Area Zoned 'Park'</i> Activities associated with passive or active recreational activities, social, cultural, educational, community and ancillary services as permitted under the Kogarah Local Environmental Plan, <i>Local Governments Act, 1993</i>, as determined by Council in respect to the objectives of the assigned land category and this plan of management.</p> <p><i>All Other Zones</i> No leases or licences are to be issues for the occupation or private use or crossing of those areas zoned in map 3 as Natural Area – Bushland, Natural Area – Watercourse or Natural Area – Escarpment. Except to construct, connect, maintain or any other works required to any essential public utility services located or to be created in the reserve or for an emergency services.</p>
Licences Permitted Uses	Licences aimed at education or scientific purposes will be allowed if the use is integral to the learning experience and no other alternative is available. Licenses will only be allowed if the activity will result in no damage to any flora, fauna or any other natural aspect of the reserve and each application is to be decided on its own merit at the discretion of relevant Council staff.
Private Access to the Reserve	<p>No private access is to be authorised within the zones Natural Area – Bushland, Natural Area – Watercourse or Natural Area – Escarpment, to provide protection to the natural values of the reserve.</p> <p>Access may be permitted where Council determines that a hazard on private property poses a direct threat to public health, safety or private property.</p> <p>In accordance with the provisions of the respective legislation access will be permitted to construct, connect, maintain or any other works required to any essential public utility services located or to be created in the reserve or emergency</p>

Principles for Leasing & Licensing

Policies, Strategies & Actions	Principles
	<p>services.</p> <p>Where access is approved to an adjoining private property owner access will be conditional and subject to an appropriate terms and conditions of the permit and the payment of all fees and charges as imposed by Council in accordance with its management plan.</p>
Intensity of Use	<p>Council permits a diversity of recreational, educational and cultural events to take place in the reserve in areas categorised as 'General Community Use' or 'Park'. However, the use of the reserve and its facilities are to be managed in a manner that will avoid detriment to the public assets excessive to general wear and tear, the natural environment or results in unreasonable inconvenience to adjoining residents and other reserve users.</p> <p>No activities are to be permitted that encourage, allow or result in large pedestrian traffic volumes and/or an excessive overflow of vehicles parking in the adjoining surrounding residential areas.</p>
Hours of Use	<p>Hours of use of the reserve will be subject to the outcomes of any negotiations between Council and the licensee and objectives of the land category.</p>
Licence Terms	<ul style="list-style-type: none"> i) Agreed negotiated period between Council and the licensee, generally not exceeding 1 year, with long term projects not exceeding 5 years, and to be reviewed and renewed six monthly. ii) Land and Property Management Authority NSW policies for licence agreements state that they are to offer shorter terms in respect to Crown land. iii) Where the land is Crown land the appointed Trustee is not permitted to lease or licence this reserved land unless it is accordance with s. 10 and s.11 of the <i>Crowns Land Act 1989</i>. Therefore no licences or leases will be granted for the Crown Reserve (45851). Consideration may be given to scientific or educational purposes as stated in the 'licence permitted use' in this table in line with the adjoining land category. iv) Seasonal licences or permits should be offered where applicable. v) Daily, weekly or monthly permits authorised to be offered at Councils discretion. vi) It is mandatory for all licensees of the reserve and associated features and assets to provide Council with accurate usage and participation data and any other data requested in writing by Council before the issuing of any licence.
Income	<p><i>Commercial Activity</i></p> <p>No private or other commercial activities are permitted within Oatley Point Reserve.</p> <p><i>Community Activity</i></p> <p>All licence arrangements with community groups or associations are to comply with Councils policy entitled '<i>Leasing of Community Land and Buildings</i>' adopted 27th August, 2001 and relevant land use categories and any other relevant terms and conditions set out in this plan of management and are to be based on an independent valuation at the time of issuing the licence.</p> <p>Any licensing fees and charges are to be expended by Council at its discretion for the benefit of the community.</p>
Damage Deposit	<p>A damage deposit may be requested before a licence is granted if the activity is or is likely to cause damage to any asset either natural or man made within the reserve. The required deposit amount will determined by relevant Council staff and will consider both the value of the asset and the cost of remediation of the asset in the event of damage.</p>
Reporting	<p>All Income created through licensing of the Reserve will be reported annually to Council auditors.</p>
Insurance	<p>Licensees must provide Council with copies of their Certificates of Currency for their Public Risk Liability Insurance that must be to the sum as stipulated in their licence agreements and as set out by Councils executive.</p> <p>Where a licensee has public risk liability insurance protection by their affiliation with an Association then they are required to provide proof of cover by way of a letter from their Governing Association that they are included in the Associations current policy.</p>

3.2 Leasing & Licensing Crown Reserve Land

All information relating to the leasing and licensing of Crown Reserve land is covered in the Crown Land section 2.0.i and table 8, Principals for Leasing and Licensing above.

3.3 Sydney Water Corporation Land

A small parcel of land in the north of the site is Sydney Water Corporation Land (Lot 1: DP 555799). Kogarah City Council does not have any jurisdiction regarding the control and management of those portions of land occupied by the Sydney Water Corporation.

3.4 General Management Policies, Strategies & Actions

General management policies, strategies and actions include the undertaking of research or specific studies to provide relevant information that would further enhance management decision-making and assist in implementing best practice reserve management. Table 9 lists only those policies, strategies and actions applicable to the whole of the reserve.

Table 9
Policies, Strategies & Actions for 'Whole of Reserve'

Policies, Strategies & Actions	Objectives	Performance Measures
In accordance within the objectives of each of the prescribed land categories avoid excessive development within those land categories where such development is permitted.	To retain and preserve public open space, improve asset management, avoid duplication of existing building facilities and amenities, encourage the maximisation and use of existing assets.	Where feasible avoid duplication of existing facilities and amenities. Shared use of facilities and amenities.
Adhere to the Principles of Leasing and Licensing as set out in table 8, to community land as permitted within the appropriate land categories.	To ensure consistency in the management of public assets. To ensure accountability in the management of public assets.	Complies with the Principles of Leasing and Licensing incorporated in legal agreements for the use of the reserves assets.
Improve direction by providing appropriate standardised signage throughout the reserve. Where appropriate incorporate the use of international symbols that meet the Australian Standards for signage. Install signage for information, environmental & heritage interpretation. Provides information on the reserves regulations.	To provide clear and informative signage throughout the reserve. To improve overall park visitor information. To provide educational information on cultural and heritage resources as well as environmental issues including the natural environment, flora, fauna and ecological systems within the reserve. To assist in enforcing regulations and provide emergency contact information. To place signs in appropriate and highly visible and accessible locations. To consolidate and reduce the number of signs throughout the reserve.	Ease of interpretation of signage for a variety of ethnic and language groups. Installation of signage at main access points. Adhere to the existing designs present within the reserve.
Initiate reserve surveys using staff, students, voluntary assistance or combination.	To monitor the use of the reserve and its impact on the environment, assets and facilities and the surrounding residential areas. To monitor changing recreational trends for various age, cultural and gender groups.	Completion of annual surveys and report findings to Council for asset management, project and budgetary considerations.
Council to monitor the condition and use of its assets and infrastructure.	To ensure accountability in the management of Councils assets and infrastructure.	Compliance with health and safety regulations.

Policies, Strategies & Actions for 'Whole of Reserve'

Policies, Strategies & Actions	Objectives	Performance Measures
	<p>To ensure appropriate service and maintenance levels relative to reasonable user demands on the reserves infrastructure and natural resources.</p> <p>To adhere to health and safety regulations to ensure the protection of visitors to the reserve.</p> <p>To retain the visual amenity of the reserve and its resources.</p>	<p>No adverse incidents to visitors or the reserves natural resources.</p> <p>Well maintained build structures, fixtures and fittings.</p>
<p>Council to apply for capital assistance through the State and Federal Governments Grants or other opportunities for recreation, cultural, heritage and natural resource projects within the reserve.</p>	<p>To provide capital assistance to undertake works to improve the amenity and environmental quality of the reserve.</p> <p>To provide quality recreational resources within the study area for the community's benefit.</p> <p>To protect, conserve, reinstate and manage the reserves natural resources, bushland, heritage and cultural areas.</p>	<p>Acquisition of capital assistance for a range of projects outlined in the plan of management and as recommended in appropriate studies outlined in the plan.</p>
<p>With the assistance of the community and organisations such as schools prepare a range of promotional and educational material relevant to the reserve.</p>	<p>To promote the reserve as a destination for quality recreation, environmental, cultural and heritage education.</p> <p>To educate the community of the environmental significance of the reserve in terms of its terrestrial and marine biodiversity.</p>	<p>Completion and community distribution of a range of educational and promotional material.</p>
<p>Liaise with the local school, environmental groups, Kogarah Bushcare Volunteers and individuals interested in environmental issues to organise events in the reserve.</p>	<p>To inform the public of the importance of biodiversity, the significance of Kogarah's natural history, the cultural significance of the reserves Aboriginal heritage and appreciation of the amenity of natural areas within an urban environment.</p> <p>To deter anti- social environmental behaviour.</p>	<p>Environmental activities completed within the reserve.</p> <p>Reduction in the number of reported dumped waste site in the reserve.</p> <p>Reduction in the, poisoning, ring barking, felling and/or clearing of the reserves vegetation.</p> <p>Reduction in the vandalism to natural resources.</p>
<p>Provide Green Web links via streetscapes leading to and around the reserve by planting native tree species.</p>	<p>To facilitate the migration of wildlife.</p> <p>To create habitat for native flora and fauna.</p> <p>To increase food sources for fauna.</p> <p>To provide green link corridors and improve the adjoining streetscapes amenity.</p>	<p>Implementation of Green Web strategies.</p> <p>Record, measure and monitor outcomes by:</p> <ul style="list-style-type: none"> • Species list • Numbers of trees planted
<p>Complete a Bushfire Management Plan</p>	<p>To minimise risk to human life and Council and public assets within and adjacent to the reserve.</p> <p>To address loss of biodiversity due to altered fire regimes and intensities.</p>	<p>Council produced a Bushfire Management Plan for the Reserve.</p>
<p>Employ a registered surveyor to identify private property boundary encroachments into the reserve.</p> <p>Produce and adopt a Bushland Encroachment Policy or similar document to address</p>	<p>To preserve public space for the benefit of the community.</p> <p>To prevent and discourage the destruction and loss of bushland.</p>	<p>Remove identified encroachments onto public land by cooperation within adjoining landowners by legal means if necessary.</p>

Policies, Strategies & Actions for 'Whole of Reserve'

Policies, Strategies & Actions	Objectives	Performance Measures
encroachment issues.		
Prohibit dog off leash areas within the reserve.	<p>To preserve the integrity of the biodiversity on site and other natural assets.</p> <p>To provide a safe and passive area of recreation for the general public.</p>	<p>Reduction of reports to Council of dogs off leash within the Reserve.</p> <p>Reduction of dog attacks on native fauna.</p> <p>Reduction of dog faeces within the reserve.</p>
All parcels of land indicated in map 2 & 3, be reviewed with the intention of rezoning them E2 – Environmental Conservation under the new or revised Kogarah Local Environment Plan.	<p>To retain and preserve valuable open space within the Kogarah LGA.</p> <p>To maintain a sustainable representation of locally indigenous vegetation.</p> <p>Provide protection for our natural resource and reserves.</p>	Land in map 2 & 3, classified as E2 – Environmental Conservation in the new or revised Kogarah Local Environment Plan.

PART 4

4.0 COMMUNITY LAND - LAND CATEGORY -GENERAL COMMUNITY USE

The portion of reserve categorised – 'General Community Use' included the following assets:

- The public vehicle parking at the end off Herbert Street
- The public vehicle parking at the corner of Algernon Street and Phipps Street.

Core Objective

The core objectives for the management of this category focus on promoting, encouraging and providing for the use of the land, and to provide facilities on the land, to meet the current and future need of the general community:

- a) in relation to public recreation and the physical, cultural, social and intellectual welfare or development of individual members of the public; and
- b) in relation to purposes for which a lease, licence or other estate may be granted in respect of the land (other than the provision of public utilities and works associated with or ancillary to public utilities).

