

## ASSET MANAGEMENT Parks&OpenSpace



Adopted by Council 19 February 2013

## 1 Introduction

### 1.1 Background

This Parks and Open Space Asset Management Plan has been prepared:

- To demonstrate sustainable, responsible and responsive management of Parks and Open Space assets (and services provided from Parks and Open Space assets);
- To demonstrate compliance with regulatory requirements; and
- To communicate strategies and funding required to provide the identified levels of service.

The Parks and Open Space Asset Management Plan aligns with and is to be read with Council's Community Strategic Plan.

## 1.2 Parks and Open Space Assets Covered By This Plan

A plan which illustrates the extent of Parks and Open Space within Mosman is included as Appendix A. A list of Parks and Open Space areas is included as Appendix B. This Parks and Open Space Asset Management Plan covers the following infrastructure assets:

Asset Group	Asset Types	Estimated As New Replacement Value
Playgrounds	15 Playgrounds (covering 3954 m <sup>2</sup> ) and associated component assets.	\$1,362,190
Sporting Fields	6 Sports Fields covering an area of 71,570 m <sup>2</sup> and associated component assets.	\$5,105,385
Parks and Reserves	32 Parks and Reserves covering an area of 172, 383 m <sup>2</sup> and associated component assets.	\$8,505,053
Bushlands	22 bushland areas covering 313, 917 $\mbox{m}^2$ , and associated component assets.	\$6,253,609
Unmade Roads		
	TOTAL	\$23,971,238

Table 1.1: Extent of Assets covered by this Plan

## 2 Levels of Service

### 2.1 Introduction

Levels of Service provide the basis for life cycle management strategies and works programs. They support the organisation's strategic goals.

This Parks and Open Space Asset Management Plan is based on "current" Levels of Service, industry benchmarking plus some limited interpretation of "desired" Levels of Service based on community consultation.

Further development and refinement of Levels of Service to address any shortfalls will be undertaken with the development of this document, and where possible match the requirements and expectations of customers.

The Levels of Service outlined in this section are based on:

- Information gathered from customers on importance of and satisfaction with services;
- Information interpreted and in some cases gathered from customers on expected quality and cost of services;
- Information obtained from expert advice on asset condition and performance capacity;
- Strategic and corporate goals;
- Legislative requirements;
- Regulations, environmental standards and industry and Australian Standards that impact on the way assets are managed;
- Design standards and Codes of Practice including Australian Design Standards which specify minimum design parameters for infrastructure delivery; and
- Availability of resources and the financial environment.

### 2.2 Customer Requests and Insurance Claims

Limited useful information and data regarding Parks and Open Space related complaints and requests were available from Council's Customer Request system. The system is being reviewed with the intent to generate targeted reporting on Parks and Open Space and other asset/service related matters in the future.

A review of reported incidents and potential insurance claims received by Council during the period 2011/12 financial year indicates 6 involved incidents in Parks.

### 2.3 Legislative Requirements

Council has to meet many requirements including National and State legislation and regulations. These are listed in Council's Asset Management Strategy document.

## 2.4 Current Community and Technical Levels of Service

One of Council's asset management priorities is to fully develop Levels of Service and related performance requirements/criteria across all of its asset and service areas.

Service levels have been defined from a Community perspective and from an Operational or Technical perspective. Community Levels of Service relate to how the community receives the service in terms of health and safety, quality, quantity, availability, cost/affordability, appearance and legislative compliance. Supporting the Community service levels are Operational or Technical measures of performance developed to ensure that the minimum or standard technical levels of service are met.

Council has yet to fully define or quantify 'desired' Levels of Service for its Parks and Open Space assets. The Levels of Service presently developed and delivered by Council generally relate to compliance with legislative requirements, appropriate industry practices and Council's historic operational practices.

Although aligned with the Community Strategic Planning process and the 2010 Community Survey, limited formal Community Levels of Service has been developed at this stage. Technical Levels of Service have been identified through the development of maintenance contracts and associated works specifications.

Levels of Service are detailed in Table 2.2. It is noted that several of the performance measures are yet to be measured. This will be gathered during the life of this Asset Management Plan and will be included in future updated versions. This process of defining and measuring service level performance is an important aspect of the improvement and evolution of asset management planning.

### 2.5 Asset Condition Rating Scale

The condition of Parks and Open Space assets were assessed in 2011 using a 1 to 5 rating scale. Service levels are linked to condition level as it determines at what condition the asset can be in before it is scheduled for renewal.

#### Table 2.1: Condition Rating Scale

Condition	Rating	1 to 5 Rating Scale
1	Excellent	As new - no need for intervention. No risk to public safety. Only normal maintenance required.
2	Very Good	Some sign of wear and tear - no immediate intervention required. Minor defects only. Minor maintenance required. Note for review at next inspection.
3	Good	Some areas of defects - generally able to be addressed through routine/scheduled maintenance required to return to accepted Level of Service. Some risk to public safety and amenity.
4	Poor	Poor condition - extensive wear and tear - requiring replacement of large sections. Significant risk to public safety and amenity.
5	Very Poor/ Failed	Asset unserviceable. Significant defects - both in terms of severity and extent. Requires replacement of significant part if not all of asset. High risk to public safety and amenity.

These conditions were used in developing valuations used in this asset management plan. Condition improvements resulting from capital works completed in the 2011/12 financial year have been accounted for in the Life Cycle Management Plans.

### Table 2.2: Parks and Open Space Levels of Service

Community Leve	Community Levels of Service						
Key Performance Measure	Level of Service	Performance Measure Process Performance Target		Current Performance			
Quality	Facilities are fit for purpose	Customer satisfaction surveys	> 80% satisfaction with quality and standard of facilities	83.5% in 2010 Community Survey)			
	High profile parks are of high quality	Customer satisfaction surveys	> 80% satisfaction with quality and standard of facilities	83.5% in 2010 Community Survey)			
	Facilities are appropriately maintained	Service enquiries	<100 customer defect reports per year. <100 customer complaints re maintenance levels per year	Specific statistics not yet available (systems being developed to identify general enquiries, defect reports and complaints)			
	Sound management and planning	Plans of Management (PoMs) and work programs in place for all open space assets.	100% parks covered by Plans of Management or Management Programs	100% of parks covered by PoM or Management Programs			
Availability	A variety of facilities are readily available to the whole community	Playgrounds available proximate to residences	All playgrounds be accessible and suitably equipped for the use and demand (local, LGA, regional)	85% compliance. Current provision deficiencies at Spit West and Balmoral (regional use)			
	Sportsgrounds available and suitable for a range of	Use of ovals/Availability of facilities	Average oval booking > 30hrs per week (exclude	Winter 2011 - 38.6hrs Summer 2010/11 –			

С	Community Levels of Service							
	ey erformance easure	Level of Service	Performance Measure Process	Performance Target	Current Performance			
		sporting activities and events		season change over and annual restoration works)	31.7hrs			
				Five complete passive recreation facilities / amenities for access and use by mobility impaired within the LGA	2 facilities provided - Clifton Gardens and Spit West Reserve			
	Health and Safety	Facilities are safe and free from hazards			Specific statistics not yet available			
			Insurance Claims	< five insurance claims per year	Four (2010 excludes paths)			
			Customer service requests	< ten high risk hazard related defects reported by customers per year (excluding vandalism related defects)	Specific statistics not yet available			
	opearance/ resentation	Assets/facilities in clean and presentable condition	Customer Service Requests / Defects / Complaints	> 80% satisfaction with quality and standard of facilities	81.9% (Public Areas) in 2010 Community Survey)			
Re	esponsiveness	Maintenance works carried out efficiently and effectively	Customer Service Request Response times	100% customer requests satisfactorily actioned in prescribed timeframes (assessed priority)	Specific statistics not yet available			

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Technical Levels	of Service			
Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
Condition	All facilities are maintained satisfactorily	Condition	> 95% assets condition 3 or better (condition rating scale 1 to 5)	86% (2011 condition audit)
		Number of defects	< 30 defects per year identified in cyclical defect inspections across all Parks and Open Space assets (excluding vandalism related defects)	Specific statistics not yet available
			< nil high risk (condition 5) playground defects per year identified in 6 monthly condition inspections	Achieved in March 2012 audit.
		Park / Oval Maintenance	> 95% contract audit compliance Playing Fields and Parks Turf areas maintained as per service standard.	Achieved 2010 Parks & Gardens & Sporting Fields contract performance review.
		Biodiversity improvement – native vegetation cover in bushland areas.	>90% native vegetation in areas under contract	55% (2010/11)
Appearance/ Presentation	Assets in clear and presentable	Parks presentation & improvement	< 30 reports of defects and non compliance with programmed services.	Specific statistics not yet available

	Technical Levels	of Service				
	Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance	
		condition		Total number of native plants supplied or funded by Council to volunteers, contractors and residents 10,000 per annum.	9,000 (2010/11)	
	Cost/Affordability All works an services provided cos effectively		Works to Service Standards and approved budgets	Operational and capital expenditure within annual budgets (less than 5% variation)	2010/2011 Achieved	
			Competitively tendered performance based contracts in place for all major works and services.	Tenders called and contracts awarded on adopted cyclical basis (100% complete)	90% (2011)	
			Cost of works and services (contrac and in-house) comparable to industry rates and costs.	Minimum 25% works and services benchmarked cyclically/ annually indicates comparable to industry rates and costs (+/- 10%) (utilise IPWEA Yardstick Program)	Comparable to industry rates and costs (+/- 10%)	
)))	Responsiveness	Maintenance works carried out efficiently and effectively	Maintenance works carried out to Service Standards	> 95% works and services satisfactorily completed in compliance with defined specifications and Intervention and Response Times in Service Standard	- Achieved 2010 Parks & Gardens & Sporting Fields contract performance review. 2011 Bushland Contract performance review.	

Technical Levels of Service						
Key Performance Measure	Service		Performance Target	Current Performance		
			Specifications			
		Cyclical defect inspections completed satisfactorily	100% asset/defect inspections for all critical assets completed satisfactorily in accordance with Service Standard Specifications.	Specific statistics not yet available		
			100% asset/defect inspections for all playground assets completed satisfactorily in accordance with Service Standard Specifications	100% inspections complete & instructions issued to rectify defects (2011)		

## 3 Future Demand

### 3.1 Demand Forecast

The forecast of very modest population growth will likely place only a slightly higher demand on infrastructure. While the population growth is not significant the changes in demographics and the popularity of recreational activities will have an ongoing effect on the type and need for recreational facilities. Increased awareness of health issues leads to greater interest in both passive and active recreational pursuits.

A larger impact is likely to be due to population growth throughout the broader metropolitan area as the high number of visitors to Mosman increases further. This is likely to generate increased demand on parks and recreation facilities, particularly foreshore facilities.

Increased awareness of health issues leads to greater interest in both passive and active recreational pursuits. An ageing population will mean greater need for disability access. There will be increased emphasis on providing quality accessible facilities.

## 3.2 Changes in Technology

Technology changes can affect the delivery of services covered by this plan through various product improvements and advances that can improve work efficiencies and provide cost savings in some areas. Advances in materials and techniques may help prolong asset life. There will also be increased awareness leading to a need to install energy efficient equipment for environmental responsibility and for cost efficiency. Council will investigate new technologies in terms of both products and maintenance techniques to best manage facilities and balance use across all facilities. As alternative products or materials become available selective use of materials may also reduce the need and frequency of required maintenance services.

## 3.3 Demand Management Plan

As stated above in Section 3.1, increased demand is expected to be modest. Demand for new services will be managed through a combination of managing existing assets and, where appropriate, upgrading existing assets and providing new assets to improve provision and meet changes in demand.

### 3.4 New Assets from Growth

Mosman is almost fully developed and the projected population growth is limited. Therefore for the purpose of this Asset Management Plan it has been assumed that there will be only minimal new construction of Parks assets due to population growth. Minimal funding has been forecast for new capital works (aligned with Council's Section 94A Plan) and flow-on recurrent costs for operation and maintenance.

## 4 Lifecycle Management Plan

The lifecycle management plan details how Council plans to manage and operate the Parks and Open Space assets at the agreed levels of service (defined in Section 2) while optimising life cycle costs. Individual more detailed lifecycle management plans for each asset group are included in Appendix E.

### 4.1 Background Data

#### 4.1.1 Physical Parameters

The assets covered by this Asset Management Plan are outlined in Section 1.2. The age profile is shown in Figure 4.1.

Some assets are in their second or third generation, having been reconstructed and upgraded on a number of occasions in the past. This the first time a comprehensive asset inventory and Asset Management Plan has been developed for Mosman's Open Space assets. For many of the assets included in this Asset Management Plan the actual build or installation date is not known. In these cases the current condition and expected useful life is used to determine an estimate of the age of the asset, the current asset value and the expected time frame for renewal. Council has endeavoured to utilise information gathered from staff, industry and other Councils to develop best estimate expected useful lives for all assets. The expected useful life is critical in determining the life cycle cost of an asset. It is important to note that the estimated useful lives used in the current asset valuation will be reviewed and revised in future inventory data collations.



Figure 4.1: Parks Assets (Consolidated) Age Profile

#### 4.1.2 Asset Capacity and Performance

Council's services are generally provided to meet design standards where these are available. Locations where deficiencies in service performance are known are detailed in Table 4.1.

Table 4.1: Known Service Performance Deficiencies

Location	Service Deficiency
Playgrounds	Spit West Reserve – Old play equipment was removed for safety reasons in 2005. Renewal required in accordance with adopted Plan of Management. Balmoral South – Very popular area and very high demand for play equipment which regularly not met by the existing facility.
Sports Fields	Due to limited ovals and limited options to develop more facilities Council is unable to fully satisfy demand resulting in some sporting clubs using ovals outside of the LGA. Middle Head Oval floodlights require upgrades to meet current standards. Subsurface drainage extension required to Georges Heights Oval out field. Irrigation systems are nearing the end of useful lives.