Policies, Strategies and Actions

The policies, strategies and actions outcomes in Table 10 are for the land categorised as 'General Community Use' and are intended to provide a system of management by objectives. The following objectives supplement the core objectives in directing the management, planning and development of the reserve. These are formulated so that it is possible to apply assessment criteria to measure the implementation of the plan. It is this element of measurability that makes the objectives valuable in determining accountability.

Table 10

Strategies & Actions for Land Category – General Community Use

Policies, Strategies & Actions	Objectives	Performance Measures
Categorise that area of reserve identified on map 3 as 'General Community Use'	To comply with the provisions of Section 36, <i>Local Government Act, 1993</i> .	Land categorised in accordance with the provisions of the <i>Local Government Act, 1993</i> .
Authorise the licensing of community facilities in accordance with the core objectives of the land category and as permitted by this plan of management.	To ensure multiple use of public facilities. To ensure accountability in the management of public assets. To ensure appropriate and sustainable use of community assets.	Leases & licensing of community assets in line with the plan of management and other appropriate documents.
Maintain and upgrade the vehicle access road off Herbert Street	To improve road safety & traffic management.	Define and naturalise the entry into the reserve.
Maintain the vehicle access and parking area off Algernon Street.	To assist in controlling surface run-off.	A suitable gate installed at the car park off Herbert Street to reduce rubbish dumped in the area.
Upgrade and formalise the lower portion of the parking area off Herbert Street in Oatley Point	To maximise the existing available vehicle parking areas by formalising the parking arrangements.	Install notice signs advising of opening and closing hours of the

Strategies & Actions for Land Category – General Community Use

Policies, Strategies & Actions	Objectives	Performance Measures
Reserve.	To improve the amenity of the reserve.	Herbert St car park.
Installation of appropriate regulatory signs within the reserve.	To formalise the entry points to these sections of the reserve.	

PART 5

5.0 COMMUNITY LAND - LAND CATEGORY – PARK

The following policies, objectives and strategies apply to the areas of reserve categorised as 'Park', shown in map 3 as 'Park'.

Core Objectives

The core objectives for the management of community land categorised as 'Park' are:

- a) To encourage, promote and facilitate recreational, cultural, social and educational pastimes and activities;
- b) To provide for passive recreation activities or pastimes and for the casual playing of games; and
- c) To improve that land in such a way as to promote and facilitate its use to achieve the other core objectives for its management.

Policies, Strategies and Actions

Table 11, outlines the planning, management and development policies, strategies and actions for that proportion of reserve categorised as 'Park'.

Table 11

Strategies & Actions for Land Category – Park

Policies, Strategies & Actions	Objectives	Performance Measures
Categorise that area of reserve identified on map 3 as 'Park'.	To comply with the provisions of Section 36, <i>Local Government Act, 1993</i> .	Land categorised in accordance with the provisions of the <i>Local Government Act, 1993</i> .
Permit low impact passive events & activities in that area of the reserve categorised 'Park' as determined by the core objectives for the land category, Council & this plan of management. Authorise the licensing of low impact community and special events, social, recreational, educational & cultural activities.	To provide a venue for community social, cultural and educational events. To promote, develop and support our local community & groups.	Promote a range of suitable low impact community activities that are not detrimental to the reserve & nearby residents. Monitor the number of complaints & introduce effective management procedures to address concerns.
Maintain the playground at the top of Oatley Point Reserve allowing for the changing needs of the local community.	To maintain recreational opportunities to all children's age groups & both genders including those with limited physical, intellectual, mobility, sight or other limitations in accordance with the changing needs of the local community.	Safe and engaging playground equipment suitable for the needs of the local community.

Strategies & Actions for Land Category – Park

Policies, Strategies & Actions	Objectives	Performance Measures
Design outdoor furniture, signs & utilities to be visually coordinated to enhance the landscape character of the reserve as expressed by the dominant theme, colours & textures of the site.	To coordinate the adopted design theme of the reserve.	Uniformity in the design of the outdoor furniture, fixtures & fittings of the reserve.
To protect the local nature of the reserve and as a precaution to prevent bushfire incidents prohibit the use of BBQs (both installed and portable) within reserve.	To protect the residence and the reserve against accidental bushfire events.	No installation of any BBQ's or picnic facilities.
Where appropriate construct internal pedestrian pathways in identified high use tracks at grades of 1:14 or better for persons with a disability & for pram use linking major recreation facilities and amenities.	To provide sure footing and/or ease of transit for wheelchair bound persons and/or persons with a disability.	Compliance with the provisions of the <i>Disability Discrimination Act, 1992</i> .

PART 6

6.0 COMMUNITY LAND - LAND CATEGORY - NATURAL AREA: BUSHLAND

The natural bushland throughout the reserve is a valuable ecological asset in terms of the habitat, biodiversity, aesthetic, heritage, recreational and the educational opportunities that it presents. In 2009 a complete flora biodiversity study was completed which included Oatley Point Reserve (Total earth Care, 2010). It was noted that there were two distinct vegetation communities present:

- Sydney Sandstone Gully Forest
- Mangrove Forest

There were no recorded flora species, communities or populations found on site that are listed under the *Threatened Species Conservation Act, 1995*. Although their absence does not exclude the possibility of other species, communities or populations being present on site that are covered under this Act, especially as there are several records of such species in the area.

A fauna study was completed in 1998 by Biosphere Environmental Consultants Pty Ltd which was repeated in 2010. A general increase of species diversity has been noted between the studies and may be linked to the increase of regeneration and environmental works carried out in the reserve.

Due to the absence of development on site the natural soil profile has been maintained with some robbing of both soil and sandstone for landscaping occurring in the 60's and 70's. This factor greatly increases the potential for natural regeneration within the reserve. This area therefore needs continued protection and conservation if it is to survive and be an integral component of the reserve and benefit to the community. The community consultation process revealed strong support for the continuation of bush regeneration activities and other methods to enhance and re-establish the natural areas.

Core Objectives

The core objectives for the management of community land categorised as 'Natural Area - Bushland' are:

- a) To ensure the ongoing ecological viability of the land by protecting its ecological values in terms of its biodiversity and habitat, the flora and fauna (including invertebrates, fungi and micro-organisms) of the land;
- b) To protect the aesthetic, heritage, recreational, educational and scientific values of the land;
- c) To promote the management of the land in a manner that protects and enhances the values and quality of the land and facilitates public enjoyment of the land, and to implement measures directed to minimise or mitigate any disturbances caused by human intrusion;
- d) To restore degraded bushland;
- e) To protect existing landforms such as exposed sandstone ridges, boulders, natural drainage lines, watercourses and foreshores;

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

Policies, Strategies and Actions

Table 12, outlines the planning, management and development policies, strategies and actions for that proportion of reserve categorised as 'Natural Area - Bushland'.

Table 12

Strategies & Actions for Land Category – Natural Area: Bushland

Policies, Strategies & Actions	Objectives	Performance Measures
Categorise that area of reserve identified on map 3 as 'Natural Area – Bushland'.	To comply with the provisions of Section 36, <i>Local Government Act, 1993</i> .	Land categorised in accordance with the provisions of the <i>Local Government Act, 1993</i> .
No leases or licenses to be issued unless inline with the Principals for Leasing & Licensing as set out in this plan of management.	To protect habitat from destruction, disturbance & damage. To avoid exclusive use of the bushland.	Restrict the use of the bushland to activities that are deemed not to be detrimental to the condition, status or quality of the bushland.
Utilise local knowledge of fauna & flora species to assist in secondary research for surveys & studies outlined in this plan.	To capitalise on local area knowledge & create effective community stewardship.	Community involvement & input in natural resource studies.
Identified & map any rare or threatened species in the reserve. Council to liaise with relevant stakeholders to prepare ecological conservation strategies for these areas.	To manage, conserve & protect the rare and threatened species that are or may be in the reserve. To ensure that these species that occur within the reserve are protected from habitat loss & conservation management practices are initiated.	Prepare an Ecological Conservation Plan for the bushland area of the reserve. Conservation is facilitated through the provision of appropriate planning & management decisions. Status is reported in the Kogarah State of Environment Report.

Strategies & Actions for Land Category – Natural Area: Bushland

Policies, Strategies & Actions	Objectives	Performance Measures
<p>Update & review <i>The Kogarah Flora Biodiversity Study, 2009</i> relevant to the study area by preparing a Vegetation Management Plan. Which includes updated mapping and assessment of terrestrial floristics of the bushland in terms of composition (population distribution), structure (species distribution) & function (contribution to health of ecosystem) & relate this to the landscape scale (Georges River Catchment), identify threatening processes & propose management & conservation strategies.</p> <p>Identify preferred native & indigenous flora biomarkers to measure changes in the condition of the native vegetation.</p> <p>Include an assessment of the possible impacts of climatic change as predicted by the CSIRO for the Sydney Region to the flora of the reserve.</p> <p>To plan and manage for any species, populations or communities that may present on sites unknown to Council that may be covered under the <i>Threatened Species Conservation Act 1993</i>.</p>	<p>To compile relevant data for natural resource management planning.</p> <p>To identify gaps in flora information.</p> <p>To identify priority habitat areas.</p> <p>To be able to monitor changes in vegetation structure & floristics over time.</p> <p>To assist in identifying threatening processes & impacts to flora.</p> <p>To provide an updated detailed map of the floristic compositions & their distribution throughout the bushland.</p> <p>To assist in seeking funding for conservation & biodiversity projects.</p> <p>To assist in identifying planning opportunities to increase habitat size, configuration or connectivity so as to maintain habitat viability.</p> <p>To anticipate the needs of the <i>Threatened Species Conservation Act 1993</i> in conserving significant flora.</p>	<p>Implementation of best practice natural resource planning & management for the reserve with regard to the regional approach ascribed for the Georges River Catchment.</p> <p>Update the comprehensive vegetation map an assessment report on the reserves biodiversity, identifying threatening processes & outlining conservation & management strategies.</p> <p>Implementation of the recommendations of the Vegetation Survey.</p> <p>Information & data used for the preparation of grants.</p> <p>Measurable biomarkers (e.g. generic diversity) identified & monitored.</p> <p>Status of the reserve and any new species, populations or communities covered under the <i>Threatened Species Conservation Act 1993</i> is reported in the Kogarah State of Environment Report.</p>
<p>Compile a significant tree register to:</p> <ul style="list-style-type: none"> • identify significant tree individuals & species & their distribution throughout the reserve. • determine the economic value of significant trees within the reserve to assist in their management. • calculate the estimated carbon sequestration of the bushland area. • carry out a hazard & risk assessment on significant native and indigenous trees utilizing Council's PDA computerised risk management system. • identify hollow bearing trees & retain for native arboreal mammal & insect habitat. 	<p>To assist in the conservation & retention of significant native and indigenous trees.</p> <p>To assist in monitoring the changing conditions of the reserve's landscape.</p> <p>To monitor changes to the height & breath of the canopy cover of the reserve.</p> <p>To provide an economic value to assist in managing the environment in accordance with its value.</p> <p>To provide estimates for carbon accounting for the bushland's above ground biomass and monitor the impacts over time of any climate change.</p> <p>To protect native fauna & invertebrate habitat.</p>	<p>Compilation of a significant native and indigenous tree register & location map. Use GPS where appropriate to locate significant tree species.</p> <p>Implementation of appropriate conservation strategies for significant native and indigenous trees (evaluate the use of introducing fire regimes).</p> <p>Established economic value of significant trees using the methodology of outlined in the Draft Australian Standard DR 9907 <i>Amenity Trees – Guide to valuation</i>.</p> <p>Identification & mapping & protective management systems of places & opportunities for native fauna & invertebrate habitat.</p>

Strategies & Actions for Land Category – Natural Area: Bushland

Policies, Strategies & Actions	Objectives	Performance Measures
<p>As part of the flora study prepare a weed management strategy for the reserve & identify and prioritise target weeds.</p> <p>Prevent the introduction of new weed species and eliminate exotic, invasive & noxious weeds by:</p> <ul style="list-style-type: none"> • Implementing bush regeneration & revegetation programs by both contract & voluntary means. • Implement stormwater drainage management systems within the reserve. <p>Implement action to police & remove illegally dumped green waste & other materials that could be potential exotic or noxious seed carriers in the reserve.</p>	<p>To preserve native vegetation & assist in the conservation of biodiversity and ensure the integrity of the ecosystem.</p> <p>To prevent & control the introduction & spread new & existing exotic & invasive weed species.</p> <p>To protect threatened & rare flora species & populations.</p> <p>To maintain & extend the existing native floristic & structural diversity.</p> <p>To maximise habitat value for native fauna.</p> <p>To maintain & enhance the environmental amenity & scenic values of the bushland.</p>	<p>Map the increase in hectares of native & indigenous flora species & reduce the total area of exotic & noxious weed species.</p> <p>Initiation of the principal guidelines for weed control outlined in the document entitled <i>Recovering bushland on the Cumberland Plain: Best Practice for the Management & Restoration of Bushland</i>, Dept Environment & Conservation (NSW).</p> <p>No illegal dumping in the reserve.</p> <p>Compliance with the: <i>Noxious Weeds Act, 1993, Pesticides Act, 1999</i> & Council's Pesticides Use Notification Plan, 2010.</p> <p>Status reported in the Kogarah State of Environment Report.</p>
<p>Reduce green space fragmentation by providing green-web infill where appropriate and feasible.</p> <p>Promote the planting of low fire ignition native vegetation on residential properties that adjoin the bushland.</p> <p>Plant native species trees in adjoining streetscapes.</p>	<p>To enhance the opportunity to increase & sustain biodiversity.</p> <p>To ensure the long-term viability of the native bushland as a source of habitat.</p> <p>To provide a nexus between native flora from the adjoining private property to the bushland.</p>	<p>Increase in the total area & distribution of native vegetation along the perimeter boundary of the bushland.</p> <p>To provide greenbelt links to the bushland.</p>
<p>Protect the aesthetic & scenic values of the bushland by not permitting unsympathetic development design within those areas of the reserve categorised as natural areas.</p>	<p>To protect the aesthetic & scenic quality of the natural areas of the reserve.</p> <p>To minimise disturbance to native vegetation & habitat.</p>	<p>Compliance with the Department of Lands - <i>Southern Sydney Catchment Blueprint</i>.</p>
<p>Where feasible, protect native vegetation & habitat during development works by improved enforcement of the guidelines for bushland protection during such works.</p> <p>Improve the efficiency & effectiveness of site inspection processes & procedures where development approval has been granted within the reserve or on adjoining private properties to the reserve.</p>	<p>To protect & conserve native vegetation during utility service works associated with adjoining property development or utility services maintenance works.</p> <p>To avoid, where feasible, changing natural drainage patterns & water regimes (affecting microhabitats for flora & fauna).</p> <p>To avoid undesirable nutrient enhancement from surface run-off.</p> <p>To ensure compliance with <i>Environmental Planning & Assessment Act, 1979</i> including conditions of development consent.</p>	<p>Recorded application of the Precautionary Principle in decisions concerning native vegetation in the reserve to be based on:</p> <ul style="list-style-type: none"> • Evaluations to avoid, wherever practicable, serious or irreversible damage to the environment; and • An assessment of risk-weighted options of the various proposed actions. <p>Enforcement of appropriate environmental legislation including the <i>Environmental Planning & Assessment Act, 1979</i> & State Environmental Planning Policy No.19 <i>Bushland in Urban Areas</i> (SEPP 19) and associated guidelines.</p> <p>Legal action initiated by Council for breaches of environmental legislation or policies.</p>

Strategies & Actions for Land Category – Natural Area: Bushland

Policies, Strategies & Actions	Objectives	Performance Measures
<p>Manage fire risk by monitoring ground fuel loadings (quantity) and fuel state (condition) by completing a Bushfire Management Plan for the reserve.</p> <p>Request the NSW Fire Brigades to perform reduction burns in identified high fuel loading areas, if appropriate.</p> <p>No burning to be conducted within the riparian vegetation corridor & areas containing protected & rare flora within the reserve.</p> <p>Create fire buffer zones & plant fire resistant native species along the rear of private property boundaries that adjoin the reserve.</p>	<p>To manage & reduce potential fire hazards.</p> <p>To avoid adverse impacts on aquatic biota.</p> <p>To germinate soil stored native seed banks.</p> <p>To avoid inappropriate fire management practices.</p> <p>To protect public & private property assets.</p>	<p>Completed Bushfire Management Plan including fire risk assessment undertaken, ongoing bush regeneration and planting of fire resistant endemic species along the property boundaries.</p> <p>Compliance with the <i>Rural Fires Act, 1997</i> and other relevant legislation.</p> <p>Preparation & implementation of fire protection measures for riparian corridor, threatened & rare flora & fauna species within the reserve.</p> <p>Appropriate use of fire as a management tool.</p> <p>Protection of high value habitat zones for identified native fauna.</p> <p>Number of ecological burns conducted reported in the Kogarah SOE Report.</p>
<p>Where feasible, propagate plant species that have local provenance to the native and indigenous vegetation of the reserve.</p>	<p>To sustain the genetic heritage of the reserves flora.</p>	<p>Propagate local native and indigenous plant species for future use in the reserve.</p>
<p>Fence off the bushland area along the car park at the end of Algernon Street.</p> <p>Fix and maintain fencing along the car park at the end of Herbert Street</p> <p>Insure the similar or same fence style is maintained throughout the reserve (i.e. similar to that at the end of Herbert Street)</p> <p>Install a suitable metal gate at the top of the Herbert Street car park to stop illegal dumping.</p>	<p>To protect the bushland from illegal dumping and trampling.</p> <p>To protect the bushland from mower creep.</p> <p>To provide a defined boundary to delineate bushland regeneration area from park features.</p>	<p>The reserve has a continuous fencing design throughout.</p> <p>Install a suitable metal gate at the top of the Herbert Street car park to discourage illegal dumping.</p>

Strategies & Actions for Land Category – Natural Area: Bushland

Policies, Strategies & Actions	Objectives	Performance Measures
<p>Continue updating Council's previous <i>Fauna Survey, 2010</i> (prepared by Biosphere Environmental Consultants Pty Ltd) to identify changes in the presence or otherwise in the fauna biodiversity within the study area.</p> <p>Identify preferred fauna species biomarkers to measure improvements in the condition of the native fauna.</p> <p>Identify threatening processes & prepare management strategies.</p>	<p>To compile relevant data for natural resource management planning.</p> <p>To provide a measurable means of monitoring the scope, distribution & presence of fauna in the reserve.</p> <p>To be able to monitor changes in biodiversity over time.</p> <p>To identify gaps in fauna information & identify priority habitat areas.</p> <p>To assist in identifying threatening processes & impacts to fauna.</p> <p>To map specific habitat areas for selected fauna.</p> <p>To assist in seeking funding for conservation projects.</p>	<p>Completion of an updated map & assessment report on the reserves fauna biodiversity, distribution & preferred habitat, identifying threatening processes & outlining conservation & management strategies.</p> <p>Implementation of the recommendations of the Fauna Survey.</p> <p>Information & data used for the preparation of grants.</p> <p>Measurable biomarkers (e.g. generic diversity) identified & monitored.</p> <p>Noted in the Kogarah State of Environment Report.</p> <p>Recorded species numbers.</p>
<p>Monitor and control feral fauna species in the bushland such as foxes, rabbits, birds (e.g. Indian Mynas), dogs, cats & insects in the Order Hymenoptera e.g. feral honey bees, wasp, ants etc by:</p> <ul style="list-style-type: none"> Community education about feral and domestic animals & insects and their competitive and destructive impact on native flora and fauna. Introduce appropriate means to catch or eliminate feral animals & high-risk insects from the reserve. Lethal baits such as Strychnine, sodium monfluoroacetate (1080), etc are prohibited in the reserve. 	<p>To conserve & improve biodiversity.</p> <p>To prevent & control the introduction of feral and domestic animals in the bushland.</p> <p>To avoid the use of lethal baits in areas of high risk to humans, particularly children and companion animals.</p>	<p>Bushland rehabilitated with an increase in the number of native fauna species.</p> <p>Community becomes aware of the problems of feral animals within urban reserves.</p> <p>A reduction in the number of feral animals including foxes, dogs and cats being sighted and captured in the bushland area.</p> <p>Pest control to be carried out to a standard that aligns with the Vertebrate Pest Control Manual (NSW) & the requirements of the <i>Pesticides Act, 1999</i>.</p>

Red Fox (*Vulpes vulpes*)



Feral Cat (*Felis catus*)



Resource: www.nationalparks.nsw.gov.au

Strategies & Actions for Land Category – Natural Area: Bushland

Policies, Strategies & Actions	Objectives	Performance Measures
<p>Formalise the primary bushland trails within the bushland area. Particularly the south eastern section up to Algernon Street.</p> <p>Reduce the total number of bush trails by closing off non essential secondary trails within the bushland area and restore locally indigenous vegetation along the closed trails.</p> <p>Construct bush trails to points of interest or that present desirable vistas.</p> <p>Where feasible, provide access for persons with a disability.</p> <p>Where appropriate use elevated walkways for areas of intensive visitor use to prevent soil erosion & provide crossings for fauna.</p>	<p>To ensure the long-term viability of the bushland area.</p> <p>To improve, manage and control access through the bushland.</p> <p>To provide access to displays, educational signage about flora & fauna, aboriginal uses of plants and aboriginal history & mythology.</p> <p>Reduce disturbance within the reserve and to reduce soil erosion & compaction.</p>	<p>Formalised bush trails including educational signage.</p> <p>Confine park visitors to formalised trails.</p> <p>Implementation of appropriate erosion & soil management systems.</p> <p>Where feasible improve ease of access.</p> <p>Closure of secondary non-essential bush trails.</p> <p>Consultation with appropriate Indigenous agencies.</p>
<p>Enforce the protection of the soil & geological features of the reserve.</p> <p>No permanent structures will be provided on or near natural features likely to be affected by natural erosion.</p> <p>Actions are to be initiated so as to minimise or eliminate erosion.</p> <p>No actions taken to control either gradual or catastrophic natural erosion for the purposes of protecting natural features but where cultural sites are at risk an assessment of the conservation importance of the site will be determined prior to carrying out any works.</p> <p>Monitor natural erosion to determine any public safety issues to individuals or assets, including natural assets.</p>	<p>To protect & conserve native soils & the geological features of the surrounding Hawkesbury sandstone gully ridges & rock outcrops of the reserve.</p>	<p>Recorded application of the Precautionary Principle in that decision concerning soils & geological features in the reserve should be based on:</p> <ul style="list-style-type: none"> • Evaluations to avoid, wherever practicable, serious or irreversible damage to the environment caused by human interference; and • An assessment of risk-weighted options of the various proposed actions for erosion control. <p>Enforce the appropriate legislation for the protection of the environment, e.g. <i>Environmental Planning & Assessment Act, 1979</i>.</p>
<p>Market and assess the feasibility of any interest shown for a Oatley Point Reserve Volunteer Bushcare Group within the reserve.</p> <p>Provide promotion, funding & coordination for any Bushcare groups that are established.</p>	<p>To increase direct community participation in biodiversity & ecology management.</p> <p>To increase community awareness of ecological systems to the maintenance of biodiversity.</p>	<p>Market for Bushcare Volunteers and maintain a viable number to ensure an efficient & effective program.</p>