Location	Service Deficiency
Bushland, Biodiversity and Unmade Roads	Due to the level of funding, biodiversity values have reduced to low condition rating in some unmade road reserves. Steady progress is being made through the unmade roads restoration program; however, the bulk of annual budgets is now allocated to maintenance.
Fences and structures	Fences within parks and road reserves have been largely neglected for many years with management and repair based on reactive need. There is over 3.5km of fencing recorded within the parks and open space asset register. The current annual budget is required for reactive repairs. A high proportion of condition 5 assets are fences.

The above service deficiencies were identified from the asset data collection and asset inspection exercise carried out in 2011 and from officer knowledge and history of local issues.

#### 4.1.3 Asset Condition

The overall condition profile of Parks and Open Space assets is summarised below.

Asset Group	Condition 1	Condition 2	Condition 3	Condition 4	Condition 5
Playgrounds	13 %	22 %	47 %	18 %	0%
Sporting Field	12 %	20 %	48 %	13 %	8%
Parks & Reserves	5%	22 %	62 %	4 %	7%
Bushland	15 %	48 %	29 %	7 %	1 %
Unmade Roads	0%	0%	73 %	3%	25 %
Parks Assets Consolidated	9%	26 %	51 %	7 %	7%

Table 4.2: Parks and Open Space Assets Condition Summary (2011)

The condition profile of all Council's Parks and Open Space assets is shown in the chart below.



Figure 4.2: Parks and Open Space Assets Condition Profile

#### 4.1.4 Asset Valuations

The value of Parks and Open Space assets as at 30 June 2011 covered by this Asset Management Plan is summarised below.

Table 4.3: Parks Asset Valuations (June 2011)

Asset Group	Current Replacement Cost	Depreciable Amount	Accumulated Depreciation at 30 June 2011	Annual Depreciation	Depreciated Replacement Cost
Playgrounds	\$1,362,190	\$1,362,190	\$464,440	\$122,978	\$897,750
Sporting Fields	\$5,284,685	\$4,534,685	\$1,562,137	\$168,857	\$3,722,548
Parks and Reserves	\$8,564,253	\$7,608,335	\$2,761,040	\$231,164	\$5,803,213
Bushland	\$6,253,609	\$3,503,530	\$981,357	\$90,942	\$5,272,252
Unmade Roads	\$2,749,201	\$2,063,353	\$846,833	\$48,291	\$1,902,367
TOTAL	\$24,213,938	\$19,072,093	\$6,615,808	\$662,232	\$17,598,130

The values are based on the condition inventory completed in June 2011. It is noted that capital projects have been completed since the inventory was completed. While these projects do result in minor changes to total asset values and changes in condition rating percentages these changes are not significant. For the purposes of data consistency and reporting at a benchmark in time the condition ratings as at June 2011 have been used in the asset valuations in this asset management plan.

The capital projects that have been completed since the June 2011 condition inventory are summarised in Table 4.4. below.

#### Table 4.4: Completed Capital Projects since June 2011

Asset Category	Site	Component	Works	Year	Condition after works
Ovals	Allan Border	Drainage	Renewal	2011/12	2
	Allan Border	Wicket Square	Renewal	2012	1
	Rawson	Fencing	Renewal	2011	1
	Rawson	Sightscreen	Renewal	2011	2
	Georges Heights Oval	Drainage	New	2011	1
	Middle Head Oval	Drainage	New	2011	1
Playgrounds	Rosherville Reserve	Playground	Upgrade	2012	1
Parks	Drill Hall	Shade Structure	New	2012	1
	Drill Hall	BBQ	New	2012	1
	Balmoral	Fencing (Fig Trees surrounds)	New	2011	1
	Balmoral	Park Furniture	Upgrade	2011/12	3
	Clifton Gardens	Fencing (Access Gate)	New	2011	1
	Mosman Square	Park Furniture	Upgrade	2012	1
	Centenary Circle	Gardens	Upgrade	2012	1
Bushland	Parriwi Lighthouse	Tracks	New	2011	1

Asset Management Plans and asset lifecycles are an ongoing process, whilst noting it is vital to have a benchmark point in time to monitor and report against. Assets are valued at Brownfield rates.

### 4.2 Risk Management Plan

Council has completed a draft assessment of risks associated with service delivery from Parks and Open Space assets. These are identified in the Parks and Open Space Asset Risk Management Plan. The risk assessment process was conducted in accordance with AS/NZS/ISO 31000:2009 (superseding AS/NZS 4360: 2004).

The Parks and Open Space Risk Management Plan indicates that a number of high and medium risk rating requiring planned action have also been identified across each of the



- Equipment failure;
- Inappropriate use of facilities;
- Vandalism;
- Workplace, Health and Safety; and
- Presence of foreign objects (e.g. broken glass, needles, etc.).

Generally the risk treatments include:

- Develop and implement routine inspection/maintenance regimes including formal assets defect inspection system including Defects Maintenance Register;
- Develop and implement formal Maintenance Management System including management of reported defects and intervention strategy; and
- Develop and implement Long Term Asset Renewal/Reconstruction Program including provide required/increased funding.

### 4.3 Maintenance Plan

Maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again. Maintenance includes reactive, planned and cyclic maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions.

Planned maintenance is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

Cyclic maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting furniture e.g. seating and shelters. This work generally falls below the capital/maintenance threshold.

Maintenance is funded from Council's operating budget and grants where available. Deferred maintenance, i.e. works that are identified for maintenance and unable to be funded are to be included in the risk assessment process in the infrastructure risk management plan. This is further discussed in Section 5.2.

#### 4.3.1 Maintenance Expenditure

Historical maintenance expenditure trends are shown in Table 4.5.

#### Table 4.5: Historical Maintenance Expenditure Trends

Year	Maintenance Expenditure			
	TOTAL	Reactive*	Planned*	Cyclic*
2007/08	\$1,370,000	\$274,000	\$959,000	\$137,000
2008/09	\$1,358,000	\$271,600	\$950,600	\$135,800
2009/10	\$1,375,000	\$275,000	\$962,500	\$137,500
2010/11	\$1,435,000	\$287,000	\$1,004,500	\$143,500
2011/12	\$1,475,000	\$295,000	\$1,032,500	\$147,500

\* Figures for Reactive, Planned and Cyclic Maintenance break-up are estimates only. Based on a high level assessment of break-up – Planned (eg Annual Contracts) approximately 70%, Cyclic approximately 10%, Reactive approximately 20%.

Maintenance expenditure levels are considered to be generally adequate to meet required service levels however slight increases in maintenance allocations are flagged for some asset groups in the Lifecycle Management Plans in Appendix E. (Maintenance funding increasing from 2011/2012 annual average level of \$1,475,000 pa to \$1,600,000 pa in 2020/21).

Future maintenance expenditure is forecast to trend in line with the value of the asset stock and additionally increase slightly due to increases in labour, plant and materials costs over and above inflation (assumed 1% pa) as shown in Figure 4.3. Note that all costs are shown in 2011 dollar values (as the value at the time of the condition inventory). It is acknowledged that if renewal funding/expenditure increases in line with that recommended under the "sustainable assets scenario", required maintenance expenditure may be able to be reduced in the medium to long term. This will need to be re-assessed several years into any increased renewal program as an increase in renewal funding will have an effect on required maintenance.



#### Figure 4.3: Planned Maintenance Expenditure

Future revision of this Asset Management Plan will include more detailed analysis linking required maintenance expenditures with required service levels.

#### 4.3.2 Maintenance Methods

Traditionally assessment and prioritisation of reactive maintenance is undertaken by Council staff using experience and judgement, within some basic but generally informal maintenance management frameworks.

A more comprehensive Maintenance Management Framework is currently being developed.

### 4.3.3 Standards and specifications

Maintenance work is carried out in accordance with the following Standards and Specifications:

- Relevant Australian Standards;
- Building Code of Australia; and
- Natspec/AUS-Spec specifications and guidelines.

## 4.4 Renewal/Replacement Plan

Renewal expenditure is major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure.

Renewals are to be funded from Council's capital works program and grants where available. Deferred renewal, i.e. those assets identified for renewal and not scheduled for renewal in capital works programs are to be included in the risk assessment process in the risk management plan. This is further discussed in Section 5.2.

#### 4.4.1 Renewal Expenditure

Renewal expenditure trends are shown in Table 4.6.

Table 4.6: Historical Renewal Expenditure Trends

Year	Renewal Expenditure
2007/08	\$33,000
2008/09	\$246,000
2009/10	\$63,000
2010/11	\$249,000
2011/12	\$205,000
Average Annual	\$159,000

The variation in renewal expenditure is a result of variations in the scope of projects in terms of asset renewal as opposed to new or upgraded assets. Availability of external (grant) funding also impacts on project planning and capital spending each year.

Table 4.7 and Figure 4.4 illustrates the annual and cumulative funding gap between projected and current/planned renewals. Projected future renewal expenditures based on

expected useful lives are based on maintaining assets at condition 1 -3. That is, renewal of assets as they approach condition 4. The expenditure requirements are forecast to increase over time as the asset stock ages. All costs are shown in 2011 dollar values.

Year	Projected/Required Renewals (\$000s)	Current/Planned Renewals (\$000s)	Renewal Funding Gap (\$000s)	Cumulative Gap (\$000s)
2012/13	80	239	(159)	(159)
2013/14	133	339	(206)	(365)
2014/15	133	189	(56)	(421)
2015/16	282	239	43	(378)
2016/17	403	189	214	(164)
2017/18	403	189	214	50
2018/19	500	189	311	361
2019/20	616	189	427	788
2020/21	616	189	427	1,215
2021/22	616	189	427	1,642
2022/23	731	189	542	2,184

Table 4.7: Projected and Current/Planned Renewals and Expenditure Gap



Figure 4.4: Projected Capital Renewal Expenditure

#### 4.4.2 Renewal Intervention

Renewal intervention will be as the assets approach the end of their useful life.

If funding is not provided to maintain assets at the desired "optimal" level of condition 1 to 3, then condition 4 assets will continue to deteriorate through condition 5. Increased maintenance works (as opposed to renewal works) will be required (and risk will increase) and there will be a need to boost maintenance funding.

Whilst Council seeks to have no Parks and Open Space assets fall into category 4 or 5, it is acknowledged and is reality that there will be a minimal percentage of assets which fall into condition 4 each year. Generally works will be carried out on those assets in subsequent annual programs.

### 4.4.3 Renewal Method

Proposed asset renewal programs are included in the Lifecycle Management Plans for each asset group in Appendix E.

In developing the asset renewal programs, assets requiring renewal are identified from estimates of remaining life and in accordance with Council's asset renewal intervention strategy (condition 4/5 "satisfactory condition threshold" intervention strategy adopted). Proposals for renewal are inspected to verify accuracy of remaining life estimate and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programs.

The renewals priority ranking criteria for major parks and open space assets is being reviewed in Council's Asset Management Strategy.

For open space assets, where the Council asset only benefits two or less residents, e.g. small access stairways, secondary property access pathways, these will not be renewed unless funded by the property benefiting from this asset.

In areas where open space retaining walls are on the boundary of private and public property, if the private property benefits from the retaining wall then its maintenance/renewal will be the responsibility of the private property.

#### 4.4.4 Renewal Standards

Renewal work is carried out in accordance with the following Standards and Specifications:

- Relevant Australian Standards;
- Relevant industry guidelines / best practice;
- Building Code of Australia; and
- Natspec/AUS-Spec specifications and guidelines.

### 4.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the Council from land development/infill development.

In the five year period 2007/08 to 2011/12 between \$100,000 pa and \$200,000 pa was expended on new works (average \$138,000 pa). This expenditure was mainly associated with the installation of underground drainage systems in sports fields, provision of shade structures at playgrounds and installation of picnic shelters at Clifton Gardens Reserve.

New Works assets from growth are considered in Section 3, which indicates that there are currently minimal new assets proposed. Council's 'Section 94A Plan' includes several proposed new or expanded assets over the next 5 years being 2012/13 to 2016/17 ranging in total value \$267,000 pa to \$386,000 pa.

### 4.5.1 Standards and specifications

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for renewal shown in Section 4.4.4.

#### 4.5.2 Summary of future upgrade/new assets expenditure

At this stage there are minimal planned Parks and Open Space asset upgrade/new asset projects/expenditures proposed in the foreseeable future. 'Section 94A New Works' projects (including upgrades/expansion) are as follows:

2012/13	Spit West Reserve playground	\$120,000 (new work component)
2013/14	Memorial Park playground	\$30,000 (new work component)
2013/14	The Esplanade playground	\$50,000 (new work component)

It is likely that there will be emerging new works projects over the next few years which will need to be considered in the context of this Asset Management Plan and Council's budget.

When new assets and services are proposed they are to be funded from Council's capital works program, contributions plans and grants where available. This is further discussed in Section 5.2.

### 4.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Currently there are no assets identified for possible decommissioning and disposal.

### 4.7 Sustainability Modelling

There are two key high level indicators for financial sustainability that have been considered in the analysis of the services provided by this asset category, these being long term life cycle costs and medium term costs over the 12 year financial planning period.

A sustainability ratio is also used to provide an indicator of financial sustainability. A sustainability ratio of 1.0 indicates that the current funding provided is equal to the required lifecycle funding estimate. A sustainability ratio of less than 1.0 indicates a funding gap.

A summary of long and medium term sustainability values can be found in Section 5.1.1.

### 4.7.1 Long Term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the longest asset life. Life cycle costs include maintenance and asset consumption (depreciation expense).

Life cycle costs can be compared to life cycle expenditure to give an indicator of sustainability in service provision. Life cycle expenditure includes operations, maintenance plus capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals.

A gap between life cycle costs and life cycle expenditure gives an indication as to whether present consumers are paying their share of the assets they are consuming each year. The purpose of this Parks and Open Space Asset Management Plan is to identify levels of service that the community needs and can afford and develop the necessary long term financial plans to provide the service in a sustainable manner.