Strategies & Actions for Land Category – Natural Area: Bushland

Policies, Strategies & Actions	Objectives	Performance Measures
<p>Develop & implement interpretation & education policy & guidelines to increase resident & visitor understanding of natural & cultural heritage of the reserve. Investigate options such as:</p> <ul style="list-style-type: none"> • Publications, • Internet, • Park interpretive signage, • Park regulatory signage, • Educational Guided Tours, • Other means. 	<p>To educate residents & visitors alike as to the value of natural & cultural heritage.</p> <p>To protect and maintain culturally significant sites or sensitive environmental areas.</p> <p>To ensure the long-term viability of the bushland & its biodiversity.</p>	<p>Public awareness & access to natural & cultural heritage educational material through a variety of media and alternative opportunities.</p>
<p>Events/Communications Officer and Natural Resource Officer to Prepare a Oatley Point Annual Events Calendar focusing on environmental education specifically for annual environmentally significant events such as Biodiversity month etc.</p> <p>Council to liaise & network with the local schools, environmental groups & interested individuals to prepare educational material.</p>	<p>To inform the public of the importance of biodiversity conservation, the significance of Kogarah's natural history, the cultural significance of the reserves aboriginal heritage and appreciation of the amenity of natural areas within an urban environment.</p> <p>To deter anti-social environmental behaviour.</p>	<p>Percentage reduction in the level of dumped waste in the reserve.</p> <p>Reduction in the felling and clearing of the reserves vegetation.</p> <p>Reduction in vandalism to natural resources.</p>
<p>Minimise external impacts by:</p> <ul style="list-style-type: none"> • Community education to reduce the illegal dumping of green waste within the reserve. • Police and monitor the bushland area for illegal activities associated with the cutting down of or damaging to trees to improve views from private property. • Manage stormwater run-off from residential properties and roads by the creation of mini-detention ponds for sediment & nutrient collection. 	<p>To ensure the long-term viability of the bushland area.</p> <p>To protect significant and other native trees & vegetation.</p> <p>To limit eternal disturbance factors which will assist in maintaining the integrity of the bushland areas.</p>	<p>Community education leading to a reduction in:</p> <ul style="list-style-type: none"> -Dumped green waste including grass cuttings and garden clippings. -The number of trees damaged or destroyed to improve views. <p>Stormwater run-off channelled efficiently through the reserve into the Georges River.</p>
<p>Hollow bearing native trees especially mature eucalyptus species with large tree diameters at breast height (DBH) is a strong predictor of occupancy by terrestrial vertebrate fauna and are to be preserved throughout the bushland & riparian zones unless such trees pose a significant threat to public property or the public.</p> <p>Where pedestrian pathways, bush trails, etc pass under or near such trees then these pathways are to be re-routed to a safe distance from the tree(s).</p>	<p>To comply with the <i>Threatened Species Conservation Act, 1995</i> to manage and reduce the loss of significant hollow trees determined to be a Key Threatening Process (KTP) under the Act to native fauna.</p> <p>To avoid public risk liability.</p>	<p>Compliance with the <i>Threatened Species Conservation Act, 1995</i> to preserve significant hollow trees as places of native fauna habitat.</p> <p>No public risk liability claims.</p>

PART 7

7.0 COMMUNITY LAND - LAND CATEGORY - NATURAL AREA: WATERCOURSE

The following objectives and strategies apply to the areas of land categorised as 'Natural Area - Watercourse', shown in map 3. This category is comprised of an open stormwater swale that runs from Algernon Street to the Georges River through the reserve.

Core Objectives

The core objectives for the management of community land categorised as 'Natural Area - Watercourse' are:

- a) to manage watercourses so as to protect the biodiversity and ecological values of the in stream environment, particularly in relation to water quality and water flows;
- b) to manage watercourses so as to protect the riparian environment, particularly in relation to riparian vegetation and habitats and bank stabilisation;
- c) to restore degraded watercourses; and
- d) to promote community education, and community access to and use of the watercourse, without compromising the other core objectives of the category.

Policies, Strategies and Actions

Table 13, outlines the planning, management and development policies, strategies and actions for that proportion of reserve categorised as 'Natural Area - Watercourse'.

Table 13,

Strategies & Actions for Land Category – Natural Area: Watercourse

Policies, Strategies & Actions	Objectives	Performance Measures
Categorise that area of reserve identified as community land in map 3 as 'Natural Area – Watercourse'.	To comply with the provisions of Section 36, <i>Local Government Act, 1993</i> .	Land categorised in accordance with the provisions of the <i>Local Government Act, 1993</i> .
No leases or licenses to be issued unless inline with the Principals for Leasing & Licensing as set out in this plan of management.	To protect habitat from destruction, disturbance & damage. To provide natural resource educational opportunities.	Restrict the use of the watercourse to activities that are deemed not to be detrimental to the condition, status of the watercourse. Controlled access & use of specific areas of the riparian corridor. Enforcement of legislative, Kogarah parks policies & regulations.
Apply & implement the appropriate principles & practices applicable to the Oatley Bay catchment where	To contribute to a coordinated & consistent approach in the planning, management & development of	Recorded application of the Precautionary Principle in decisions concerning locally indigenous

Strategies & Actions for Land Category – Natural Area: Watercourse

Policies, Strategies & Actions	Objectives	Performance Measures
<p>the reserve is sited as outlined in the documents entitled:</p> <p><i>Lower Georges River Stormwater Management Plan, 1999, Sinclair Knight Merz.</i></p> <p><i>Georges River Catchment for Better Practice in Foreshore Works, Version 1, July 2004.</i></p> <p><i>Biodiversity of the Georges River Catchment: Aquatic Biodiversity, November 2004.</i></p>	<p>natural resources in the Georges River Catchments.</p>	<p>riparian vegetation in the reserve should be based on:</p> <ul style="list-style-type: none"> • Evaluations to avoid, wherever practicable, serious or irreversible damage to the environment; and • An assessment of risk-weighted actions of the various proposals. <p>Implementation of best practice natural resource planning & management for the reserve with regard to the regional approach ascribed for the Georges River Catchment.</p>
<p>Engage a qualified ecologist to prepare a riparian corridor study to determine appropriate stream & embankment management strategies. Including:</p> <ul style="list-style-type: none"> • Areas to be regenerated and revegetated. • Provide areas of habitat for terrestrial animals. • Stabilises the creeks embankments, bind the soil & protects against erosion & slumping of the embankment in time of high flows. • Act as a filter for sediments, phosphorous & organic nitrogen, improving the water quality entering into the Georges River. • Control weed growth that competes, suppresses or kills native and indigenous riparian vegetation & restricts habitat for native wildlife. 	<p>To identify appropriate management strategies that will result in favourable aquatic physiological conditions to sustain & encourage native aquatic life.</p> <p>To establish the boundary of the riparian corridor to provide appropriate management practices between riparian & transitional vegetation zones.</p> <p>To avoid the planting of inappropriate vegetation along embankments and to stabilise the creek banks.</p> <p>Control weeds in the riparian zone to conserve and assist in regenerating indigenous vegetation along the embankments.</p> <p>To assist in reducing the scouring of the creek bed & embankments.</p> <p>To increase habitat values for native wildlife and improve water quality.</p> <p>To improve the visual amenity of the riparian landscape.</p>	<p>Establishment & identification of riparian corridor for best practice management & planning.</p> <p>Identification of threatening processes & actions to manage these processes.</p> <p>Plant locally indigenous riparian vegetation to improved biodiversity.</p> <p>Adhere to Land and Property Management Authority guidelines for creek restorations and to State water quality standards for urban stormwater drainage systems.</p> <p>Reduction in the erosion of the creek embankment.</p> <p>Compliance with the: <i>Pesticides Act, 1999</i> Council's Pesticides Use Notification Plan, 2006.</p>
<p>Implement the strategies relevant to State Government's <i>Southern Sydney Catchment Blueprint Policy</i> for riparian and watercourse zones.</p>	<p>To contribute to and assist in achieving an ecologically healthy and productive catchment.</p> <p>To contribute and assist in achieving the objectives of the <i>Southern Sydney Catchment Blueprint Policy</i>.</p> <p>To address the following key issues identified in the <i>Southern Sydney Catchment Blueprint Policy</i>:</p> <ul style="list-style-type: none"> • Water quality • Land use and capability • Information exchange, network and access • Aquatic and terrestrial biodiversity • Community education and participation • Cultural heritage 	<p>Compliance with the <i>Southern Sydney Catchment Blueprint Policy</i>.</p> <p>Record of the implementation of those actions outlined in the Blueprint Policy that are applicable to the site and are Council's responsibility.</p> <p>Liaise with the Land and Property Management Authority concerning environmental protection of the foreshore adjoining the reserve.</p>

Strategies & Actions for Land Category – Natural Area: Watercourse

Policies, Strategies & Actions	Objectives	Performance Measures
	To protect the river foreshore and riparian vegetation of the adjoining Bays.	
Remove terrestrial and aquatic weeds in the ephemeral creek bed.	<p>To control terrestrial and aquatic weed infestation along the ephemeral creek bed.</p> <p>To maintain appropriate stream flows.</p> <p>To eliminate competition to the establishment & growth of native and indigenous plant species.</p> <p>To provide food for aquatic biota where necessary.</p> <p>To improve the visual amenity of the creek corridor.</p>	<p>Removal & control of aquatic weeds along the creek bed.</p> <p>No creek flow obstructions caused by the presence of terrestrial and /or aquatic weeds.</p> <p>Planting of locally indigenous riparian vegetation.</p> <p>Increase in the overall health of the ephemeral creek ecological systems.</p> <p>Compliance with the: <i>Noxious Weeds Act, 1993</i></p> <p>Measured rated improvement in the visual amenity of the creek corridor.</p>
<p>Updating & review of the <i>Total Earth Care Flora Biodiversity Study, 2009</i>. Map and assess the riparian corridor including terrestrial, emergence & aquatic floristics in terms of composition (population distribution), structure (species distribution) & function (contribution to health of ecosystem) at the patch (study area) & landscape scale (Georges River Catchment), identify threatening processes & propose management & conservation strategies.</p> <p>Identify preferred species biomarkers to measure improvements in the condition of the native vegetation in the riparian corridor.</p> <p>Include an assessment of the possible impacts of climatic change as predicted by the CSIRO to the flora of the reserve.</p>	<p>To compile relevant data for natural resource management planning.</p> <p>To identify gaps in flora information</p> <p>To identify priority habitat areas.</p> <p>To be able to monitor changes in vegetation structure & floristics over time.</p> <p>To assist in identifying threatening processes & impacts to flora.</p> <p>To provide a detailed map of the floristic composition & its distribution throughout the riparian corridor.</p> <p>To assist in seeking funding for conservation projects.</p>	<p>Implementation of best practice natural resource planning & management for the riparian corridor.</p> <p>Completion of a comprehensive vegetation map an assessment report on the aquatic biodiversity, identifying threatening processes & outlining conservation & management strategies.</p> <p>Implementation of the recommendations of the Vegetation Survey.</p> <p>Information & data used for the preparation of grants.</p> <p>Measurable riparian biomarkers identified & monitored.</p> <p>Findings included in the State of Environment Report.</p>
Instigate integrated catchments management as prescribed in the report entitled <i>Oatley Bay Estuary Management Plan, 2009</i> and <i>Oatley Bay Estuary Management Study 2009</i> .	<p>To provide an on ground holistic approach to catchment management.</p> <p>To achieve control and management of aquatic weeds.</p> <p>To improve the water quality for creek, estuarine & Georges River biota.</p>	Implementation of the recommendations of the <i>Oatley Bay Estuary Management Plan, 2009</i> and <i>Oatley Bay Estuary Management Study 2009</i> .
<p>Monitor the condition of the ephemeral creek embankments for erosion & slumping after high flows.</p> <p>Monitor the condition of the ephemeral creeks water quality.</p>	<p>To assess the impact of natural erosion and determine its consequences.</p> <p>To allow for water quality improvement works when necessary and to monitor the overall health of</p>	<p>Record and monitor changes to the creek flow rate and impacts on either embankment.</p> <p>Wherever possible do not instigate actions to interfere with natural weathering.</p>

Strategies & Actions for Land Category – Natural Area: Watercourse

Policies, Strategies & Actions	Objectives	Performance Measures
<p>Assess the nature, source & significance of any environmental risk & prepare tactics to reduce any identified risk to the environment.</p>	<p>the water course.</p> <p>To identify possible & probable sources of synthetic chemicals or other pollutants entering the riparian corridor & estuarine environment.</p> <p>To eliminate where possible synthetic chemical or other pollutants entering the riparian corridor & estuarine wetland.</p>	<p>Hazard & risk assessment completed in accordance with: ANZECC/ARMCANZ 2000: <i>Australia & New Zealand for Fresh & Marine Water Quality</i>, Publisher Australian & New Zealand Environment & Conservation Council & Agricultural & Resource Management Council of Australia & New Zealand, Canberra, Australia.</p> <p>Implement action to eliminate synthetic chemical intrusion into the riparian corridor & wetland.</p>
<p>Replace a suitable bridge over the creek to reduce disturbance to the soil and flora and fauna.</p>	<p>To provide safe passage throughout the reserve.</p> <p>To minimise erosion occurring along the creek line where it meets the walking track.</p>	<p>Installation of a bridge at the junction where the walking track and creek line meet.</p> <p>Structure meets the appropriate Australian Standards.</p>

PART 8

8.0 COMMUNITY LAND - LAND CATEGORY - NATURAL AREA: ESCARPMENT

The following policies, objectives and strategies apply to the areas of land categorised as 'Natural Area - Escarpment', shown in map 3. This category is comprised of the sandstone escarpment that runs approximately west to east along the centre of the reserve.

Core Objectives

The core objectives for the management of community land categorised as 'Natural Area - Escarpment' are:

- a) to protect any important geological, geomorphological or scenic features of the escarpment, and
- b) to facilitate safe community use and enjoyment of the escarpment.

Policies, Strategies and Actions

Table 14, outlines the planning, management and development policies, strategies and actions for that proportion of reserve categorised as 'Natural Area - Escarpment'.

Table 14
Policies, Strategies & Actions for Land Category – Natural Area: Escarpment

Policies, Strategies & Actions	Objectives	Performance Measures
Categorise that area of reserve identified in map 3 as 'Natural Area – Escarpment'.	To comply with the provisions of Section 36, <i>Local Government Act, 1993</i> .	Land categorised in accordance with the provisions of the <i>Local Government Act, 1993</i> .
Limit access to the escarpment to minimise damage, provide stability to the ecosystem and reduce hazard to users of the reserve.	Reduce the disturbance to this fragile ecosystem. To avoid public risk liability.	Decreased number of reports of disturbance in this zone. Decreased number of reports of accidents in this zone. Increase cover of locally indigenous vegetation throughout the zone.
Manage habitat potential of the escarpment and associate vegetation.	Provide a variety of habitat niches representative of this type of landscape. To maximise the potential of the reserve in terms of its green web links.	Recorded change of fauna & flora within the reserve. Reduced cover of weeds throughout the zone and increase the cover of locally indigenous flora. Wherever possible do not instigate actions to interfere with natural weathering.

Policies, Strategies & Actions for Land Category – Natural Area: Escarpment

Policies, Strategies & Actions	Objectives	Performance Measures
<p>Engage a qualified ecologist to prepare an ecological study to determine appropriate management strategies. Including:</p> <ul style="list-style-type: none"> • Provide management options to maximise the habitat potential within the reserve. • Provide areas of habitat for terrestrial animals. • Stabilises embankments, bind the soil & protects against erosion. 	<p>To provide appropriate management strategies for the zone to provide direction.</p> <p>Maintain and improve habitat for any flora or fauna that may be present within the reserve, especially those listed under the <i>Threatened Species Conservation Act 1995</i>.</p>	<p>Completion of an Ecological Study for the reserve which provides appropriate direction for the management of the site.</p> <p>Implemented recording procedure/database for the actions completed within the reserve.</p> <p>Report within Kogarah's SOE Report.</p>
<p>Control invasive plant species growth that competes, suppresses or kills native and indigenous vegetation & restricts habitat for native wildlife.</p>	<p>To minimise the invasive plant species cover throughout the zone.</p> <p>To improve the visual amenity of the landscape.</p> <p>To control invasive plant species in the zone to conserve and assist in regenerating locally indigenous vegetation along the escarpment.</p> <p>To meet the requirements under the <i>Noxious Weeds Act, 1993</i>.</p>	<p>Limited number of invasive plant species located within the zone.</p> <p>Reduction (meters² / hectare) of invasive cover over time.</p>

PART 9

9.0 STATE CROWN RESERVE

The portion of Crown Reserve land in Oatley Point Reserve consists of a 30m wide parcel that runs along the Georges River. This parcel of land includes the items of indigenous heritage significance therefore their management is to be included into the management policies, strategies and actions of this land.

Policies, Strategies and Actions

Table 15, outlines the preferred policies, strategies and actions for the management of Crown Reserve (45851) that comply with the objectives of s.11 entitled *Principles of Crown land management, Crown Lands Act 1989*.

Table 15

Policies, Strategies & Actions – Crown Land

Policies, Strategies & Actions	Objectives	Performance Measures
Apply the <i>Whole of Reserve Strategies</i> as outlined in Table 9, p.36 to the Crown land of reserve (45851).	To provide a consistent and holistic planning, management and development approach to the whole of the reserve.	Meet objectives for <i>Whole of Reserve Strategies</i> listed in Table 9 p.36.
Apply the policies, strategies and actions outlined in Table 12, p.44 <i>Natural Area-Bushland</i> to the Crown Reserve (45851).	To provide a consistent and holistic planning, management and development approach to the whole of the reserve. To implement best practice natural area land management.	Implementation of actions, strategies and the achievement of objectives and monitoring of outcomes for <i>Natural Area-Bushland</i> listed in Table 12, p.44.
Apply the policies, strategies and actions outlined in Table 13, p.51 <i>Natural Area- Watercourse</i> to the Crown Reserve (45851).	To ensure consistency in the management of habitat and biodiversity in the drainage swale. To implement the state rivers & estuary policy. To implement the southern Sydney <i>Catchments Blueprint Policy</i> . To comply with the <i>Rivers & Foreshores Improvement Act, 1948</i> .	Compliance with the Department of Lands <i>Sydney Catchments Blueprint Policy</i> . Compliance with the principles of the <i>Rivers & Foreshores Improvement Act 1948</i> . Compliance with the NSW State rivers & estuary policies. Compliance with the objects and principles of management as per ss.10-11 of the <i>Crown Lands Act, 1989</i> .
Implement protection measures of the Grey Mangrove's (<i>Avicennia marina</i>) present on site.	To ensure the protection & conservation of the Grey Mangrove's from inappropriate use. To conserve and protect the ecological processes within the riparian zone. To assist in the environmental education of the ecological role & function of natural creeks.	Monitor sediment build up within the macrophyte zones. Remove emergent undesirable vegetation to prevent colonising the foreshore & open water. Replace with native and indigenous riparian flora as required. Correct erosion & slumping as soon as detected.
Liaise with the Department of Conservation, Climate Change and	To protect and manage items of indigenous heritage significance.	Completion of a Conservation Management Plan or

Policies, Strategies & Actions – Crown Land

Policies, Strategies & Actions	Objectives	Performance Measures
<p>Water to prepare a Conservation Management Plan or management options for the items of indigenous heritage significance located within the reserve.</p>	<p>To adhere to legislative requirements under the <i>National Parks and Wildlife Acts 1974</i> and the <i>Environmental Planning and Assessments Act 1979</i>.</p>	<p>management options for items of indigenous heritage significance located within the reserve.</p> <p>Appropriate recommendations, strategies adopted and implemented.</p>

PART 10

10.0 FUNDING & SCHEDULE OF WORKS

The implementation of the policies, strategies and action outlined in the plan is dependent on the demands made on Council, its preferred priorities in any one financial year and the availability of resources each financial year. Possible external sources of funding should therefore be sought to assist Council in undertaking capital works associated with this plan.

External grants are generally available annually but may vary as to the sum of capital assistance available and the criteria for preferred projects being promoted by the funding body. It also should be noted that grants are not available to contribute towards maintenance works which remain the responsibility of Council. In addition grants are only available for a limited time and are not available every year. The availability of grants can be limited to only 12 months or may be available for a set period. Financial assistance from grants is generally confined to a dollar for dollar contribution. This requires Council to contribute 50% of the costs of the project and the funding body contributing the other 50%.

The total amount and number of grant funds that are available from any one source at any one time is very limited. The availability of grant funding is also competitive between all applicant Councils. Therefore, Council cannot entirely rely on grants to commence and supplement a project. However, it should apply to any grant body for assistance where any of its projects comply with the grant criteria. This plan of management can assist Council in the preparation of appropriate applications. In addition, the State and Federal Governments periodically introduce new grant programs. These may address a specific social, economic or environmental issue. Council will need to monitor these as they are introduced.

The consequence of a failure to adequately maintain a valuable asset is seen in the cost to bring that asset back online at a latter date, which is usually higher to the community. Further consequences result in a loss of public accountability in asset management as well as a reduction in asset service value. Ongoing maintenance and replacement of existing assets is preferred as a course of action where the asset has high community value and use. However if the rate of deterioration has exceeded reasonable ongoing maintenance expenditure, repair or replacement costs, the Council will need to give consideration to further action.

Ranking

The cited proprieties may be subject to change so as to accommodate a program of works that best achieves a constant means of development relative to available funding resources. However, where changes are proposed prior consideration needs to be given to the impact it may have on any other proposed future works so as to avoid unnecessary expenditure, duplication or inconvenience.

The schedule of works listed in the plan have been prioritised in a hierarchy expressed by the numeric symbols '1' indicating a 'First Order Priority', '2' a 'Second Order Priority' and '3' a 'Third Order Priority'. These are detailed in Table 16 below.

Table 16,

Priority Order Key

Priority	Description
1	First Order Priority Items allocated "1" are the preferred first items to be addressed in implementing the plan.
2	Second Order Priority Items allocated "2" are the preferred secondary items to be addressed in implementing the plan but can be upgraded or downgraded.
3	Third Order Priority Items allocated "3" are the preferred third order items to be addressed in implementing the plan and should be implemented after items "1" and "2" have been initiated. Items in this category may be upgraded to secondary items.

Schedule of Policies, Strategies and Actions

The following tables 17 to 23 presents the actions and priorities for the various land management categories defined by the *Local Government Act, 1993* and relative to the reserve Crown land as outlined in this plan of management. Tables 17 to 23 indicate the actions and their preferred priority.

Table 17

Priority	Policies, Strategies & Actions for 'Whole of Reserve'
1	In accordance within the objectives of each of the prescribed land categories avoid excessive development within those land categories where such development is permitted.
1	Adhere to the Principles of Leasing and Licensing as set out in table 8, to community land as permitted within the appropriate land categories.
1	Employ a registered surveyor to identify private property boundary encroachments into the reserve. Produce and adopt a Bushland Encroachment Policy or similar document to address encroachment issues.
1	All parcels of land indicated in map 2 & 3, be reviewed with the intention of rezoning them E2 – Environmental Conservation under the new or revised Kogarah Local Environment Plan.
1	Council to apply for capital assistance through the State and Federal Governments Grants or other opportunities for recreation, cultural, heritage and natural resource projects within the reserve.
1	Council to monitor the condition and use of its assets and infrastructure.
1	Complete a Bushfire Management Plan
2	Improve direction by providing appropriate standardised signage throughout the reserve. Install signage for information, environmental & heritage interpretation. Provides information on the reserve's regulations.
2	With the assistance of the community and organisations such as schools prepare a range of promotional and educational material relevant to the reserve.
2	Prohibit dog off leash areas within the reserve.
2	Liaise with the local school, environmental groups, Kogarah Bushcare Volunteers and individuals interested in environmental issues to organise events in the reserve.
2	Provide Green Web links via streetscapes leading to and around the reserve by planting native tree species.

Table 18,

Priority	Policies, Strategies & Actions for Land Category 'General Community Use'
1	Categorise that area of reserve identified in map 3 as 'General Community Use'.
1	Authorise the licensing of community facilities in accordance with the core objectives of the land category and as permitted by this plan of management.
1	Maintain and upgrade the vehicle access road off Herbert Street.
1	Maintain the vehicle access and parking area off Algernon Street.
1	Upgrade and formalise the lower portion of the parking area off Herbert Street in Oatley Point Reserve.
1	Installation of appropriate regulatory signs within the reserve.
2	Initiate reserv surveys using staff, students, voluntary assistance or combination.



Plate 3, 'General Community Use' land – Car park at the corner of Algernon & Phipps Street

Table 19

Priority	Policies, Strategies & Actions for Land Category 'Park'
1	Categorise that area of reserve identified on map 3 as 'Park'.
1	Permit low impact passive events & activities in that area of the reserve categorised 'Park' as determined by the core objectives for the land category, council & this plan of management. Authorise the licensing of low impact community and special events, social, recreational, educational & cultural activities.
1	Maintain the playground at the top of Oatley Point Reserve allowing for the changing needs of the local community.
2	Design outdoor furniture, signs & utilities to be visually coordinated to enhance the landscape character of the reserve as expressed by the dominant theme, colours & textures of the site.

Priority	Policies, Strategies & Actions for Land Category 'Park'
2	To protect the local nature of the reserve and as a precaution to prevent bushfire incidents prohibit the use of BBQs (both installed and portable) within reserve.
2	Where appropriate construct internal pedestrian pathways in identified high use tracks at grades of 1:14 or better for persons with a disability & for pram use linking major recreation facilities and amenities.