To sustain the condition and serviceability of Council's assets Council will consider providing funding to match the projected renewal expenditure requirements. Further in completing future condition audits a better understanding of expected useful lives of assets will be developed which will assist in managing the gap.

#### 4.7.2 Medium Term – 12 Year Financial Planning Period

This Asset Management Plan identifies the estimated maintenance and capital expenditures required to provide an agreed level of service to the community into a 12 year financial plan to provide the service in a sustainable manner.

This may be compared to existing or planned expenditures to identify any gap. In a core asset management plan, a gap is generally due to increasing asset renewals.

Given that long term modelling over the life of an asset can at times produce inaccuracies due to assumptions, it is considered the medium term sustainability should be more heavily relied on.

## 5 Financial Summary

This section contains the financial requirements resulting from all the information presented in the previous sections and in the individual asset group Lifecycle Management Plans (Appendix E) of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service, actual useful lives and current and projected future asset performance.

Maintenance and renewal are funded from general revenue, including the recent Infrastructure Levy rate increase that provides funding for infrastructure asset renewal including Open Space assets. A key issue will be to monitor short term funding requirements as well as the long term funding requirements due to the short remaining life of some assets and to balance maintenance and renewal funding within the service level parameters established.

### 5.1 Financial Statements and Projections

The 12 year financial projections are shown in Figure 5.1 for planned operating (operations and maintenance) and capital expenditure (renewal and new works i.e. upgrade/expansion/new assets). Operating and capital projections are detailed in the 12 Year Lifecycle Financial Forecasts table in Appendix C.



Figure 5.1: Planned Operating and Capital Expenditure

Note that all costs are shown in 2011 dollar values.

### 5.1.1 Sustainability of service delivery

A summary of the long and medium term sustainability of all Parks and Open Space assets is as follows:

Table 6.1: Long and Medium Term Financial Sustainability (as of June 2011)

Long Term		Medium Term	
Life Cycle Cost <sup>1</sup>	\$2,405,000 pa	Required Expenditure <sup>3</sup>	\$1,985,000 pa
Life Cycle Expenditure <sup>2</sup>	\$2,344,000 pa	Current Expenditure <sup>4</sup>	\$1,562,000 pa
		Funding Gap	\$423,000 pa
		Sustainability Ratio	0.79

<sup>1</sup> Consultant's annual figures averaged over the entire life of the asset.

<sup>2</sup> Required annual operations, maintenance and renewal ('sustainable' assets case) expenditure averaged over the 12 year financial period.

<sup>3</sup> Required annual maintenance and renewal ('sustainable' assets case) expenditure averaged over the 12 year financial period.

<sup>4</sup> Current annual maintenance and renewal expenditure averaged over the past 5 years.

### 5.2 Funding Strategy

Projected expenditure detailed in the Lifecycle Financial Forecasts in Appendix C is to be funded from Council's operating and capital budgets. The funding strategy is detailed in the Council's 12 year long term financial plan.

Achieving the financial strategy will require additional funding from a combination of:

- Review/rationalisation of current expenditure across all asset classes and indeed across Council's budget generally;
- Investigation and implementation of alternative funding sources e.g. conversion of Community Environmental Contract Levy to Infrastructure Levy or increase of Infrastructure Levy;
- Review and rationalisation of specific service areas identified as potentially being overserviced;
- Re-allocation of income where appropriate to Parks and Open Space asset management e.g. park fees and charges income;
- Additional grant funding from higher levels of Government;
- A review of fees and charges relevant to Parks management; and
- Review of Section 94 Plans.

## 5.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by developers and others and donated to Council. However as identified in this asset management plan, there is forecast at this stage to be minimal new assets created over the next 12 years.

The depreciated replacement cost (or "Fair Value") (current replacement cost less accumulated depreciation) will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is based on current projected asset renewal funding levels.

## 5.4 Key Assumptions Made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this Asset Management Plan. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this Asset Management Plan are:

- Financial forecasts are based on providing defined Levels of Service;
- Council will endeavour to fully fund required asset renewal requirements into the future;
- Capital renewal programs are designed to maintain the service potential of existing assets;
- Operations and maintenance costs are based largely on historical expenditure and assume there will be no significant increase in the cost of providing these services apart from related to new assets; and
- Financial forecasts are based on 2011 dollars with the inherent assumption then that costs will increase in the future in line with consumer price index (CPI). For Operations and Maintenance it has been assumed that costs will increase at a rate slightly above CPI i.e. additional 1% pa. (This may not be the case as material costs and/or salaries and wages for example may increase (or decrease) at alternative rates). No sensitivity analysis has been carried out at this stage to identify how this may impact costs in the future.

Accuracy of future financial forecasts may be improved in future revisions of this Asset Management Plan by the following actions:

- Review of asset unit rates and useful lives;
- Better alignment with Council's Community Strategic Plan and Long Term Financial Plan;
- Improved understanding regarding and development of Levels of Service;

- Improved understanding of Demand Forecasting and future required new works/ upgraded assets;
- Refining/developing long term operational and capital programs for works and services (at least 12 years);
- More advanced strategic analysis of the data and information particularly considering Levels of Service, asset capacity and performance and demand; and
- Understanding and analysing the many financial and economic influences which may potentially impact upon the cost of provision of services (sensitivity analysis).

## 6 Plan Improvement and Monitoring

## 6.1 Performance Measures

The effectiveness of this Asset Management Plan can be measured in the following ways:

- The degree to which the required cashflows identified in this Asset Management Plan are incorporated into Council's Resourcing Strategy, Council's long term financial plan and Strategic Management Plan;
- The degree to which adopted organisation 1 to 10 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan; and
- Community acceptance including Levels of Service and risk management plan.

Refer to Council's Asset Management Strategy for more information regarding asset management status and maturity).

### 6.2 Monitoring and Review Procedures

This Asset Management Plan will be reviewed during annual budget preparation and amended to recognise any changes in service levels and/or resources available to provide those services as a result of the budget decision process.

The Plan has a life of 3 to 4 years and is due for revision and updating at least within 1 year of each Council election aligned with the review of Council's Community Strategic Plan and Delivery Program.

## References

- Mosman Community Strategic Plan (MOSPLAN)
- Mosman Council Asset Management Policy 2009
- Mosman Council Asset Management Strategy 2011
- Planning a Sustainable Future Planning and Reporting Guidelines for Local Government in NSW 2010
- Planning a Sustainable Future Planning and Reporting Manual for Local Government in NSW 2010
- IPWEA, 2011, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au
- IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au
- Australian Infrastructure Financial Management Guideline 2009
- AS/NZS/ISO 31000:2009 Risk Management Principles and Guidelines

Appendices



Appendix A – Parks and Open Space Asset Category Maps










## Appendix B – List of Parks and Open Space Areas

Playgrounds				
Bay Street Park Playground	Plunkett Reserve Playground			
Clifton Gardens Playground	Reginald Park Playground			
Countess Street Park Playground	Reid Park Playground			
Currughbeena Park Playground	Rosherville Reserve Playground			
Hunter Park Playground	Sirius Cove Reserve Playground			
Memorial Park Playground	Spit Reserve Playground			
Memory Park Playground	The Esplanade Playground			
Morella Road Reserve Playground	Mosman OCC (AB Oval Pavilion)			
Sporting Fields				
Allan Border Oval	Middle Head Oval			
Balmoral Oval	Rawson Oval			
Georges Heights Oval	Rawson Oval/Drill Hall Netball Courts			
Bushland				
Balmoral Park	Quakers Hat North			
Bradley Bushland Reserve	Quakers Hat Park			
Chinamans Beach Dunes	Quakers Hat South			
Clifton Gardens	Reid Park			
Curraghbeena Park	Rosherville Reserve			
Harnett Park Bushland	Sirius Park East			
Lawry Plunkett Reserve	Sirius Park West			
Morella Road	Spit Reserve			
Parriwi Lighthouse	Other (not named)			
Parriwi Park	Wyargine Point			

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Bushland	
Parriwi Point	Joels Reserve
Parks and Reserves	
Balmoral North (North of Raglan)	Little Ashton Park
Balmoral South (South of Raglan)	Memory Park
Bay Street Park	Morella Road Reserve
Botanic Road Park	Mosman Bay Reserve
Carol's Lookout	Mosman Park
Clifton Gardens Reserve	Mosman Square (Civic Centre)
Countess Street Park	Parrawi Park Lighthouse
Currughbeena Lookout	Rawson Park
Currughbeena Park	Reginald Street Park
Drill Hall Common - Cross Street	Reid Park
Hampshire Park	Reservoir Park & Boronia House
Harnett Park	Rosherville Reserve
Hunter Park	Sirius Cove Reserve
Joel's Reserve	Spit Reserve East
Lawry Plunkett Reserve	Spit Reserve West
Library Walk	

Reserves in Unmade Roads				
Barney Kearns Steps	Unmade Lower McLeod St Reserve			
Herron Walk	Unmade Lower Punch St Reserve			
Sarah Walk	Unmade Lower Sverge St Reserve			
Unmade Almora St Reserve	Unmade Mandalong Ln Reserve (East)			
Unmade Amaroo Cres Reserve	Unmade Mandalong Ln Reserve (West)			
Unmade Arbutus St Reserve	Unmade Marsala St Reserve			
Unmade Armitage Ln Reserve	Unmade Mary Margaret Ln Reserve			
Unmade Bay St Reserve	Unmade McLeod St Reserve (East)			
Unmade Bickell PI Reserve	Unmade McLeod St Reserve (West)			
Unmade Bullecourt Ave Reserve (North)	Unmade Millet Rd Reserve			
Unmade Bullecourt Ave Reserve (South)	Unmade Moran St Reserve			
Unmade Burrawong Rd Reserve (North)	Unmade Morella Rd Reserve (North)			
Unmade Burrawong Rd Reserve (South)	Unmade Morella Rd Reserve (South)			
Unmade Carrington Ave Reserve	Unmade Mosman Ln Reserve			
Unmade Central Ave Reserve	Unmade Moss Ln Reserve			
Unmade Cobbittee St Reserve	Unmade Mulbring St Reserve			
Unmade Crown Rd Reserve	Unmade Other (not named)			
Unmade Edwards Bay Reserve	Unmade Parriwi Rd Reserve			
Unmade Elfrida St Reserve	Unmade Pearl Bay Ave Reserve			
Unmade Everview Ave Reserve	Unmade Pretoria Ave Reserve			
Unmade Fairfax Rd Reserve (East)	Unmade Pulpitt Ln Reserve			
Unmade Fairfax Rd Reserve (West)	Unmade Quakers Rd Reserve (Beauty Point Park)			
Unmade Glen Rd Reserve	Unmade Quakers Rd Reserve (East)			
Unmade Gooseberry Ln Reserve	Unmade Quakers Rd Reserve (West)			
Unmade Gordon St Reserve	Unmade Raglan St Reserve			

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#### Reserves in Unmade Roads

Unmade Government Rd Reserve Unmade Grecia Ln Reserve (East) Unmade Grecia Ln Reserve (West) Unmade Grove Ave Reserve **Unmade Hampden St Reserve** Unmade Harnett Ave Reserve Unmade Harston Ave Reserve Unmade Inkerman Reserve (South) Unmade Inkerman St Reserve (North) Unmade Kahibah Rd Reserve (North) Unmade Kahibah Rd Reserve (South) Unmade Kallaroo St Reserve Unmade Keston Ln Reserve Unmade Killarney St Reserve Unmade Koowong St Reserve (East) Unmade Koowong St Reserve (West) Unmade Le Gay Bereton Reserve Unmade Lower Illawarra St Reserve

Unmade Lower Boyle St Reserve

**Unmade Shellbank Ave Reserve** Unmade Spit Reserve Unmade Stanley Ave Reserve Unmade Stanton Ln Reserve Unmade Stanton Rd Reserve Unmade Upper Illawarra St Reserve Unmade Upper McLeod St Reserve Unmade Upper Sverge St Reserve Unmade Wallington Rd Reserve Unmade Warringah Rd Reserve Unmade Water Ln Reserve (East) Unmade Water Ln Reserve (West) Unmade Wyong Rd Reserve Unmade Bradleys Head Road Verge Unmade Musgrave Road Verge Unmade Wolseley (Cnr Mulbring) Road Verge

Unmade Parriwi Verge

Unmade Rosherville Road Reserve

## Appendix C – Park Assets 12 Year Financial Forecasts

Parks and Open Space Assets 12 Year Operational and Capital Forecasts (in 2011 \$s)

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
		1	2	3	4	5	6	7	8	9	10	11	12
	(\$000s)												
OPERATIONS													
Playgrounds	0	0	0	0	0	0	0	0	0	0	0	0	0
Sporting Fields	31	31	32	32	32	33	33	33	34	34	34	35	35
Parks and Reserves	305	308	311	314	317	321	324	327	330	334	337	340	340
Bushland	0	0	0	0	0	0	0	0	0	0	0	0	0
Unmade Roads	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL OPERATIONS	336	339	343	346	350	353	357	360	364	367	371	375	375
MAINTENANCE													
Playgrounds	57	58	58	59	59	60	61	61	62	62	63	64	64
Sporting Fields	388	388	388	388	388	388	388	388	388	388	388	388	388
Parks and Reserves	470	475	479	484	489	494	499	504	509	514	519	524	524
Bushland	411	415	419	423	428	432	436	441	445	450	454	459	459
Unmade Roads	150	152	153	155	156	158	159	161	162	164	166	167	167