Plate 4, 'Park' land – Playground at Oatley Point Reserve

Table 20

Priority	Policies, Strategies & Actions for Land Category 'Natural Area – Bushland'
1	Categorise the area of reserve identified on map 3 as 'Natural Area – Bushland'.
1	No leases or licenses to be issued unless inline with the Principals for Leasing & Licensing as set out in this plan of management.
1	Compile a significant tree register.
1	Identified & map any rare or threatened species in the reserve. Council to liaise with relevant stakeholders to prepare ecological conservation strategies for these areas.
1	Update & review <i>The Kogarah Flora Biodiversity Study, 2009</i> relevant to the study area by preparing a Vegetation Management Plan. Identify preferred native & indigenous flora biomarkers to measure changes in the condition of the native vegetation. Include an assessment of the possible impacts of climatic change as predicted by the CSIRO for the Sydney Region to the flora of the reserve.

Priority	Policies, Strategies & Actions for Land Category 'Natural Area – Bushland'
1	<p>As part of the flora study prepare a weeds management strategy for the reserve & identify and prioritise target weeds.</p> <p>Prevent the introduction of new weed species and eliminate exotic, invasive & noxious weeds by:</p> <ul style="list-style-type: none"> • Implementing bush regeneration & revegetation programs by both contract & voluntary means. • Implement stormwater drainage management systems within the reserve. • Implement action to police & remove illegally dumped green waste & other materials that could be potential exotic or noxious seed carriers in the reserve.
1	<p>Reduce green space fragmentation by providing green-web infill where appropriate and feasible.</p> <p>Promote the planting of low fire ignition native vegetation on residential properties that adjoin the bushland.</p> <p>Plant native species trees in adjoining streetscapes.</p>
1	<p>Protect the aesthetic & scenic values of the bushland by not permitting unsympathetic development design within those areas of the reserve categorised as natural areas.</p>
1	<p>Where feasible, protect native vegetation & habitat during development works by improved enforcement of the guidelines for bushland protection during such works.</p> <p>Improve the efficiency & effectiveness of site inspection processes & procedures where Development approval has been granted within the reserve or on adjoining private properties to the reserve.</p>
1	<p>Manage fire risk by monitoring ground fuel loadings (quantity) and fuel state (condition) by completing a Bushfire Management Plan for the reserve.</p> <p>Request the NSW Fire Brigades to perform reduction burns in identified high fuel loading areas, if appropriate.</p> <p>No burning is to be conducted within the riparian vegetation corridor & areas containing protected & rare flora within the reserve.</p> <p>Create fire buffer zones & plant fire resistant native species along the rear of private property boundaries that adjoin the reserve.</p>
1	<p>Fence off the bushland area along the car park at the end of Algernon Street.</p> <p>Fix and maintain fencing along the car park at the end of Herbert Street.</p> <p>Insure the similar or same fence style is maintained throughout the reserve (i.e. similar to that at the end of Herbert Street).</p> <p>Install a suitable metal gate at the top of the Herbert Street car park to stop illegal dumping.</p>
1	<p>Continue updating Council's previous <i>Fauna Survey, 2010</i> (prepared by Biosphere Environmental Consultants Pty Ltd) to identify changes in the presence or otherwise in the fauna biodiversity within the study area.</p> <p>Identify preferred fauna species biomarkers to measure improvements in the condition of the native fauna.</p> <p>Identify threatening processes & prepare management strategies.</p>
1	<p>Monitor and control feral fauna species in the bushland such as foxes, rabbits, birds (e.g. Indian Mynas), dogs, cats & insects in the Order Hymenoptera e.g. feral honey bees, wasp, ants etc by:</p> <ul style="list-style-type: none"> • Community education about feral and domestic animals & insects and their competitive and destructive impact on native flora and fauna. • Introduce appropriate means to catch or eliminate feral animals & high-risk insects from the reserve. • Lethal baits such as Strychnine, sodium monfluoroacetate (1080), etc are prohibited in the reserve.
1	<p>Formalise the primary bushland trails within the bushland area. Particularly the south eastern section up to Algernon Street.</p> <p>Reduce the total number of bush trails by closing off non essential secondary trails within the bushland area and restore locally indigenous vegetation along the closed trails.</p> <p>Construct bush trails to points of interest or that present desirable vistas.</p> <p>Where feasible, provide access for persons with a disability.</p> <p>Where appropriate use elevated walkways for areas of intensive visitor use to prevent soil erosion & provide crossings for fauna.</p>

Priority	Policies, Strategies & Actions for Land Category 'Natural Area – Bushland'
1	<p>Enforce the protection of the soil & geological features of the reserve. No permanent structures will be provided on or near natural features likely to be affected by natural erosion. Actions are to be initiated so as to minimise or eliminate erosion. No actions taken to control either gradual or catastrophic natural erosion for the purposes of protecting natural features but where cultural sites are at risk an assessment of the conservation importance of the site will be determined prior to carrying out any works. Monitor natural erosion to determine any public safety issues to individuals or assets, including natural assets.</p>
1	<p>Minimise external impacts by:</p> <ul style="list-style-type: none"> • Community education to reduce the illegal dumping of green waste within the reserve. • Police and monitor the bushland area for illegal activities associated with the cutting down of or damaging to trees to improve views from private property. <p>Manage stormwater run-off from residential properties and roads by the creation of mini-detention ponds for sediment & nutrient collection.</p>
2	<p>Develop & implement interpretation & education policy & guidelines to increase resident & visitor understanding of natural & cultural heritage of the reserve. Investigate options such as:</p> <ul style="list-style-type: none"> • Publications, • Internet, • Park interpretive signage, • Park regulatory signage, • Educational Guided Tours, • Other means.
2	<p>Events/Communications Officer and Natural Resource Officer to prepare a Oatley Point Annual Events Calendar focusing on environmental education specifically for annual environmentally significant events such as Biodiversity month etc. Council to liaise & network with the local schools, environmental groups & interested individuals to prepare educational material.</p>
2	<p>Market and assess the feasibility of any interest shown for an Oatley Point Reserve Volunteer Bushcare Group within the reserve. Provide promotion, funding & coordination for any Bushcare groups that are established.</p>
2	<p>Where feasible, propagate plant species that have local provenance to the native and indigenous vegetation of the reserve.</p>
2	<p>Hollow bearing native trees especially mature eucalyptus species with large tree diameters at breast height (DBH) is a strong predictor of occupancy by terrestrial vertebrate fauna and are to be preserved throughout the bushland & riparian zones unless such trees pose a significant threat to public property or the public.</p> <p>Where pedestrian pathways, bush trails, etc pass under or near such trees then these pathways are to be re-routed to a safe distance from the tree(s).</p>
2	<p>Utilise local knowledge of fauna & flora species to assist in secondary research for surveys & studies outlined in this plan.</p>

Table 21

Priority	Policies, Strategies & Actions for Land Category 'Natural Area – Watercourse'
1	<p>Categorise that area of reserve identified as community land in map 3 as 'Natural Area – Watercourse'.</p>
1	<p>No leases or licenses to be issued unless inline with the Principals for Leasing & Licensing as set out in this plan of management.</p>
1	<p>Apply & implement the appropriate principles & practices applicable to the Oatley Bay catchment where the reserve is sited as outlined in the documents entitled: <i>Lower Georges River Stormwater Management Plan, 1999, Sinclair Knight Merz.</i> <i>Georges River Catchment for Better Practice in Foreshore Works, Version 1, July 2004.</i> <i>Biodiversity of the Georges River Catchment: Aquatic Biodiversity, November 2004.</i></p>
1	<p>Engage a qualified ecologist to prepare a riparian corridor study to determine appropriate stream & embankment management strategies. Including:</p> <ul style="list-style-type: none"> • Areas to be regenerated and revegetated. • Provide areas of habitat for terrestrial animals. • Stabilises the creeks embankments, bind the soil & protects against erosion & slumping of the embankment in time of high flows. • Act as a filter for sediments, phosphorous & organic nitrogen, improving the water

Priority	Policies, Strategies & Actions for Land Category 'Natural Area – Watercourse'
	<p>quality entering into the Georges River.</p> <ul style="list-style-type: none"> Control weed growth that competes, suppresses or kills native and indigenous riparian vegetation & restricts habitat for native wildlife.
1	Implement the strategies relevant to State Government's <i>Southern Sydney Catchment Blueprint Policy</i> for riparian and watercourse zones.
1	Remove terrestrial and aquatic weeds in the ephemeral creek bed.
1	Updating & review of the <i>Total Earth Care Flora Biodiversity Study, 2009</i> . Map and assess the riparian corridor including terrestrial, emergence & aquatic floristics in terms of composition (population distribution), structure (species distribution) & function (contribution to health of ecosystem) at the patch (study area) & landscape scale (Georges River Catchment), identify threatening processes & propose management & conservation strategies. Identify preferred species biomarkers to measure improvements in the condition of the native vegetation in the riparian corridor. Include an assessment of the possible impacts of climatic change as predicted by the CSIRO to the flora of the reserve.
1	Instigate integrated catchments management as prescribed in the report entitled <i>Oatley Bay Estuary Management Plan, 2009</i> and <i>Oatley Bay Estuary Management Study 2009</i> .
2	Monitor the condition of the ephemeral creek embankments for erosion & slumping after high flows. Monitor the condition of the ephemeral creeks water quality.
2	Assess the nature, source & significance of any environmental risk & prepare tactics to reduce any identified risk to the environment.
2	Replace a suitable bridge over the creek to reduce disturbance to the soil and flora and fauna.



Plate 5, 'Natural Area - Watercourse' land – Drainage point off Algernon Street

Table 22

Priority	Policies, Strategies & Actions for Land Category 'Natural Area – Escarpment'
1	Categorise that area of reserve identified in map 3 as 'Natural Area – Escarpment'.
1	Limit access to the escarpment to minimise damage, provide stability to the ecosystem and reduce hazard to users of the reserve.
1	Manage habitat potential of the escarpment and associate vegetation.
1	Engage a qualified ecologist to prepare an ecological study to determine appropriate management strategies. Including: <ul style="list-style-type: none"> • Provide management options to maximise the habitat potential within the reserve. • Provide areas of habitat for terrestrial animals. • Stabilises embankments, bind the soil & protects against erosion.
1	Control invasive plant species growth that competes, suppresses or kills native and indigenous vegetation & restricts habitat for native wildlife.



Plate 6, 'Natural Area - Escarpment'

Table 23

Priority	Policies, Strategies & Actions for Reserve Crown Land
1	Apply the <i>Whole of Park Strategies</i> as outlined in Table 9, p.35 to the Crown land of reserve (45851).
1	Apply the policies, strategies and actions outlined in Table 12, p.43 <i>Natural Area-Bushland</i> to the Crown land of reserve (45851).
1	Apply the policies, strategies and actions outlined in Table 13, p.50 <i>Natural Area-Watercourse</i> to the Crown land of reserve (45851).
1	Implement protection measures of the Grey Mangrove's (<i>Avicennia marina</i>) present on site.
1	Liaise with the Department of Conservation, Climate Change and Water to prepare a Conservation Management Plan or management options for the items of indigenous heritage significance located within the reserve.

APPENDIX 1:

PLANNING & DEVELOPMENT

Planning and Development

The following section outlines a number of planning instruments, environmental policies and relevant legislation that complements the current and proposed park, environmental and conservational management options outlined within this plan of management. The following instruments, policies and legislation have been noted and should be further considered for any amendments or revisions of this plan. All policies can be viewed on Councils website or by contacting Councils Customer Service Centre. All NSW Legislation can be viewed at <http://www.austlii.edu.au>.

Dividing Fences Act, 1991

Under the provisions of the *Dividing Fences Act, 1991*, Section 25(1) all Councils are exempt from the payment of a contribution towards the installation or replacement of a fence on private land that adjoins public property in Council's ownership, care, control and management.