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
		1	2	3	4	5	6	7	8	9	10	11	12
	(\$000s)												
TOTAL MAINTENANCE	1476	1487	1498	1509	1520	1531	1543	1554	1566	1578	1590	1602	1602
RENEWALS						-						-	
Playgrounds	100	100	200	50	100	50	50	50	50	50	50	50	50
Sporting Fields	81	40	40	40	40	40	40	40	40	40	40	40	40
Parks and Reserves	24	88	88	88	88	88	88	88	88	88	88	88	88
Bushland	0	11	11	11	11	11	11	11	11	11	11	11	11
Unmade Roads	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RENEWALS	205	239	339	189	239	189	189	189	189	189	189	189	189
NEW WORK													
Playgrounds	0	120	80	2	2	2	2	2	2	2	2	2	2
Sporting Fields	138	56	56	56	56	56	56	56	56	56	56	56	56
Parks and Reserves	0	86	86	86	86	86	86	86	86	86	86	86	86
Bushland	0	124	123	123	123	123	0	0	0	0	0	0	0
Unmade Roads	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL NEW WORK	138	386	345	267	267	267	144	144	144	144	144	144	144
DEPRECIATION													
Playgrounds	123	124	135	142	142	142	143	143	143	143	143	143	143

Parks and en S 

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
		1	2	3	4	5	6	7	8	9	10	11	12
	(\$000s)	(\$000s)	(\$000s)	(\$000s)	(\$000s)	(\$000s)	(\$000s)	(\$000s)	(\$000s)	(\$000s)	(\$000s)	(\$000s)	(\$000s)
Sporting Fields	157	164	166	167	169	171	173	174	176	178	180	181	181
Parks and Reserves	229	230	232	235	237	239	241	244	246	248	251	253	253
Bushland	91	91	92	94	96	98	100	100	100	100	100	100	100
Unmade Roads	48	48	48	48	48	48	48	48	48	48	48	48	48
TOTAL DEPRECIATION	648	656	673	686	692	698	704	709	713	717	721	726	726
RENEWALS (Bas	ed on Susta	inable Asset	ts Case)										
Playgrounds	20	20	73	73	73	73	73	170	170	170	170	170	170
Sporting Fields	21	21	21	21	170	170	170	170	170	170	170	170	170
Parks and Reserves	19	19	19	19	19	140	140	140	140	140	140	255	255
Bushland	10	10	10	10	10	10	10	10	119	119	119	119	119
Unmade Roads	10	10	10	10	10	10	10	10	17	17	17	17	17
TOTAL RENEWALS	80	80	133	133	282	403	403	500	616	616	616	731	731
RENEWALS FUN	IDING GAP	(Sustainable	e Assets Cas	e Compared	to 11/12 O <sub>l</sub>	perational Pl	an)						
Playgrounds	-80	-80	-127	23	-27	23	23	120	120	120	120	120	120
Sporting Fields	-3	-19	-19	-19	130	130	130	130	130	130	130	130	130
Parks and Reserves	-5	-69	-69	-69	-69	52	52	52	52	52	52	167	167
Bushland	10	-1	-1	-1	-1	-1	-1	-1	108	108	108	108	108

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
		1	2	3	4	5	6	7	8	9	10	11	12
	(\$000s)												
Unmade Roads	10	10	10	10	10	10	10	10	17	17	17	17	17
TOTAL FUNDING GAP	-68	-159	-206	-56	43	214	214	311	427	427	427	542	542



#### Asset Criticality

Asset Criticality and maintenance intervention is based on the following framework:

Category	Function	Safety	Presentation
1	High Value	Very High	Very High
2	Important	High	High
3	Lower Value	Medium	Medium

Proposed Criticality/Performance Categories (including defect/ maintenance response times and proposed defect inspection cycle) are:

Asset Group	Category 1	Category 2	Category 3
Playgrounds	Regional	Neighbourhood	Local
	High/Very High risk	High/Very High risk	High/Very High risk
	defects – assessed/	defects – assessed/	defects – assessed/
	"make safe"	"make safe"	"make safe"
	completed within 1	completed within 1	completed within 1
	working day	working day	working day
	High/Very High risk	High/Very High risk	High/Very High risk
	defects temporary	defects temporary	defects temporary
	repairs completed	repairs completed	repairs completed
	within 3 days	within 5 days	within 5 days
	High/Very High risk	High/Very High risk	High/Very High risk
	permanent repairs and	permanent repairs and	permanent repairs and
	other defect repairs	other defect repairs	other defect repairs
	completed within 14	completed within 30	completed within 30
	days	days	days
	Cyclical monitoring for vandalism, sharps etc - Daily	Cyclical monitoring for vandalism, sharps etc - Daily	Cyclical monitoring for vandalism, sharps etc - Daily
	Cyclical asset defect	Cyclical asset defect	Cyclical asset defect
	inspections/condition	inspections/condition	inspections/condition
	monitoring 6 months	monitoring 6 months	monitoring 6 months

Asset Group	Category 1	Category 2	
Sporting Fields	Regional	Local	
	High/Very High risk defects – assessed/ "make safe" completed within 24 hours	High/Very High risk defects – assessed/ "make safe" completed within 24 hours	
	High/Very High risk defects temporary repairs completed within 3 days	High/Very High risk defects temporary repairs completed within 5 days	
	High/Very High risk permanent repairs and other defect repairs completed within 14 days	High/Very High risk permanent repairs and other defect repairs completed within 30 days	
	Cyclical monitoring for vandalism, sharps etc - Weekly	Cyclical monitoring for vandalism, sharps etc - Weekly	
	Cyclical asset defect inspections/condition monitoring 3 months	Cyclical asset defect inspections/condition monitoring 6 months	

Asset Group	Category 1	Category 2	Category 3
Parks and Reserves	Regional	Neighbourhood	Local
	High/Very High risk	High/Very High risk	High/Very High risk
	defects – assessed/	defects – assessed/	defects – assessed/
	"make safe" completed	"make safe" completed	"make safe" completed
	within 24 hours	within 24 hours	within 24 hours
	High/Very High risk	High/Very High risk	High/Very High risk
	defects temporary	defects temporary	defects temporary
	repairs completed within	repairs completed within	repairs completed within
	3 days	5 days	10 days
	High/Very High risk	High/Very High risk	High/Very High risk
	permanent repairs and	permanent repairs and	permanent repairs and
	other defect repairs	other defect repairs	other defect repairs
	completed within 14	completed within 30	completed within 30
	days	days	days
	Cyclical asset defect	Cyclical asset defect	Cyclical asset defect
	inspections/condition	inspections/condition	inspections/condition
	monitoring 6 months	monitoring 6 months	monitoring 12 months

Asset Group	Category 1	Category 2	
Bushland	Regional	Local	
	High/Very High risk defects – assessed/ "make safe" completed within 24 hours	High/Very High risk defects – assessed/ "make safe" completed within 24 hours	
	High/Very High risk defects temporary repairs completed within 3 days	High/Very High risk defects temporary repairs completed within 10 days	
	High/Very High risk permanent repairs and other defect repairs completed within 14 days	High/Very High risk permanent repairs and other defect repairs completed within 30 days	
	Cyclical asset defect inspections/condition monitoring 6 months	Cyclical asset defect inspections/condition monitoring 6 months	

Asset Group	Category 1	Category 2	
Unmade Roads	Regional	Local	
	High/Very High risk defects – assessed/ "make safe" completed within 24 hours	High/Very High risk defects – assessed/ "make safe" completed within 24 hours	
	High/Very High risk defects temporary repairs completed within 3 days	High/Very High risk defects temporary repairs completed within 10 days	
	High/Very High risk permanent repairs and other defect repairs completed within 14 days	High/Very High risk permanent repairs and other defect repairs completed within 30 days	
	Cyclical asset defect inspections/condition monitoring 6 months	Cyclical asset defect inspections/condition monitoring 6 months	

\* Note Condition Assessment is undertaken on a 3 to 4 yearly cycle

#### **Risk Ratings**

Risks are rated:

- Very High (very high safety risk exists and/or very high functional risk)
- High (moderate to high safety risk, and high functional or presentation risk exists)
- Medium (low safety risk and moderate functional or presentation risk exists)
- Lower (low functional or presentation risk exists)

Appendix E – Life Cycle Management Plans

#### E1 Life Cycle Management Plan – Playgrounds E1.1 Description of Playground and Asset Valuation

Mosman has 15 public playgrounds. These playgrounds vary from simple swings and climbing structures to the latest in playground equipment and play design incorporating public art, educational features and equipment for junior and senior users.

Playgrounds have an area covering 3,954 m<sup>2</sup> consisting of:

- Play equipments;
- 1,302 m<sup>2</sup> shade cloth;
- 12 shade structures;
- 3,954 m<sup>2</sup> softfall (e.g. pine bark, sand);
- 300 m<sup>2</sup> softfall rubber; and
- 815 m fencing.

Typical unit rates and useful lives are as follows:

Playgrounds	Useful Life (Years)	Unit Rate
Play Equipment	15	Varies from \$1,000 to \$90,000 per playground
Shade Cloth	10	\$155 per m <sup>2</sup>
Shade Structure (posts)	30	\$6,000 per item
Softfall	12	\$130 per m <sup>2</sup>
Fencing	20	\$130 per m

The break up of playgrounds into material type is as follows (as at 30 June 2011):

Material Type	Current Replacement Cost (\$)	Depreciable Amount (\$)	Accumulated Depreciation (\$)	Annual Depreciation (\$/Yr)	Depreciated Replacement Cost (\$)
Fencing	105,950	105,950	33,930	6,478	72,020
Play Equipment	737,380	737,380	267,696	49,158	469,684
Shade Cloth	201,810	201,810	44,392	20,181	157,418
Shade Structures	70,200	70,200	10,440	2,340	59,760
Softfall	207,850	207,850	92,382	41,570	115,468
Softfall – Rubber	39,000	39,000	15,600	3,250	23,400
Total	1,362,190	1,362,190	464,440	122,798	897,750

#### E1.2 Playground Condition

The condition profile (2011) of the playgrounds are as follows:



#### E1.3 Current Status of "Unsatisfactory" Condition Assets

As at June 2011 playground assets valued at \$260,000 (approximately 19%) are in an "unsatisfactory" condition (i.e. rated condition 4 or worse).

#### E1.4 Build Date and Remaining Life

The estimated build date of Council's playground assets is shown below.



The above charts indicate that the majority of Council's playgrounds were constructed/reconstructed from 2002 onwards.

#### E1.5 Playground Expenditure Profile

Playground expenditure over the last few years is outlined in the following table:

	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	Average
	\$(000's)	\$(000's)	\$(000's)	\$(000's)	\$(000's)	\$(000's)
Maintenance	41	40	43	60	57	48
Renewals	28	114	0	0	100	48
New Work	74	25	6	0	0	21
TOTAL	143	179	49	60	157	117

The "New Works" were associated with the play area shade sails in Memorial Park and Clifton Gardens.

Substantial renewal work is scheduled for Rosherville Reserve and Spit West Playground in the current budget, and funding has generally been increased (including via the recent Infrastructure Levy rate increase) with a view to better managing risk and making this

category of assets sustainable in the long term. These upgrades will complete the current playground improvement program which began in 2001. It is planned that the program will commence again as the first playgrounds completed will be approaching the end of there useful lives.

Council has a rigorous methodology for inspecting and assessing condition and monitoring of playgrounds using six monthly safety audits via a contract and via the maintenance contractor for prioritising maintenance work.

#### E1.6 Sustainability Modelling

A summary of the long and medium term sustainability of Playground assets is as follows:

Long Term		Medium Term	
Life Cycle Cost <sup>1</sup>	\$215,000 pa	Required Expenditure <sup>3</sup>	\$178,000 pa
Life Cycle Expenditure <sup>2</sup> \$178,000 pa		Current Expenditure <sup>4</sup>	\$96,000 pa
		Funding Gap	\$82,000 pa
		Sustainability Ratio	0.54

<sup>1</sup> Consultant's annual figures averaged over the entire life of the asset.

<sup>2</sup> Required annual operations, maintenance and renewal ('sustainable' assets case) expenditure averaged over the 12 year financial period.

<sup>3</sup> Required annual maintenance and renewal ('sustainable' assets case) expenditure averaged over the 12 year financial period.

<sup>4</sup> Current annual maintenance and renewal expenditure averaged over the past 5 years.

#### E1.7 Proposed Playgrounds Renewals Program

The following playgrounds renewals program is proposed. Note the exact timing, extent and estimated cost of works will be dependent upon review of proposed renewal works at time of development of Council's Delivery Program.



#### Playground 10 Year Renewals Program (Renewal will be part of playground upgrade)

Park Name	Sub Asset	Measure	Quantity	Rate / Measure	Forecast Expenditure	Forecast Renewal Year
Countess Street Park Playground	Softfall	m²	360	\$45	\$16,200	2013
Memorial Park Playground	Softfall	m²	352	\$130	\$45,760	2013
Rosherville Reserve Playground	Softfall	m²	117	\$45	\$5,265	2013
Spit Reserve Playground	Softfall	m²	135	\$45	\$6,075	2013
Bay Street Park Playground	Softfall	m²	256	\$45	\$11,520	2014
Clifton Gardens Playground	Softfall	m²	800	\$45	\$36,000	2014
Currughbeena Park Playground	Softfall	m²	300	\$45	\$13,500	2014
Hunter Park Playground	Softfall	m²	63	\$45	\$2,835	2014
Memory Park Playground	Softfall	m²	180	\$45	\$8,100	2014
Spit Reserve Playground *	Play Equipment	item	1	\$1,000	\$1,000	2014
Reginald Park Playground	Softfall	m²	325	\$45	\$14,625	2015
Reid Park Playground	Softfall	m²	765	\$45	\$34,425	2015
Mosman OCC (AB Oval Pavilion)	Play Equipment	item	1	\$1,000	\$1,000	2016
Mosman OCC (AB Oval Pavilion)	Shade Cloth	m²	175	\$155	\$27,125	2016
Plunkett Reserve Playground	Softfall	m²	180	\$45	\$8,100	2016

Park Name	Sub Asset	Measure	Quantity	Rate / Measure	Forecast Expenditure	Forecast Renewal Year
Reid Park Playground	Fencing	m	95	\$130	\$12,350	2016
Reid Park Playground	Shade Cloth	m²	145	\$155	\$22,475	2016
Rosherville Reserve Playground *	Play Equipment	item	1	\$3,000	\$3,000	2016
Sirius Cove Reserve Playground	Softfall	m²	121	\$45	\$5,445	2016
Currughbeena Park Playground	Shade Cloth	m²	50	\$155	\$7,750	2017
The Esplanade Playground *	Play Equipment	item	1	\$80,000	\$80,000	2017
Countess Street Park Playground	Shade Cloth	m²	100	\$155	\$15,500	2018
Countess Street Park Playground	Softfall	m²	360	\$45	\$16,200	2018
Memorial Park Playground	Play Equipment	item	1	\$80,000	\$80,000	2018
Memorial Park Playground	Softfall	m²	352	\$130	\$45,760	2018
Rosherville Reserve Playground	Softfall	m²	117	\$45	\$5,265	2018
Spit Reserve Playground	Softfall	m²	135	\$45	\$6,075	2018
Mosman OCC (AB Oval Pavilion)	Softfall - Rubber	m²	160	\$130	\$20,800	2018
Bay Street Park Playground	Softfall	m²	256	\$45	\$11,520	2019
Clifton Gardens Playground	Play Equipment	item	1	\$90,000	\$90,000	2019
Currughbeena Park Playground	Softfall	m²	300	\$45	\$13,500	2019

						Forecost
Park Name	Sub Asset	Measure	Quantity	Rate / Measure	Forecast Expenditure	Forecast Renewal Year
Hunter Park Playground	Softfall	m²	63	\$45	\$2,835	2019
Memory Park Playground	Softfall	m²	180	\$45	\$8,100	2019
Reginald Park Playground	Softfall	m²	325	\$45	\$14,625	2019
Reid Park Playground	Softfall	m <sup>2</sup>	765	\$45	\$34,425	2019
The Esplanade Playground	Softfall - Rubber	m²	140	\$130	\$18,200	2019
Clifton Gardens Playground	Fencing	m	130	\$130	\$16,900	2020
Clifton Gardens Playground	Shade Cloth	m <sup>2</sup>	492	\$155	\$76,260	2020
Clifton Gardens Playground	Softfall	m²	800	\$45	\$36,000	2020
Currughbeena Park Playground	Play Equipment	item	1	\$37,000	\$37,000	2020
Hunter Park Playground	Play Equipment	item	1	\$5,000	\$5,000	2020
Mosman OCC (AB Oval Pavilion)	Fencing	m	70	\$130	\$9,100	2020
Plunkett Reserve Playground	Softfall	m²	180	\$45	\$8,100	2020
Memory Park Playground	Play Equipment	item	1	\$70,000	\$70,000	2021
Reginald Park Playground	Play Equipment	item	1	\$70,000	\$70,000	2021
Reid Park Playground	Play Equipment	item	1	\$80,000	\$80,000	2021
Memorial Park Playground	Fencing	m	200	\$130	\$26,000	2022
Memorial Park Playground	Shade Cloth	m²	240	\$155	\$37,200	2022

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Park Name	Sub Asset	Measure	Quantity	Rate / Measure	Forecast Expenditure	Forecast Renewal Year
Memorial Park Playground	Softfall	m²	352	\$130	\$45,760	2022
Reginald Park Playground	Fencing	m	40	\$130	\$5,200	2022

## E2 Life Cycle Management Plan – Sportsfields

#### E2.1 Description of Sporting Field Assets and Asset Valuation

Mosman has 6 Sporting Fields, Allan Border Oval, Balmoral Oval East, Balmoral Oval West,, Georges Heights Oval Middle Head Oval and Rawson Oval.

A new multi-use netball/basketball court has recently been constructed the Drill Hall common site at Cross Street. The outdoor netball courts are managed under this Asset Management Plan.

The pavilions along with toilets, kiosks, change rooms etc associated with the ovals are included under the Council Buildings Asset Management Plan.

6 Sports Fields cover an area of 71,570 m<sup>2</sup> consisting of:

- 18 floodlights;
- 71,570 m<sup>2</sup> irrigation systems;
- 3 irrigation tank and 3 irrigation pumps;
- 6 cricket wickets (practice synthetic);
- 10 cricket wicket (practice turf);
- 4 cricket wicket (synthetic surface);
- 18 cricket wicket (turf);
- 40,020 m<sup>2</sup> drainage;
- 820 m grated drains;
- 3 netball (hard surface);
- 1,260 m picket fence;
- 2 scoreboards;
- 4 sight screens;
- 69,320 m<sup>2</sup> outfields;
- 550 m<sup>2</sup> sports wire netting;
- Storm reuse pumps systems and 2 sheds; and
- An athletic facility.

Typical Sport Field unit rates and useful lives are as follows:

Sport Field Sub Assets	Useful Life (Years)	Unit Rate
Athletics facilities - Concrete elements	50	\$30,000 per item
Athletics facilities - Rubber surface	15	\$15,000 per item
Cricket Wicket - Practice Synthetic (Concrete Base)	50	\$10,000 per item
Cricket Wicket - Practice Synthetic Surface	5	\$6,000 per item
Cricket Wicket - Practice Turf	30	\$15,000 per item
Cricket Wicket - Synthetic Concrete Base	50	\$10,000 per item
Cricket Wicket - Synthetic Surface	5	\$6,000 per item
Cricket Wicket - Turf	20	\$25,000 per item
Drainage	15	\$8 per m <sup>2</sup>
Drains Grated	15	\$150 per m
Goal Posts	10	\$3,500 per item
Irrigation	30	\$7.50 per m <sup>2</sup>
Irrigation Tank	10 0	\$30,000 per item
Irrigation Tank pump	15	\$4,000 per item
Netball – hard surface	50	\$70,000 per item/individual structure
Outfield	50	\$25 per m <sup>2</sup>
Oval Flood Lights	25	\$40,000 per item/ individual structure
Picket Fence	40	\$265 per m
Score Board	50	\$50,000 per item/individual structure
Sight Screen	30	\$20,000 per item/individual structure
Sports Wire Netting	40	\$61 per m <sup>2</sup>

Sport Field Sub Assets	Useful Life (Years)	Unit Rate
Stormwater Reuse Pump Shed	50	\$10,000 per item
Stormwater Reuse Pump System	30	\$30,000 per item

The break-up of sporting field assets is as follows (as at 30 June 2011):

Location	Current Replacement Cost (\$)	Depreciable Amount (\$)	Accumulated Depreciation (\$)	Annual Depreciation (\$/Yr)	Depreciated Replacement Cost (\$)
Athletics facilities - Concrete elements	30,000	30,000	0	600	30,000
Athletics facilities - Rubber surface	15,000	15,000	0	1,000	15,000
Cricket Wicket - Practice Synthetic Surface	36,000	36,000	7,200	7,200	28,800
Cricket Wicket - Practice Turf	150,000	120,000	48,000	4,000	102,000
Cricket Wicket - Synthetic Surface	24,000	24,000	9,600	4,800	14,400
Cricket Wicket - Turf	450,000	307,500	105,500	15,375	344,500
Drainage	320,160	320,160	103,264	21,344	216,896
Drains Grated	123,000	123,000	73,800	8,200	49,200
Goal Posts	28,000	28,000	8,400	2,800	19,600
Irrigation	536,775	536,775	254,115	17,893	282,660
Irrigation Tank	900,000	900,000	36,000	900	54,000
Irrigation Tank pump	12,000	12,000	4,800	800	7,200
Netball - hard surface	210,000	210,000	0	4,200	210,000
Outfield	1,733,000	1,155,500	387,900	23,110	1,345,100
Oval Flood Lights	720,000	720,000	336,000	28,800	384,000
Picket Fence	333,900	333,900	182,320	8,348	151,580
Score Board	100,000	100,000	50,000	2,000	50,000
Sight Screen	80,000	80,000	32,000	2,667	48,000

Location	Current Replacement Cost (\$)	Depreciable Amount (\$)	Accumulated Depreciation (\$)	Annual Depreciation (\$/Yr)	Depreciated Replacement Cost (\$)
Sports Wire Netting	33,550	33,550	6,710	839	26,840
Stormwater Reuse Pump Shed	20,000	20,000	0	400	20,000
Stormwater Reuse Pump System	60,000	60,000	0	2,000	60,000
Total	5,105,385	4,355,385	1,645,609	157,274	3,459,776

### E2.2 Sporting Field Condition

The condition profile (2011) of the sporting field assets is as follows:



## E2.3 Current Status of "Unsatisfactory" Condition Assets

As at June 2011, sporting field assets valued at \$1,037,925 (approximately 21%) are in an "unsatisfactory" condition (i.e. rated condition 4 or worse).

## E2.4 Build Date and Remaining Life

The estimated build date of Council's sporting field assets is shown below.



The above charts indicate that the majority of Council's current sporting field assets were constructed/reconstructed from 1970 onwards with a majority of assets being constructed just after 1990. Some sporting field assets are second or third generation assets, having been reconstructed and upgraded on a number of occasions in the past.

## E2.5 Sports field Expenditure Profile

Sports field expenditure over the last few years is outlined in the following table:

	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	Average
	\$(000's)	\$(000's)	\$(000's)	\$(000's)	\$(000's)	\$(000's)
Maintenance	41	40	43	60	57	48
Renewals	28	114	0	0	100	48
New Work	74	25	6	0	0	21
TOTAL	143	179	49	60	157	117

A majority of "New Works" were associated Cross Street netball courts and upgrades to Balmoral Oval floodlighting.

It is forecast that new sports field construction will be nil in the future however due to the very high use and demand for ovals there is continual pressure for various sports field

assets to be added, improved and upgraded. An allowance of approximately \$50,000 per annum has been allowed in the long term financial forecasts.

	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012
	\$(000's)	\$(000's)	\$(000's)	\$(000's)	\$(000's)
Infrastructure Levy Funding For Sports fields	5	5	5	0	5

\* assumed to 20% of total allocation

#### E2.6 Proposed Strategy

Substantial renewal and improvement work has commenced on Council's sports field network in recent years including installation of subsoil drainage across all ovals and new oval fencing at Allan Border Oval and Rawson Oval. Funding has generally been increased with a view to better managing risk and making this category of assets sustainable in the long term.

Council has a rigorous methodology for assessing and monitoring the condition of sports fields and prioritising replacement and maintenance work.

Additional maintenance and renewal funding is considered necessary to maintain appropriate service levels and provision of facilities.

#### E2.7 Sustainability Modelling

A summary of the long and medium term sustainability of Sports field assets is as follows:

Long Term		Medium Term	
Life Cycle Cost <sup>1</sup>	\$580,000 pa	Required Expenditure <sup>3</sup>	\$521,000 pa
Life Cycle Expenditure <sup>2</sup> \$554,000 pa		Current Expenditure <sup>4</sup>	\$390,000 pa
		Funding Gap	\$131,000 pa
		Sustainability Ratio	0.75

<sup>1</sup> Consultant's annual figures averaged over the entire life of the asset.

<sup>2</sup> Required annual operations, maintenance and renewal ('sustainable' assets case) expenditure averaged over the 12 year financial period.

<sup>3</sup> Required annual maintenance and renewal ('sustainable' assets case) expenditure averaged over the 12 year financial period.

<sup>4</sup> Current annual maintenance and renewal expenditure averaged over the past 5 years.

#### E2.8 Proposed Sporting Fields Renewals Program

The following sporting fields renewals program is proposed. Note the exact timing, extent and estimated cost of works will be dependent upon review of proposed renewal works at time of development of Council's Delivery Program.

#### Sporting Fields 10 Year Renewals Program

Park Name	Sub Asset	Measure	Quantity	Depreciable Amount	Forecast Renewal Year
General	Playing Field Rejuvenation Program	item	1	\$20,000	2012
General	Playing Field Rejuvenation Program	item	1	\$20,000	2013
Balmoral Oval	Cricket Wicket - Synthetic Surface	item	2	\$12,000	2014
Georges Heights Oval	Cricket Wicket - Synthetic Surface	item	2	\$12,000	2014
General	Playing Field Rejuvenation Program	item	1	\$50,000	2015
Balmoral Oval	Cricket Wicket - Practice Synthetic Surface	item	6	\$36,000	2015
Middle Head Oval	Oval Flood Lights	item / individual structure	4	\$160,000	2016
Allan Border Oval	Drains Grated	m	400	\$60,000	2017
Balmoral Oval	Goal Posts	item	2	\$7,000	2017
Middle Head Oval	Goal Posts	item	2	\$7,000	2017
General	Playing Field Rejuvenation Program	item	1	\$50,000	2018
Rawson Oval	Drains Grated	m	420	\$63,000	2018
Rawson Oval	Picket Fence	m	420	\$111,300	2018
Allan Border Oval	Goal Posts	item	1	\$3,500	2019
Balmoral Oval	Cricket Wicket - Synthetic Surface	item	2	\$12,000	2019

Park Name	Sub Asset	Measure	Quantity	Depreciable Amount	Forecast Renewal Year
Georges Heights Oval	Cricket Wicket - Synthetic Surface	item	2	\$12,000	2019
Georges Heights Oval	Goal Posts	item	2	\$7,000	2019
Middle Head Oval	Picket Fence	m	440	\$116,600	2019
Rawson Oval	Goal Posts	item	1	\$3,500	2019
Allan Border Oval	Irrigation Tank pump	item	1	\$4,000	2020
Balmoral Oval	Cricket Wicket - Practice Synthetic Surface	item	6	\$36,000	2020
Georges Heights Oval	Irrigation Tank pump	item	1	\$4,000	2020
Rawson Oval	Drainage	m <sup>2</sup>	13000	\$104,000	2020
Rawson Oval	Irrigation Tank pump	item	1	\$4,000	2020
General	Playing Field Rejuvenation Program	item	1	\$50,000	2021
Allan Border Oval	Drainage	m²	11520	\$92,160	2021
Balmoral Oval	Oval Flood Lights	item / individual structure	6	\$240,000	2022

## E3 Life Cycle Management Plan – Parks and Reserves

#### E3.1 Description of Parks and Reserves and Asset Valuation

A general description of some parks and reserves are given below. (Note: Park buildings and related structures are included in Council's Buildings Asset Management Plan).