Companion Animals Act, 1998

Council recognises the importance of residents having pets and the need to provide off the leash exercise to maintain the health of the animal and has subsequently completed a *Companion Animal Management Plan for the City of Kogarah*, In line with the *Companion Animals Act, 1998*. As Oatley Point Reserve is primarily a natural bushland area there is no plan to make any part of the Reserve into a leash free area. This is due to the known affects that domestic animals, both dogs and cats, can have on the integrity of these natural areas (Buchanan1996; White 2010). All animals are required to be on a leash at all times while in Oatley Point Reserve and any of the Parks and Reserves mentioned in table 24 can be utilised if a leash free area is required.

Table 24.

LOCAL PARKS WITH PROVISION FOR OFF LEASH DOG EXERCISE AREAS

Park Name	Street	Suburb	Times	Restrictions
Arrowsmith Reserve	King Georges Road	Hurstville	24 hours	Nil
Empress Street Reserve	George Street	Hurstville	6:00pm to 8:00am daily	Not permitted within 10 metres of playgrounds and exercise areas
Hogben Park	Railway Parade	Kogarah	24 hours	Not permitted within 10 metres of playgrounds and exercise areas
Moore Park	Ferry Street	Beverley Park	24 hours	Nil

ADDITIONAL RELEVANT COUNCIL POLICIES & PLANS

- Kogarah Open Space Policy
- Youth Recreational Facilities Policy
- Procurement Policy
- Need for a Playground Policy
- Georges River Estuary Management Plan

- Lower Georges River Urban Sustainability Initiative
- Kogarah City Council Flora Biodiversity Study 2009
- Neverfail Bay and Oatley Point Reserve Fauna Study 2010
- Foreshore Development Policy
- Development Assessment Criteria

APPENDIX 2:

LAND ASSESSMENT

Site condition and features

The primary function for describing and assessing the land's assets and resources is to identify the principal attributes of the land within the various management zones, determine the condition of both the natural elements and man-made structures in the reserve as well as identify constraints. The process provides the basis for ascribing land categories, identifying land management issues, determining objectives to supplement the core objectives for each category of land and for determining the appropriate action plan and performance measures as required by the *Local Government Act, 1993*. The following outlines the lands general descriptive factors such as landform, geology and soils and hydrology.

Climatic Conditions

The climatic conditions impacting on the reserve are typical Sydney moderate temperate climate having a mean annual rainfall of 1100mm and temperatures ranging from 8° - 24° degrees Celsius (Bureau of Meteorology, 2000). Seasonal rainfall is variable and unpredictable. Winds are predominantly southeast in the winter and north-easterly in the summer. The climatic conditions favour the introduction of environmentally sustainable energy and water management systems.

Hydrology (Stormwater, presence & monitoring)

Council has the responsibility for managing its urban stormwater through the provisions of the *Local Government Act, 1993*, the *Environmental Planning & Assessment Act, 1979 (as amended)* and the *Protection of the Environment Operations Act, 1997*. Owing to the reserve being sited on the foreshores of the Georges River, Council must also give consideration the requirements of the *Fisheries Management Act, 1994* to ensure the protection of marine life in the intertidal area and Kogarah Bay.

There are several aspects of the site's hydrology that need to be addressed in the plan in terms of the quality of surface run-off water and stormwater drainage.

Stormwater

Owing to human disturbance, stormwater run-off has become a source for carrying pollutants to the receiving waters of Oatley Bay. Within Oatley Point Reserve there is one drainage point which services the lower end of Algernon Street and the car park on the corner of Algernon and Phipps Street. The drainage point flows through the south east of the reserve before entering the Georges River. The drainage swale continues to create a large amount of disturbance due to the resulting increased nutrients and moisture within the reserve.

Currently there is no stormwater monitoring within Oatley Point Reserve nor does Council have any ongoing monitoring program to detect the presence of any heavy

metals, oils, phosphorus, nitrogen or other chemical compositions that may be present in stormwater discharged from its channel into Oatley Bay. A monitoring system that includes physical and biological analysis of the aquatic environment and any impacts on the relationships between biological systems such as algae, invertebrates, fishes, etc needs to be initiated in the Oatley Bay catchment. The monitoring system should aim to detect, identify and assist in determining remedial action and police any non-visible hazardous or toxic discharges into the waterways.

Soil Type

The main soil type within the reserve is Hawkesbury Sandstone which is visible in the form of the sandstone escarpment that runs west east through the middle of the reserve. Hawkesbury sandstone based soils are quartz rich rock bound by ferriferous clays yielding light coloured sandy loams that are strongly acidic and generally deficient in phosphate and nitrogen which influences the vegetation types within the reserve. The soils have low available water capacities a condition that best suits local native and indigenous vegetation (Chapman & Murphy:1997).

Fauna

The native vegetation in the reserve supports a range of native avifauna (White, 2010) including birds like the Eastern Rosella and White-plumed Honeyeater, reptiles such as the Eastern Water Skink and the Southern Leaf-tailed Gecko as well as the Ring-tailed and Brush tailed Possums. A Fauna study was completed in 1998 by Biosphere Environmental Consultants Pty Ltd which was repeated in 2010. The earlier study recorded a population of Sugar Gliders (*Petaurus breviceps*) and Brown Antechinus (*Antechinus stuartii*) at Oatley Point Reserve, with the Brown Antechinus recorded in 2010 also. The Sugar Gliders (*Petaurus breviceps*) were not recorded in the 2010 survey but the existence of recent feeding marks may indicate their continued presence on site. Additional species have been recorded and are available for viewing at the NSW National Parks and Wildlife Service 'Atlas of NSW Wildlife' at <http://wildlifeatlas.nationalparks.nsw.gov.au/wildlifeatlas/watlas.jsp>

In addition, both the Common Eastern Froglet and Peron's Tree Frog are also found in the reserve (White, 2010). Out of all the native fauna species present in the reserve, birds are the most predominant. Full species list are available at the request of Council or on the council website www.kogarah.nsw.gov.au

The ground dwelling native animals have almost disappeared from the area, with only two species of frog, five species of skinks, one Gecko and one species of Antechinus being recorded. The only other ground dwelling animals found are non-native species and include foxes, dogs, cats, rats and mice (White, 2010). Further comprehensive studies should be completed to allow comparisons over time and to create hypothesis about the effectiveness of past land management works to provide future direction.

Flora

The 2.8 hectare Reserve is largely covered with natural remnant bushland with the eastern boarder of the Reserve facing Phipps Street and the remaining adjoining the Georges River. Predominantly the vegetation type is Sydney Sandstone Gully Forest which has a well developed canopy dominated by *Angophora costata* (Sydney Red Gum), *Eucalyptus paniculata* ssp *paniculata* (Grey Ironbark) and *Eucalyptus pilularis* (Blackbutt) (TEC, 2009). There is also a small Mangrove community located at the northern of the reserve dominated by *Avicennia marina* spp *australasica*.

There are more than 100 species of locally native remnant species recorded within Oatley Point Reserve. A flora species list is available at the request of Council and contains all the known flora species present at the site.

Culturally significant features

Information from the AHIMS system administered by DECCW has provided information including the site of several indigenous heritage items located within the reserve. Information regarding these features has been covered in the Governance section under Policies and Legislation: Native Title and Heritage Conservation.

Impacts on the Bushland

Impacts of urban bushlands have been covered in the Governance section under Policies and Legislation: Management Initiatives, Natural Resource Management. These disturbances promote the growth of invasive weed species which create further negatively impact the reserve including:

- Competition for resources including sunlight, moisture and nutrients;
- Prevention of recruitment, reducing or preventing the establishment of native plant species;
- Alteration of geomorphological processes by prolific growth in exotic and noxious weeds;
- Alteration to hydrological cycles by invasive plant species that lower water tables or change watercourses;
- Alteration of nutrient content of soils;
- Changes to the abundance of indigenous flora caused by the modification of indigenous plant population sizes subsequently impacting on native fauna habitat and ecosystem cycles (BMURCP, 2003).

The greatest intensity of these weeds is found on the disturbed area behind the residential properties that surround the reserve and along the drainage swale. Currently, Council engages contractors to carry out bush regeneration and restoration works in the reserve to:

- Remove invasive species present within the reserve to;
 - Restore or recreate a suitable habitat to either attract or maintain native flora and fauna biodiversity;
 - Creating a green corridor for native fauna as habitat and as a source of sustenance;
 - Maintaining an ecological community that provides ecological or aesthetic services that enhances historical features;
 - Reversing historical anthropogenic damage to the ecosystem; and
 - Increase public awareness of the value of natural resources.

Other impacts on the bushland include:

- The dumping of lawn, soil and exotic vegetation waste in the reserve;
- Change in distribution and area of selected ecosystems;
- Illegal clearing or wilful destruction of native, indigenous and remnant vegetation;

- Environmental stresses including increased air and water pollution;
- Introduced plant diseases;
- The illegal removal of natural rock and soils;
- Urban encroachment into the reserve.

APPENDIX 3:

OATLEY POINT RESERVE COMMUNITY SURVEY

Distribution of Community Survey

As part of the consultation process Council issued 70 local residents with self-returned addressed envelopes to those residential properties in the following streets adjacent, opposite and near the reserve:

- Herbert Street (some residents)
- Clifton Street
- Algernon Street (some residents)
- Phipps Street

Table 25, Community Survey response to question 14, Street

Street Surveyed	Tally	% Responded (of total amount)	% Responded (of total sent to the street)
Algernon St	17	61	47
Herbert St	7	25	32
Clifton St	1	4	33
Annette St	2	7	15
Phipps St	1	4	33
Totals	28	100	N/A

Survey Return Rate

The residents in the survey area were determined to be the most likely passive users of the reserve and or have knowledge of the reserve and its issues. Council received a 36% return rate, refer to table 26.

Table 26, Response to Community Survey

	Tally	%
Total number of Survey Questionnaires	77	100
Total number of Responses	28	36

Frequency of Visitation

The table below shows the frequency of the respondents that visit the reserve with most of the respondents visiting either weekly (39%) or seasonally (36%). With none of the respondents indicating that they never visited the reserves (0%).

Table 27, Frequency of Visitation

Frequency of Visitation	Tally	% Responded
Weekly	11	39
Monthly	7	25
Seasonally	10	36
Never	0	0
Sum	28	100

Season of Visitation

The table below shows the respondents preferred seasons to visit the reserve with the most visiting either during summer (36%) or spring (36%). None (0%) of the respondents indicated that they visit the reserve in the winter and (28%) visited in Autumn.

Table 28, Season of Visitation

Season of Visitation	Tally	% Responded
Summer	23	36
Autumn	18	28
Spring	23	36
Winter	0	0
Sum	64	100

Dominate Age Groups of Respondents

In all, of the twenty-eight (28) people who responded to the survey 12 (42%) were male and 16 (57%) were female. Of those that responded to the survey 39% fell into the 46-55 age group with no one represented from the <18 to 35 age group, refer to table 29.

Table 29, Community Survey response to question 13, Age

Street Surveyed	Tally	% Responded
<18	0	0
18-25	0	0
26-35	0	0
36-45	5	18
46-55	11	39
56-65	5	18
66-75	3	11
76+	4	14
Totals	28	100

Parkland User Travel Type

Some 96.5% of people indicated that they walked to the reserve. With no one indicating that they went in a friend's vehicle (0%) or rode a bike (0%).

Table 30, Community Survey response to question 7, Method of Travel

Mode of travel to the Reserve	Tally	% Responded
Private vehicle	1	3.5
Friends vehicle	0	0
Walk	27	96.5
Ride a bike	0	0
Sum	28	100

Socialisation

Local residence that responded to the survey indicated that they visit the reserve with family and friends of a similar age group (26.3%). Some 19.3% of respondents indicated that they visited the reserve alone, refer to table 31.