In summary there are 32 Parks and Reserves and component assets covering an area of 172,383m<sup>2</sup> included in this Asset Management Plan.

Typical Park & Reserve unit rates and useful lives are as follows:

Park & Reserve Assets	Useful Life (Years)	Unit Rate
BBQ	25	\$500 per item
Bike Rack	25	\$2,200 per item
Billy the dog	100	\$12,000 per item
Bins (Be Tidy)	25	\$1,000 per item
Bins (Dog Tidy)	20	\$500 per item
Bins (Enclosures)	25	\$2,000 per item
Bollards - Other	25	\$150 per item
Bollards - Timber	15	\$100 per item
Cenotaph	100	\$80,000 per item
Compacting Bins	30	\$35,000 per item
Courts	60	\$125 per m <sup>2</sup>
Dinghy Racks	20	\$15,000 per item
Dinghy Racks Timber	20	\$8,000 per item
Drains Grated	15	\$150per m
Fencing - Pipe rail	25	\$221 per m
Fencing - Timber Ordinance	20	\$210 per m
Fire & Security	25	\$5,000 per item
Fitness Equipment	15	\$1,500 per item

Park & Reserve Assets	Useful Life (Years)	Unit Rate
Flag Pole	60	\$500 per item
Fountain / Water Feature	50	\$50,000 per item
Friendship Tree	100	\$30,000 per item
Gardens	20	\$60 per m <sup>2</sup>
General Lighting	30	\$5,000 per item
Irrigation	30	\$20 per m <sup>2</sup>
Lawns	50	\$8 per m <sup>2</sup>
Lucunda monument	100	\$30,000 per item
Memorials and Monuments	100	\$30,000 per item
Minor Structures	80	\$170 per item
Minor Structures	80	\$16,420 per item
Park Furniture - Monier	20	\$750 per item
Park Furniture - Picnic Set Benches	20	\$3,000 per item
Park Furniture - Plaza	20	\$1,200 per item
Paths	50	\$125 per m <sup>2</sup>
Plumbing	20	\$2,500 per item
Retaining	120	\$1,200 per m <sup>2</sup>
Shade Structures	30	\$650 per m <sup>2</sup>
Signage	15	\$135 per item
Skate Park	100	\$220,000 per item
Small cenotaph	100	\$100,000 per item
Sundial	100	\$15,000 per item
Sunflower Sculpture	100	\$30,000 per item
Water Tank	100	\$30,000 per item

The break up of parks and reserves assets valuation is as follows (as at 30 June 2011):

	Current Replacement Cost (\$)	Depreciable Amount (\$)	Accumulated Depreciation (\$)	Annual Depreciation (\$/Yr)	Depreciated Replacement Cost (\$)
BBQ	500	500	300	20	200
Bike Rack	8,800	8,800	2,200	352	6,600
Billy the dog	12,000	12,000	2,400	120	9,600
Bins (Be Tidy)	57,000	57,000	29,400	2,280	27,600
Bins (Dog Tidy)	8,500	8,500	2,800	425	5,700
Bins (Enclosures)	218,000	218,000	44,400	8,720	173,600
Bollards - Other	4,500	4,500	960	180	3,540
Bollards - Timber	15,000	15,000	6,480	1,000	8,520
Cenotaph	80,000	80,000	16,000	800	64,000
Compacting Bins	70,000	70,000	0	2,333	70,000
Courts	18,625	18,625	7,300	310	11,325
Dinghy Racks	60,000	30,000	0	1,500	60,000
Dinghy Racks Timber	8,000	8,000	4,800	400	3,200
Drains Grated	18,000	18,000	7,200	1,200	10,800
Fencing - Pipe rail	48,620	48,620	11,050	1,945	37,570
Fencing - Timber Ordinance	115,290	115,290	42,966	5,765	72,324
Fire & Security	60,000	60,000	12,000	2,400	48,000
Fitness Equipment	6,000	6,000	2,400	100	3,600
Flag Pole	200,000	200,000	30,000	4,000	170,000
Fountain / Water Feature	30,000	30,000	0	300	30,000
Friendship Tree	1,282,580	806,582	322,165	40,329	960,415
Gardens	325,000	325,000	130,000	10,833	195,000
General Lighting	1,024,560	1,024,560	615,504	34,152	409,056
Irrigation	1,134,648	689,228	301,611	13,785	833,037
Lawns	150,450	150,450	60,030	30,090	90,420

	Current Replacement Cost (\$)	Depreciable Amount (\$)	Accumulated Depreciation (\$)	Annual Depreciation (\$/Yr)	Depreciated Replacement Cost (\$)
Lucinda monument	30,000	30,000	6,000	300	24,000
Memorials and Monuments	315,500	315,500	74,100	3,155	241,400
Minor Structures	19,140	19,140	3,998	239	15,142
Park Furniture - Monier	105,750	105,750	35,850	5,288	69,900
Park Furniture - Picnic Set Benches	126,000	126,000	46,800	6,300	79,200
Park Furniture - Plaza	90,000	90,000	38,160	4,500	51,840
Paths	949,875	949,875	279,525	18,998	670,350
Plumbing	195,000	195,000	76,500	9,750	118,500
Retaining	1,190,400	1,190,400	472,080	9,920	718,320
Shade Structures	19,500	19,500	6,630	650	12,870
Signage	22,815	22,815	8,991	1,521	13,824
Skate Park	220,000	220,000	44,000	2,200	176,000
Small cenotaph	100,000	100,000	0	1,000	100,000
Sundial	15,000	15,000	9,000	150	6,000
Sunflower Sculpture	30,000	30,000	0	300	30,000
Water Tank	120,000	120,000	24,000	1,200	96,000
Total	8,505,053	7,553,635	2,777,600	228,809	5,727,453
# E3.2 Parks and Reserves Condition

The condition profile (June 2011) of the Parks and Reserve assets are as follows:



# E3.3 Current Status of "Unsatisfactory" Condition Assets

As at June 2011, parks and reserve assets valued at \$930,000 (approximately 11%) are in an "unsatisfactory" condition (i.e. rated condition 4 or worse).

# E3.4 Build Date and Remaining Life

The estimated build date of Council's parks and reserve assets is shown below.



The above charts indicate that the Council's current park and reserve assets were constructed many years ago from 1891 onwards with the large majority being constructed from the 1980's onwards. Some park and reserve assets are second or third generation assets, having been reconstructed and upgraded on a number of occasions in the past.

### E3.5 Parks and Reserve Expenditure Profile

Parks and reserve expenditure over the last few years is outlined in the following table:

	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	Average
	\$(000's)	\$(000's)	\$(000's)	\$(000's)	\$(000's)	\$(000's)
Maintenance	512	511	519	525	470	507
Renewals	0	0	24	216	24	53
New Work	0	3	78	179	0	52
TOTAL	512	514	621	920	494	612

It is forecast that new parks and reserve construction will be limited in the future however there may be pressure for some parks and reserves areas to be upgraded. It is assumed that new works expenditure will be between \$50,000 and \$100,000 per annum.

Maintenance and renewal are funded from general revenue, including the recent Infrastructure Levy rate increase that provides funding for infrastructure asset renewal including parks and reserves. The Infrastructure Levy Rate increase provided the following funding for parks and reserves over the last few years\* Assumed 20% of infrastructure levy is spent on Parks and Open Space assets.

# E3.6 Proposed Strategy

Substantial renewal work has commenced on Council's parks and reserve network in recent years, and funding has generally been increased with a view to better managing risk and making this category of assets sustainable in the long term.

# E3.7 Sustainability Modelling

A summary of the long and medium term sustainability of Parks and Reserves assets is as follows:

Long Term		Medium Term	
Life Cycle Cost <sup>1</sup>	\$806,000 pa	Required Expenditure <sup>3</sup>	\$620,000 pa
Life Cycle Expenditure <sup>2</sup>	\$945,000 pa	Current Expenditure <sup>4</sup>	\$560,000 pa
		Funding Gap	\$60,000 pa
		Sustainability Ratio	0.90

<sup>1</sup> Consultant's annual figures averaged over the entire life of the asset.

<sup>2</sup> Required annual operations, maintenance and renewal ('sustainable' assets case) expenditure averaged over the 12 year financial period.

<sup>3</sup> Required annual maintenance and renewal ('sustainable' assets case) expenditure averaged over the 12 year financial period.

<sup>4</sup> Current annual maintenance and renewal expenditure averaged over the past 5 years.

# E3.8 Proposed Parks and Reserve Assets Renewals Program

The following parks and reserve assets renewals program is proposed. Note the exact timing, extent and estimated cost of works will be dependent upon review of proposed renewal works at time of development of Council's Delivery Program.

Parks and Reserve A	Assets 10 Year	Renewals	Program
	1000010 10 1001	1.0011011010	i i ogiaini

Park Name	Sub Asset	Work Type	Measure	Quantity	Unit Rate (\$)	Forecast Expenditure (\$)	Forecast Renewal Year
Balmoral South (South of Raglan)	Bins (Be Tidy)	Renew	item	1	1000	1,000	2011
Bay Street Park	Retaining Structure	Repair/ Refurbish	m²	15	1200	5,000	2011
Clifton Gardens Reserve	Bins (Be Tidy)	Renew	item	10	1000	10,000	2011
Balmoral North (North of Raglan)	Fencing - Timber Ordinance	Renew	m	30	210	6,300	2015
Carol's Lookout	Park Furniture - Monier	Renew	item	1	750	750	2015
Clifton Gardens Reserve	Lifesaving Equipment	Renew	item	1	150	150	2015
Balmoral South (South of Raglan)	Lifesaving Equipment	Renew	item	2	150	300	2016
Balmoral North (North of Raglan)	Irrigation	Renew	m²	16050	20	321,000	2017
Balmoral North (North of Raglan)	Bollards - Timber	Renew	item	24	100	2,400	2017
Balmoral South (South of Raglan)	Irrigation	Renew	m²	10120	20	202,400	2018
Botanic Road Park	Park Furniture - Monier	Renew	item	4	750	3,000	2019

Park Name	Sub Asset	Work Type	Measure	Quantity	Unit Rate (\$)	Forecast Expenditure (\$)	Forecast Renewal Year
Mosman Square (Civic Centre)	Park Furniture - Plaza	Renew	item	21	1200	25,200	2019
Spit Reserve West	Dinghy Racks Timber	Renew	item	1	8000	8,000	2019
Balmoral North (North of Raglan)	Signage	Renew	item	18	135	2,430	2020
Balmoral South (South of Raglan)	Signage	Renew	item	36	135	4,860	2020
Bay Street Park	Signage	Renew	item	1	135	135	2020
Botanic Road Park	Signage	Renew	item	1	135	135	2020
Carol's Lookout	Signage	Renew	item	1	135	135	2020
Clifton Gardens Reserve	Signage	Renew	item	23	135	3,105	2020
Countess Street Park	Signage	Renew	item	1	135	135	2020
Currughbeena Park	Signage	Renew	item	1	135	135	2020
Hampshire Park	Signage	Renew	item	1	135	135	2020
Hunter Park	Signage	Renew	item	2	135	270	2020
Joel's Reserve	Signage	Renew	item	1	135	135	2020
Lawry Plunkett Reserve	Signage	Renew	item	1	135	135	2020
Library Walk	Signage	Renew	item	2	135	270	2020
Little Ashton Park	Signage	Renew	item	2	135	270	2020
Memory Park	Signage	Renew	item	2	135	270	2020

Park Name	Sub Asset	Work Type	Measure	Quantity	Unit Rate (\$)	Forecast Expenditure (\$)	Forecast Renewal Year
Mosman Bay Reserve	Signage	Renew	item	3	135	405	2020
Mosman Park	Signage	Renew	item	4	135	540	2020
Mosman Square (Civic Centre)	Signage	Renew	item	6	135	810	2020
Parrawi Park Lighthouse	Signage	Renew	item	1	135	135	2020
Rawson Park	Signage	Renew	item	7	135	945	2020
Reid Park	Signage	Renew	item	4	135	540	2020
Reservoir Park & Boronia House	Signage	Renew	item	7	135	945	2020
Rosherville Reserve	Signage	Renew	item	18	135	2,430	2020
Sirius Cove Reserve	Signage	Renew	item	6	135	810	2020
Spit Reserve East	Signage	Renew	item	5	135	675	2020
Spit Reserve West	Signage	Renew	item	10	135	1,350	2020
Balmoral North (North of Raglan)	Gardens	Renew	m²	1850	60	77,700	2021
Balmoral South (South of Raglan)	Gardens	Renew	m²	1100	60	46,200	2021
Bay Street Park	Gardens	Renew	m <sup>2</sup>	340	60	14,280	2021
Botanic Road Park	Bollards - Timber	Renew	item	15	100	1,500	2021
Botanic Road Park	Gardens	Renew	m²	400	60	16,800	2021
Carol's Lookout	Gardens	Renew	m <sup>2</sup>	40	60	1,680	2021

Park Name	Sub Asset	Work Type	Measure	Quantity	Unit Rate (\$)	Forecast Expenditure (\$)	Forecast Renewal Year
Clifton Gardens Reserve	Gardens	Renew	m²	1680	60	70,560	2021
Currughbeena Park	Bollards - Timber	Renew	item	20	100	2,000	2021
Joel's Reserve	Bollards - Timber	Renew	item	30	100	3,000	2021
Rawson Park	Bollards - Timber	Renew	item	22	100	2,200	2021
Reservoir Park & Boronia House	Bollards - Timber	Renew	item	10	100	1,000	2021
Rosherville Reserve	Bollards - Timber	Renew	item	15	100	1,500	2021
Sirius Cove Reserve	Bollards - Timber	Renew	item	8	100	800	2021
Spit Reserve East	Bollards - Timber	Renew	item	6	100	600	2021
Spit Reserve West	BBQ	Renew	item	1	500	500	2021
Drill Hall Common - Cross Street	Gardens	Renew	m²	856	60	35,952	2022
Hampshire Park	Gardens	Renew	m <sup>2</sup>	70	60	2,940	2022
Hunter Park	Gardens	Renew	m <sup>2</sup>	590	60	24,780	2022
Joel's Reserve	Gardens	Renew	m <sup>2</sup>	20	60	840	2022
Lawry Plunkett Reserve	Gardens	Renew	m <sup>2</sup>	150	60	6,300	2022
Library Walk	Gardens	Renew	m <sup>2</sup>	60	60	2,520	2022
Little Ashton Park	Gardens	Renew	m <sup>2</sup>	1880	60	78,960	2022
Memory Park	Gardens	Renew	m <sup>2</sup>	6	60	252	2022
Mosman Bay Reserve	Gardens	Renew	m <sup>2</sup>	760	60	31,920	2022

Park Name	Sub Asset	Work Type	Measure	Quantity	Unit Rate (\$)	Forecast Expenditure (\$)	Forecast Renewal Year
Mosman Park	Gardens	Renew	m <sup>2</sup>	1032	60	43,344	2022
Balmoral North (North of Raglan)	Bins (Dog Tidy)	Renew	item	2	500	1,000	2023
Balmoral North (North of Raglan)	Park Furniture - Picnic Set Benches	Renew	item	5	3000	15,000	2023
Balmoral North (North of Raglan)	Plumbing	Renew	item	8	2500	20,000	2023
Balmoral South (South of Raglan)	Park Furniture - Monier	Renew	item	5	750	3,750	2023
Balmoral South (South of Raglan)	Park Furniture - Plaza	Renew	item	10	1200	12,000	2023
Balmoral South (South of Raglan)	Park Furniture - Picnic Set Benches	Renew	item	5	3000	15,000	2023
Balmoral South (South of Raglan)	Plumbing	Renew	item	5	2500	12,500	2023
Clifton Gardens Reserve	Plumbing	Renew	item	3	2500	7,500	2023
Countess Street Park	Plumbing	Renew	item	1	2500	2,500	2023
Currugbeena Lookout	Signage	Renew	item	1	135	135	2023
Currughbeena Park	Plumbing	Renew	item	1	2500	2,500	2023
Drill Hall Common - Cross Street	Drains Grated	Renew	m	30	150	4,500	2023
Drill Hall Common - Cross Street	Plumbing	Renew	item	3	2500	7,500	2023

Park Name	Sub Asset	Work Type	Measure	Quantity	Unit Rate (\$)	Forecast Expenditure (\$)	Forecast Renewal Year
Drill Hall Common - Cross Street	Signage	Renew	item	2	135	270	2023
Hampshire Park	Park Furniture - Monier	Renew	item	6	750	4,500	2023
Hampshire Park	Plumbing	Renew	item	1	2500	2,500	2023
Hunter Park	Plumbing	Renew	item	1	2500	2,500	2023
Lawry Plunkett Reserve	Park Furniture - Monier	Renew	item	4	750	3,000	2023
Library Walk	Plumbing	Renew	item	1	2500	2,500	2023
Mosman Bay Reserve	Park Furniture - Monier	Renew	item	19	750	14,250	2023
Mosman Bay Reserve	Bins (Dog Tidy)	Renew	item	1	500	500	2023
Mosman Park	Drains Grated	Renew	m	20	150	3,000	2023
Mosman Square (Civic Centre)	Drains Grated	Renew	m	30	150	4,500	2023
Mosman Square (Civic Centre)	Gardens	Renew	m²	860	60	36,120	2023
Rawson Park	Bins (Dog Tidy)	Renew	item	3	500	1,500	2023
Reginald Street Park	Gardens	Renew	m²	60	60	1,800	2023
Reginald Street Park	Signage	Renew	item	2	135	270	2023
Reid Park	Bins (Dog Tidy)	Renew	item	2	500	1,000	2023
Reid Park	Gardens	Renew	m <sup>2</sup>	340	60	10,200	2023

Park Name	Sub Asset	Work Type	Measure	Quantity	Unit Rate (\$)	Forecast Expenditure (\$)	Forecast Renewal Year
Reservoir Park & Boronia House	Drains Grated	Renew	m	20	150	3,000	2023
Reservoir Park & Boronia House	Gardens	Renew	m²	1564	60	46,920	2023
Rosherville Reserve	Drains Grated	Renew	m	20	150	3,000	2023
Rosherville Reserve	Gardens	Renew	m²	280	60	8,400	2023
Sirius Cove Reserve	Bins (Dog Tidy)	Renew	item	1	500	500	2023
Sirius Cove Reserve	Gardens	Renew	m <sup>2</sup>	120	60	3,600	2023
Spit Reserve West	Bins (Dog Tidy)	Renew	item	2	500	1,000	2023

# E4 Life Cycle Management Plan – Bushland

# E4.1 Description of Bushland Assets and Asset Valuation

There are 22 bushland areas and associated assets covering 313,917 m<sup>2</sup>. Assets include:

- 312,509 m<sup>2</sup> biodiversity (bushland);
- 2,043 m drainage;
- 1,237m fencing;
- 7 memorials and monuments;
- 1,230 m<sup>2</sup> retaining walls;
- 138 signage; and
- 5,200 m tracks.

Overall Council actively manages 19 of its 22 large bushland sites. The sites not currently under regular active management include Rawson Park, Little Ashton Park and an unnamed site found on the southern side of Rosherville Reserve.

Typical bushland unit rates and useful lives are as follows:

Bushland Assets	Useful Life (Years)	Unit Rate
Biodiversity	200	\$11 per m <sup>2</sup>
Drainage	50	\$600 per m
Fencing	20	\$210 per m
Memorials and Monuments	100	\$30,000 per item
Retaining Structures	120	\$1,200 per m <sup>2</sup>
Signage	15	\$135 per item
Tracks	20	\$200 per m



The value of the Bushland assets is summarised below (as at 30 June 2011):

	Current Replacement Cost	Depreciable Amount	Accumulated Depreciation	Annual Depreciation	Depreciated Replacement Cost
Biodiversity	\$3,437,599	\$687,520	\$164,343	\$3,438	\$3,273,256
Drainage	\$1,225,800	\$1,225,800	\$265,800	\$24,516	\$960,000
Fencing	\$148,440	\$148,440	\$38,976	\$7,422	\$109,464
Memorials and Monuments	\$90,400	\$90,400	\$ 2,000	\$904	\$78,400
Retaining Structures	\$318,000	\$318,000	\$128,880	\$2,650	\$189,120
Signage	\$20,610	\$20,610	\$7,494	\$1,374	\$13,116
Tracks	\$1,012,760	\$1,012,760	\$363,864	\$50,638	\$648,896
Total	\$6,253,609	\$3,503,530	\$981,357	\$90,942	\$5,272,252

### E4.2 Bushland Condition

The condition profile (June 2011) of the bushland assets is as follows:



# E4.3 Current Status of "Unsatisfactory" Condition Assets

As at June 2011, bushland assets valued at \$478,968 (approximately 8%) are in an "unsatisfactory" condition (i.e. rated condition 4 or worse).

# E4.4 Build Date and Remaining Life

The indicative "build date" of Council's bushland assets is shown below.



The above chart indicates that the Council's current bushland assets were developed from the 1800s onwards with major investments showing around the 1930s and 1970 onwards. These figures relate principally to the age of component assets within bushland areas. As has been noted above and in the AMP document the biodiversity component of bushland areas has been given a useful life of 200 years and a residual value of 80% for the purposes of this asset management plan.

# E4.5 Current Maintenance and Renewal Strategies

Weed management in bushland is a major issue. Mosman Council ensures that weed management has clear conservation outcomes that follow three main principles when managing bushlands:

1. **Retain** - relates to letting nature take its course and simply involves leaving healthy weed free bushland alone or if necessary applying minimal human intervention. Retain also relates to ensuring adequate fauna habitats are maintained and often the rate of weed removal in these situations will be dictated by the creation of suitable habitats in close proximity.

- 2. Regenerate relates to using high level human intervention to help re-create natural processes in a bushland site and involves the removal and control of weeds in an area to assist the re-colonisation of native plants. This is only possible in areas where native propagules are stored in the soil and therefore the site has resilience.
- 3. Revegetate refers to the planting of locally sourced plant tubestock in areas where no regeneration of the bushland is possible. This is generally in areas that no longer have any natural soil profile and have either been heavily disturbed or have had fill placed on them and are usually devoid of any soil stored native propagules and therefore resilience.

Council has implemented Bushland Restoration Contracts for the vast majority of its bushland work.

Bushland expendi	ture over the	e last few ye	ars is outline	d in the follo
	2007/2008	2008/2009	2009/2010	2010/2011

E4.6 Bushland Expenditure Profile	E4.6	diture Profile	ishland E
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	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	Average
	\$(000's)	\$(000's)	\$(000's)	\$(000's)	\$(000's)	\$(000's)
Maintenance	354	353	378	385	411	376
Renewals	6	0	0	33	0	8
New Work	0	0	0	0	0	0
TOTAL	360	353	378	418	411	384

ollowing table:

There were no new works associated with bushlands.

It is forecast that new bushland construction will be nil to limited in the future however there may be pressure for some bushland assets in foreshore park bushland areas.

### **Proposed Strategy** E4.7

Limited renewal work has been carried out on Council's Bushland assets in recent years, and limited funding has generally been provided. Increased funding for renewals is considered desirable, with a view to better managing risk and making this category of assets sustainable in the long term, particularly in terms of tracks, fences and drainage lines.

Council is developing a rigorous methodology for assessing and monitoring the condition of assets and prioritising replacement and maintenance work. This is further underpinned by a maintenance management system which is currently being developed. It is proposed to review and modify this strategy to provide for more proactive maintenance and defect intervention.

# E4.8 Sustainability Modelling

A summary of the long and medium term sustainability of Bushland assets is as follows:

Long Term		Medium Term	
Life Cycle Cost <sup>1</sup>	\$578,000 pa	Required Expenditure <sup>3</sup>	\$494,000 pa
Life Cycle Expenditure <sup>2</sup>	\$494,000 pa	Current Expenditure <sup>4</sup>	\$384,000 pa
		Funding Gap	\$110,000 pa
		Sustainability Ratio	0.78

<sup>1</sup> Consultant's annual figures averaged over the entire life of the asset.

<sup>2</sup> Required annual operations, maintenance and renewal ('sustainable' assets case) expenditure averaged over the 12 year financial period.

<sup>3</sup> Required annual maintenance and renewal ('sustainable' assets case) expenditure averaged over the 12 year financial period.

<sup>4</sup> Current annual maintenance and renewal expenditure averaged over the past 5 years.

# E4.9 Proposed Bushland Renewals Program

The following bushland renewals program is proposed. Note the exact timing, extent and estimated cost of works will be dependent upon review of proposed renewal works at time of development of Council's Delivery Program.

Bushland 10 Year Renewals Program

Park Name	Sub Asset	Measur e	Quantity	Unit Rate (\$)	Forecast Expenditure (\$)	Forecast Renewal Year
Parriwi Lighthouse	Tracks	m	113	400	45,200	2019
Parriwi Park	Fencing	m	30	120	3,600	2019
Quakers Hat North	Tracks	m	280	200	56,000	2019
Balmoral Park	Signage	item	6	135	810	2020
Bradley Bushland Reserve	Signage	item	14	150	2,100	2020
Chinamans Beach Dunes	Signage	item	6	150	900	2020
Clifton Gardens	Signage	item	6	150	900	2020
Curraghbeena Park	Signage	item	6	150	900	2020

Park Name	Sub Asset	Measur e	Quantity	Unit Rate (\$)	Forecast Expenditure (\$)	Forecast Renewal Year
Joels Reserve	Signage	item	6	150	900	2020
Morella Road	Signage	item	3	150	450	2020
Parriwi Lighthouse	Signage	item	3	150	450	2020
Parriwi Park	Signage	item	6	150	900	2020
Parriwi Point	Signage	item	6	150	900	2020
Quakers Hat North	Signage	item	6	150	900	2020
Quakers Hat Park	Signage	item	6	150	900	2020
Quakers Hat South	Signage	item	6	150	900	2020
Rosherville Reserve	Signage	item	6	150	900	2020
Sirius Park East	Signage	item	6	150	900	2020
Sirius Park West	Signage	item	6	150	900	2020
Spit Reserve	Signage	item	6	150	900	2020
Unnamed / Other	Signage	item	3	150	450	2020
Wyargine Point	Signage	item	6	150	900	2020
Sirius Park East	Drainage	m	100	600	60,000	2021
Balmoral Park	Tracks	m	287	200	57,400	2022
Clifton Gardens	Tracks	m	53	200	10,600	2022
Harnett Park Bushland	Tracks	m	275	200	55,000	2022
Parriwi Lighthouse	Fencing	m	25	120	3,000	2022
Rosherville Reserve	Tracks	m	144.8	200	28,960	2022
Sirius Park East	Fencing	m	10	120	1,200	2022
Lawry Plunkett Reserve	Signage	item	10	150	1,500	2023
Quakers Hat Park	Tracks	m	1353	200	270,600	2023
Reid Park	Fencing	m	65	120	7,800	2023
Reid Park	Signage	item	15	150	2,250	2023
Spit Reserve	Fencing	m	5	120	600	2023

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# E5 Life Cycle Management Plan – Parks Unmade Road Assets

E5.1 Description of Unmade Road Parks Assets and Asset Valuation

There are 89 unmade road reserves including component assets covering 75,473 m<sup>2</sup>. Component assets include:

- 61,366 m<sup>2</sup> biodiversity (bushland);
- 1,585 m stormwater drainage;
- 2,835 m fencing;
- 3,446 m<sup>2</sup>gardens;
- 10,611 m<sup>2</sup>lawns;
- 2 memorials and monuments;
- 4,275 m<sup>2</sup>paths;
- 4,352 m<sup>2</sup>retaining walls; and
- 133 signage.