Table 31, Community Survey response to question 8, Socialisation

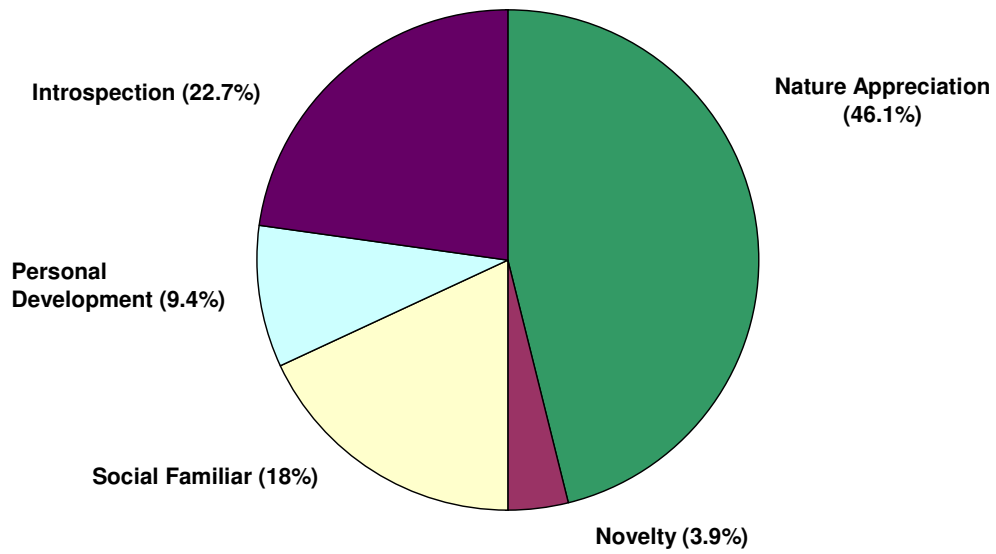
Street Surveyed	Tally	%
Alone	11	19.3
With a pet	5	8.8
With family and friends of a similar age group	15	26.3
With family and/or friends of a much different age group	7	12.3
With one or more children under 6 years of age	9	15.8
With one or more children between 7-11 years of age	6	10.5
In the company of teenagers between 12-19 years	2	3.5
With aged and/or persons with a disability	2	3.5
Totals	57	100.0

Reasons for Visitation by Local Residents

Of the total number of people surveyed some 46.1% responded that the reason they visit the reserve is to appreciate its natural settings. Items in this category include 'to view the scenery', 'be close to nature' and 'Release tension', refer to figure 1. The reserve setting includes extensive areas of regenerated and natural bushland. The restoration of the bushland has significantly contributed to the scenic amenity of the reserve and from the survey results it is valued as an important feature.

The second highest reason was for introspection (22.7% of respondents) and includes items such as 'just do your own thing', 'be away from family and friends', 'think about important issues and problems' and 'rest physically and relax'. This indicates the importance of the sense of place that a reserve can provide to the visitors.

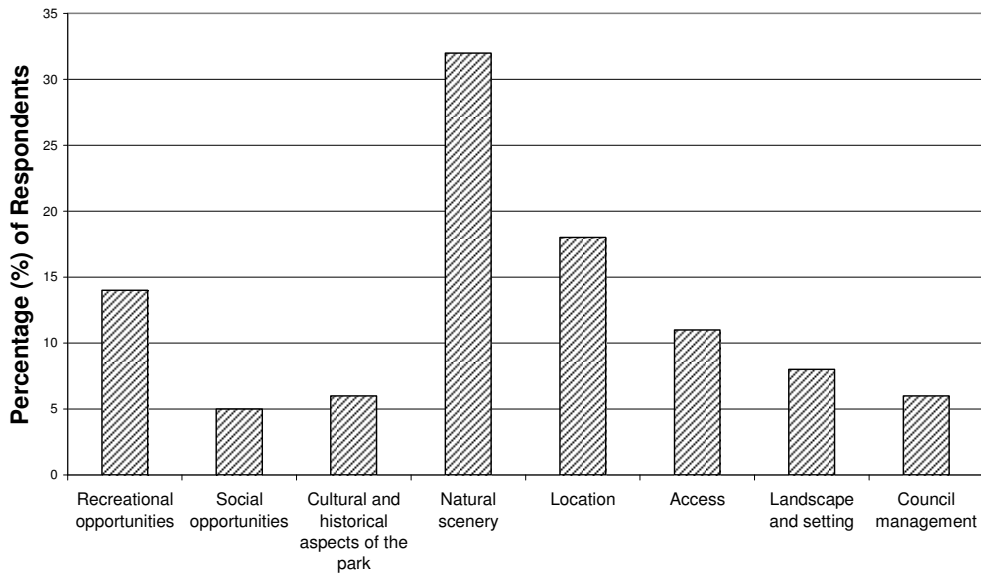
Figure 1, Reasons for Visitation by Local Residents



Important Values of the Reserve

Respondents were asked 'What is the most important values to you about this reserve?' and it was found that the highest was natural scenery (32%), location (17%) and recreational opportunities (14%).

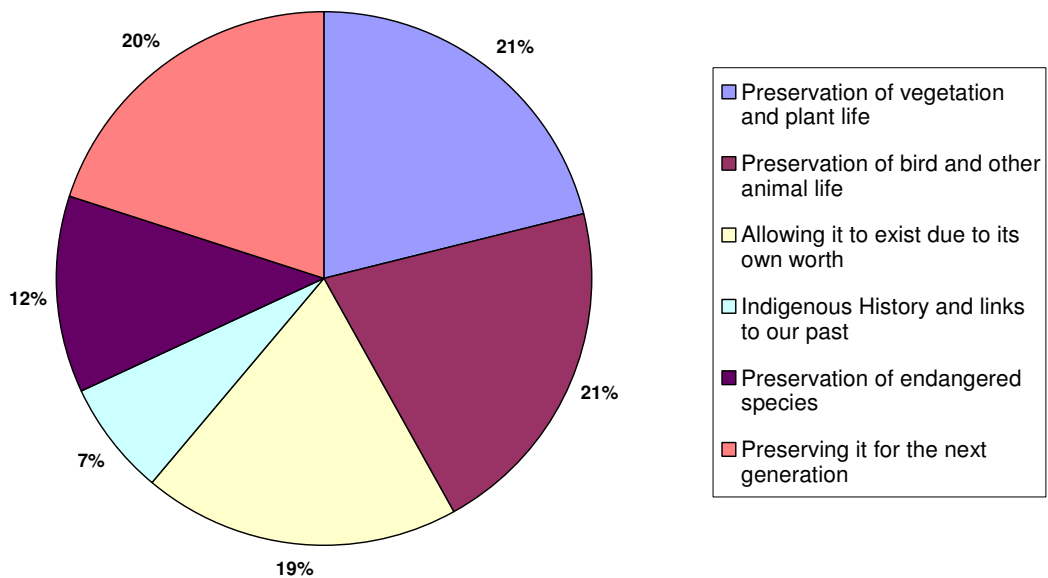
Figure 2, Important Values of the Reserve



Important Natural Aspects

Respondents were asked 'What natural aspects of the reserve are most important to you?' and it was found that the highest was, preservation of vegetation and plant life (21%), preservation of bird and other animal life (21%) and preservation for the next generation (Intergenerational equity) (20%) and allowing it to exist due to its own worth (19%).

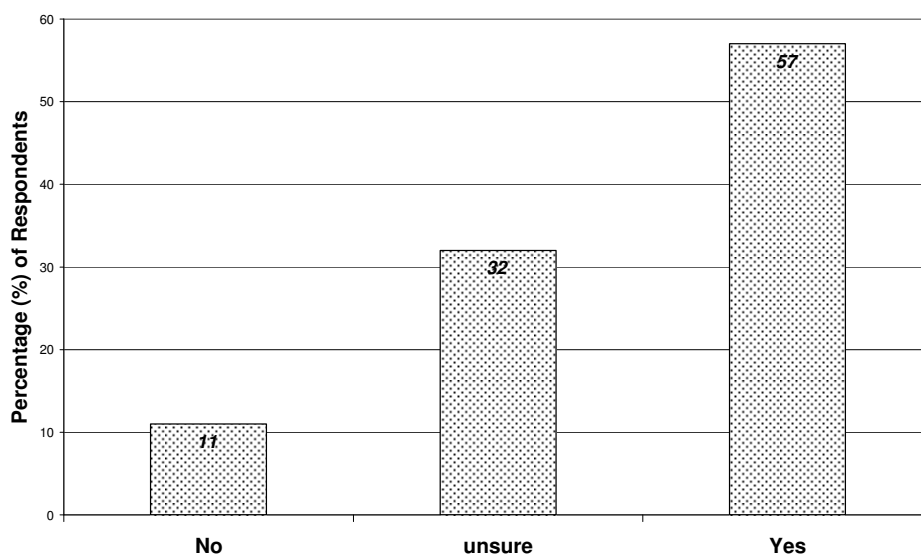
Figure 3 Important Natural Aspects of the Reserve



Feeling of Safety within the Reserve

When asked if they felt safe within the reserve 57% of respondents answered yes, 32% were unsure and only 11% indicated that they did not feel safe within the reserve as shown in Figure 4 below.

Figure 4, Feeling of Safety within the Reserve

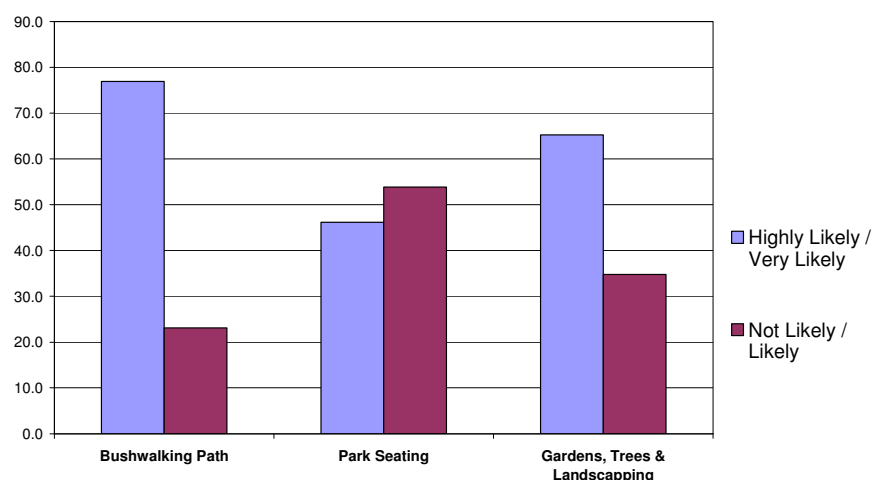


Facilities that would most likely be used if available in the Reserve

Preferred additional facilities were rated as either 'Very Likely' or 'Highly Likely' to be used by respondents were as follows:

- Bushwalking path – 71% of respondents stated that they would be very or highly likely to use a bushwalking track and 21% stated they would be not likely or likely to use this facility.
- Gardens, Trees and Landscaping – 65% of respondents stated that they would be very or highly likely to use Gardens, Trees and Landscaping while 56% stated they would be not likely or likely to use this facility.

Figure 5, Preferred facilities within Oatley Point Reserve



Undesirable Facilities

Respondents were asked to list facilities that they would NOT like to see in the reserve, the highest being 'BBQ's, table and chairs, picnic facilities' (9 responses), 'Buildings or commercial development (inc café)' (7 responses) and Toilets (5 responses).

Table 32, Facilities that are **NOT** wanted in Oatley Point Reserve

Community Survey Results	
Item	Tally
Extensive formalised stairs and walkways	2
Organised facilities or facilities	2
Buildings or commercial development (inc café)	<u>7</u>
Anything to encourage loutish behaviour / Vandalism (inc litter)	4
Sports fields, sporting activities, swings etc	3
Toilets	<u>5</u>
BBQ's, table and chairs, picnic facilities	<u>9</u>
Extra car spaces or extension of car park	3
Landscaping	2
Anything that will compromise the natural bushland	4
Cleared of trees	1
Any plantings that are out of character with the area	1

Desirable Facilities

Respondents were asked to list facilities that they would like to see in the reserve, the highest being 'Fix and maintain the natural walking track (particularly steps at Algernon St)' (10 responses), 'Continue bush regeneration - clear out weeds' (5 responses) and 'No need to improve, leave as natural scenery' (5 responses).

Table 33, Facilities that **ARE** wanted in Oatley Point Reserve

Community Survey Results	
Item	Tally
Patrol car park (Police)	2
Lock gates at sunset	3
Install educational signs about offensive behaviour	1
Install bridge to fishing rock	4
Fix and maintain the natural walking track (particularly steps at Algernon St)	10
Install seating for views	2
Provide access to waters edge	2
Provide information about the history of the park	1
Discourage fishermen from littering	1
Keep the reserve clean & safe	2
Address fire hazard	1
Stop encroachment	1
Remove Foxes	1
Clear off section for kids to play	1
Continue bush regeneration - clear out weeds	5
No need to improve, leave as natural scenery	5

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