Typical unmade road reserve unit rates and useful lives are as follows:

Park & Reserve Assets	Useful Life (Years)	Unit Rate
Biodiversity	200	\$11 per m <sup>2</sup>
Drainage	50	\$600 per m
Fencing	20	\$120 per m
Gardens	20	\$60 per m <sup>2</sup>
Lawns	50	\$8 per m <sup>2</sup>
Memorials and Monuments	100	\$3,000 per item
Paths	50	\$123 per m <sup>2</sup>
Retaining Walls	120	\$200 per m <sup>2</sup>
Signage	15	\$150 per item

Replacement Cost Replacement Cost Biodiversity \$675,030 \$135,006 \$108,005 \$675 \$567,025 380,323 \$19,016 Drainage \$ 950,808 \$380,323 \$570,485 Fencing \$196,440 \$196,440 \$78,576 \$9,822 \$117,864 Gardens \$206,760 \$103,380 \$41,352 \$5,169 \$165,408

\$16,978

\$2,400

\$210,330

\$47,760

\$7,860

\$893,584

\$849

\$60

\$10,517

\$663

\$1,310

\$48,081

\$67910

\$3,600

\$315,495

\$31,840

\$11,790

\$1,851,417

\$42,444

\$6,000

\$525,825

\$79,600

\$19,650

\$2,059,152

Lawns

Paths

Signage

Total

Memorials and

**Retaining Walls** 

Monuments

\$84,888

\$6,000

\$525,825

\$79,600

\$19,650

\$2,745,001

The value of the Parks Assets in Unmade Road Reserves is summarised below (as at 30 June 2011):

# E5.2 Condition of Parks Assets in Unmade Roads

The condition profile (June 2011) of the Parks Assets in Unmade Roads are as follows:



# E5.3 Renewal Intervention

It is likely that with 73% of assets in condition 3, some will progressively deteriorate from condition 3 to condition 4 then condition 5 each year. Generally works will be carried out on those assets in subsequent annual programs. A consistent stream of renewal funding is considered necessary to renew deteriorating assets each year and prevent a further build up of condition 4 and 5 assets.

# E5.4 Current Status of "Unsatisfactory" Condition Assets

As at June 2011, Unmade Roads related Parks assets valued at \$ 754,630 (approximately 28%) are in an "unsatisfactory" condition (i.e. rated condition 4 or worse).

# E5.5 Build Date and Remaining Life

The estimated build date of Council's Park assets in Unmade Roads is shown below.



The above chart indicates that many of Council's current Parks assets in Unmade Roads were developed many decades ago with additional major investments showing in the late 1900s. Some Parks Unmade Roads assets are second or third generation assets, having been reconstructed and upgraded on a number of occasions in the past.

### E5.6 Current Maintenance and Renewal Strategies

Maintenance includes reactive, planned and cyclic maintenance work activities.

Council is currently formalising its maintenance management system.

# E5.7 Expenditure Profile For Parks Assets in Unmade Roads

Expenditure related to Council's Parks assets in Unmade Roads over the last few years is outlined in the following table:

	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	Average
	\$(000's)	\$(000's)	\$(000's)	\$(000's)	\$(000's)	\$(000's)
Maintenance	132	128	116	130	150	131
Renewals	0	0	0	0	0	0
New Work	0	0	0	0	0	0
TOTAL	132	128	116	130	150	131

There were no new works associated with unmade roads in the past 5 years.

It is forecast that new Parks assets in Unmade Roads construction will be nil to limited in the future however there may be pressure for some new assets in foreshore areas. It is assumed that this cost can be absorbed within the Renewals Program and as such "new works" projections have been assumed to be nil.

# E5.8 Proposed Strategy

Limited renewal work has been carried out on Council's Parks assets in Unmade Roads in recent years, and limited funding has generally been provided. Increased funding for renewals is considered desirable, with a view to better managing risk and making this category of assets sustainable in the long term.

Council is developing a rigorous methodology for assessing and monitoring the condition of assets and prioritising replacement and maintenance work. This is further underpinned by a maintenance management system which is currently being developed. It is proposed to review and modify this strategy to provide for more proactive maintenance and defect intervention.

# E5.9 Sustainability Modelling

A summary of the long and medium term sustainability of Unmade Road assets is as follows:

Long Term		Medium Term	
Life Cycle Cost <sup>1</sup>	\$226,000 pa	Required Expenditure <sup>3</sup>	\$173,000 pa
Life Cycle Expenditure <sup>2</sup> \$173,000 pa		Current Expenditure <sup>4</sup>	\$131,000 pa
		Funding Gap	\$42,000 pa
		Sustainability Ratio	0.76

<sup>1</sup> Consultant's annual figures averaged over the entire life of the asset.

<sup>2</sup> Required annual operations, maintenance and renewal ('sustainable' assets case) expenditure averaged over the 12 year financial period.

<sup>3</sup> Required annual maintenance and renewal ('sustainable' assets case) expenditure averaged over the 12 year financial period.

<sup>4</sup> Current annual maintenance and renewal expenditure averaged over the past 5 years.

### E5.10 Proposed Parks Assets in Unmade Roads Renewals Program

The following Council's Parks assets in Unmade Roads renewals program is proposed. Note the exact timing, extent and estimated cost of works will be dependent upon review of proposed renewal works at time of development of Council's Delivery Program.

### Council's Parks assets in Unmade Roads 10 Year Renewals Program

Park Name	Sub Asset	Measure	Quantity	Forecast Expenditure (\$)	Forecast Renewal Year
Barney Kearns Steps Reserve	Signage	item	2	\$300	2020
Herron Walk	Signage	item	4	\$600	2020
Unmade Almora St Reserve	Signage	item	2	\$300	2020
Unmade Arbutus St Reserve	Signage	item	2	\$300	2020
Unmade Bay St Reserve	Signage	item	1	\$150	2020
Unmade Bullecourt Ave Reserve (North)	Signage	item	2	\$300	2020
Unmade Bullecourt Ave Reserve (South)	Signage	item	2	\$300	2020
Unmade Bungaree Ln Reserve	Signage	item	2	\$300	2020
Unmade Burrawong Rd Reserve (North)	Signage	item	2	\$300	2020
Unmade Burrawong Rd Reserve (South)	Signage	item	2	\$300	2020
Unmade Carrington Ave Reserve	Signage	item	1	\$150	2020
Unmade Central Ave Reserve	Signage	item	2	\$300	2020
Unmade Cobbittee St Reserve	Signage	item	1	\$150	2020
Unmade Crown Rd Reserve	Signage	item	1	\$150	2020
Unmade Edwards Bay Reserve	Signage	item	1	\$150	2020
Unmade Everview Ave Reserve	Signage	item	1	\$150	2020
Unmade Fairfax Rd Reserve (East)	Signage	item	2	\$300	2020

Park Name	Sub Asset	Measure	Quantity	Forecast Expenditure (\$)	Forecast Renewal Year
Unmade Glen Rd Reserve	Signage	item	1	\$150	2020
Unmade Government Rd Reserve	Signage	item	2	\$300	2020
Unmade Grecia Ln Reserve (East)	Signage	item	2	\$300	2020
Unmade Grecia Ln Reserve (West)	Signage	item	1	\$150	2020
Unmade Grove Ave Reserve	Signage	item	2	\$300	2020
Unmade Hampden St Reserve	Signage	item	2	\$300	2020
Unmade Harston Ave Reserve	Signage	item	2	\$300	2020
Unmade Inkerman Reserve (South)	Signage	item	5	\$750	2020
Unmade Inkerman St Reserve (North)	Signage	item	1	\$150	2020
Unmade Kahibah Rd Reserve (South)	Signage	item	2	\$300	2020
Unmade Kallaroo St Reserve	Signage	item	1	\$150	2020
Unmade Killarney St Reserve	Signage	item	2	\$300	2020
Unmade Koowong St Reserve (East)	Signage	item	2	\$300	2020
Unmade Koowong St Reserve (West)	Signage	item	2	\$300	2020
Unmade Lennox St Reserve	Signage	item	2	\$300	2020
Unmade Lower Illawarra St Reserve	Signage	item	2	\$300	2020
Unmade Lower Boyle St Reserve	Signage	item	1	\$150	2020

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Park Name	Sub Asset	Measure	Quantity	Forecast Expenditure (\$)	Forecast Renewal Year
Unmade Lower McLeod St Reserve	Signage	item	2	\$300	2020
Unmade Lower Punch St Reserve	Signage	item	1	\$150	2020
Unmade Lower Sverge St Reserve	Signage	item	2	\$300	2020
Unmade Mandalong Ln Reserve (West)	Signage	item	2	\$300	2020
Unmade Marsala St Reserve	Signage	item	2	\$300	2020
Unmade Mary Margaret Ln Reserve	Signage	item	2	\$300	2020
Unmade McLeod St Reserve (East)	Signage	item	2	\$300	2020
Unmade McLeod St Reserve (West)	Signage	item	1	\$150	2020
Unmade Millet Rd Reserve	Signage	item	4	\$600	2020
Unmade Moran St Reserve	Signage	item	1	\$150	2020
Unmade Morella Rd Reserve (North)	Signage	item	1	\$150	2020
Unmade Morella Rd Reserve (South)	Signage	item	2	\$300	2020
Unmade Mosman Ln Reserve	Signage	item	2	\$300	2020
Unmade Moss Ln Reserve	Signage	item	2	\$300	2020
Unmade Mulbring St Reserve	Signage	item	1	\$150	2020
Unmade Musgrave Road Verge	Signage	item	8	\$1,200	2020
Unmade Pearl Bay Ave Reserve	Signage	item	1	\$150	2020

Park Name	Sub Asset	Measure	Quantity	Forecast Expenditure (\$)	Forecast Renewal Year
Unmade Pretoria Ave Reserve	Signage	item	2	\$300	2020
Unmade Pulpitt Ln Reserve	Signage	item	2	\$300	2020
Unmade Quakers Rd Reserve (Beauty Point Park)	Signage	item	2	\$300	2020
Unmade Quakers Rd Reserve (East)	Signage	item	2	\$300	2020
Unmade Quakers Rd Reserve (West)	Signage	item	2	\$300	2020
Unmade Shellbank Ave Reserve	Signage	item	1	\$150	2020
Unmade Stanton Ln Reserve	Signage	item	2	\$300	2020
Unmade Stanton Rd Reserve	Signage	item	3	\$450	2020
Unmade Upper Illawarra St Reserve	Signage	item	2	\$300	2020
Unmade Upper McLeod St Reserve	Signage	item	2	\$300	2020
Unmade Upper Sverge St Reserve	Signage	item	2	\$300	2020
Unmade Wallington Rd Reserve	Signage	item	1	\$150	2020
Unmade Warringah Rd Reserve	Signage	item	2	\$300	2020
Unmade Water Ln Reserve (East)	Signage	item	2	\$300	2020
Unmade Water Ln Reserve (West)	Signage	item	2	\$300	2020
Unmade Wolseley (at Mulbring) Rd Verge	Signage	item	2	\$300	2020
Unmade Wyong Rd Reserve	Signage	item	2	\$300	2020

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Park Name	Sub Asset	Measure	Quantity	Forecast Expenditure (\$)	Forecast Renewal Year
Barney Kearns Steps Reserve	Fencing	m	125	\$15,000	2022
Herron Walk	Fencing	m	80	\$9,600	2022
Sarah Walk	Fencing	m	58	\$6,960	2022
Unmade Almora St Reserve	Fencing	m	73	\$8,760	2022
Unmade Arbutus St Reserve	Gardens	m²	68	\$2,040	2022
Unmade Bungaree Ln Reserve	Fencing	m	95	\$11,400	2022
Unmade Bungaree Ln Reserve	Gardens	m²	361	\$10,830	2022
Unmade Burrawong Rd Reserve (North)	Fencing	m	35	\$4,200	2022
Unmade Central Ave Reserve	Fencing	m	0	\$-	2023
Unmade Central Ave Reserve	Gardens	m <sup>2</sup>	253	\$7,590	2023
Unmade Crown Rd Reserve	Fencing	m	15	\$1,800	2023
Unmade Edwards Bay Reserve	Fencing	m	21	\$2,520	2023
Unmade Elfrida St Reserve	Fencing	m	8	\$960	2023
Unmade Fairfax Rd Reserve (West)	Gardens	m <sup>2</sup>	300	\$9,000	2023
Unmade Government Rd Reserve	Fencing	m	20	\$2,400	2023
Unmade Grecia Ln Reserve (East)	Fencing	m	56	\$6,720	2023
Unmade Grove Ave Reserve	Fencing	m	49	\$5,880	2023
Unmade Grove Ave Reserve	Gardens	m²	300	\$9,000	2023

Park Name	Sub Asset	Measure	Quantity	Forecast Expenditure (\$)	Forecast Renewal Year
Unmade Hampden St Reserve	Fencing	m	17	\$2,040	2023
Unmade Harston Ave Reserve	Fencing	m	63	\$7,560	2023
Unmade Inkerman Reserve (South)	Fencing	m	80	\$9,600	2023
Unmade Kahibah Rd Reserve (North)	Fencing	m	11	\$1,320	2023
Unmade Kahibah Rd Reserve (South)	Fencing	m	77	\$9,240	2023
Unmade Kallaroo St Reserve	Fencing	m	43	\$5,160	2023
Unmade Lower Punch St Reserve	Gardens	m <sup>2</sup>	131	\$3,930	2023
Unmade Mandalong Ln Reserve (West)	Gardens	m²	862	\$25,860	2023



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