



Aquatics

Asset Management Plan



ASSET MANAGEMENT PLAN AQUATIC CENTRES



21 JULY 2010

MAITLAND CITY COUNCIL



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1. EXECUTIVE SUMMARY

What Council Provides

Council provides Aquatic Centres to enable safe and functional access to swimming and associated recreational facilities for the community. The two Aquatic Centres are located at Maitland and East Maitland. See Appendix B for aerial photographs.

The current replacement cost for the aquatic centre assets is **\$14.8M**.

Table 1.0 Aquatic Centre Assets

Asset Category	Number of Assets
Swimming Pools	5
Concourses	2
Water Treatment Plant & Pipelines	3
Buildings	12
Ancillary Assets	29
TOTAL	51

What does it Cost?

There are two key indicators of cost to provide the Aquatic Centre service.

- The life cycle cost being the average cost over the life cycle of the asset, and
- The total maintenance and capital renewal expenditure required to deliver existing service levels in the next 15 years covered by Council's long term financial plan.

Annual Forecast Maintenance
\$135,407

Annualised Renewal/ Replacement Program
\$156,996

Total Annual Cost

\$292,403

The estimated cost to bring the aquatic centre assets up to satisfactory condition is **\$1,190,000**.

The current written down value of the aquatic centre assets is **\$10.3M** and their economic useful life is **94 years**.

See Chapters 5, 6, 7 and Appendix C for full details

Plans for the Future

Council plans to operate and maintain the Aquatic Centres to achieve the following strategic objectives.

1. Ensure the Aquatic Centres are maintained at a safe, secure, equitable and functional standard as set out in this asset management plan.
2. Ensure the Aquatic Centres are inspected regularly to the standards as set out in this asset management plan.
3. Ensure the Aquatic Centres meet the demand of future growth as set out in this asset management plan.

Measuring our Performance

Quality

Aquatic Centre assets will be maintained in a reasonably usable condition. Defects found or reported that are outside our service standard will be repaired. See our maintenance response service levels for details of defect prioritisation and response time.

Function

Our intent is that Aquatic Centre Assets are maintained adequately to provide the community, sporting groups and visitors with appropriate, safe, accessible and attractive facilities.

Aquatic Centre asset attributes will be maintained at a safe level and associated signage and equipment be provided as needed to ensure public safety and accessibility. We need to ensure key functional objectives are met:

- Future Demand.

Safety

We inspect the Aquatic Centres regularly and prioritise and repair defects in accordance with our inspection schedule to ensure they are safe.

The Next Steps

This actions resulting from this asset management plan are:

- Continue Formal Routine Inspections.
- Action community and user requests regarding Aquatic Centre maintenance and improvements.
- Community Survey of satisfaction of Aquatic Centre service levels.
- Review demand growth areas.

2. INTRODUCTION

2.1 Background

This asset management plan seeks to: demonstrate responsive management of assets and associated services, comply with regulatory requirements, and communicate the level of funding necessary to provide the required levels of service.

The asset management plan is to be read with the following associated planning documents:

Maitland 2021 Community Strategic Plan 2011

Maitland Delivery Program 2011

Asset Management Policy 2011

Asset Management Strategy 2011

This asset management plan covers the infrastructure assets listed below in Table 2.1.0 together with their replacement values. Refer to Appendix C for further details.

Table 2.1.0 Assets and Replacement Values

Asset Category	Number of Assets	Replacement Value (\$M)
Swimming Pools	5	5.7
Concourses	2	0.3
Water Treatment Plant & Pipelines	3	2.4
Buildings	12	5.6
Ancillary Assets	Shade Structures/Picnic Shelters/ Children's Playgrounds/Landscaping/ Lighting /Perimeter Fences - 29	0.8
TOTAL	51	\$14.8M

Key stakeholders in the preparation and implementation of this asset management plan are listed below in Table 2.1.1:

Table 2.1.1 Key Stakeholders

Community, Recreational Groups & Visitors	User Safety, Work requests & Satisfaction
Kiosk Lessees	User Safety, Work requests & Satisfaction
Council Community & Recreation Services	Provision of Operational Staff & Management Services
Council Assets & Infrastructure Planning	Planning, Design and Infrastructure Management
Council City Works & Services	Provision of Maintenance Services

2.2 Goals and Objectives of Asset Management

The Council exists to provide services to its community. Some of these services are provided by infrastructure assets. Council has acquired infrastructure assets by construction via council staff or contractors to meet increased levels of service.

Council's goal in managing infrastructure assets is to meet the required level of service in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Taking a life cycle approach.
- Developing cost-effective management strategies for the long term.
- Providing a defined level of service and monitoring performance.
- Understanding and meeting the demands of growth through demand management and infrastructure investment.
- Managing risks associated with asset failures.
- Sustainable use of physical resources.
- Continuous improvement in asset management practices.¹

2.3 Plan Framework

Key elements of the plan are:

- Levels of service – specifies the services and levels of service to be provided by council.
- Future demand – how this will impact on future service delivery and how this is to be met.
- Life cycle management – how Council will manage its existing and future assets to provide the required services.
- Financial summary – what funds are required to provide the required services.
- Asset management practices.
- Monitoring – how the plan will be monitored to ensure it is meeting Council's objectives.
- Asset management improvement plan.

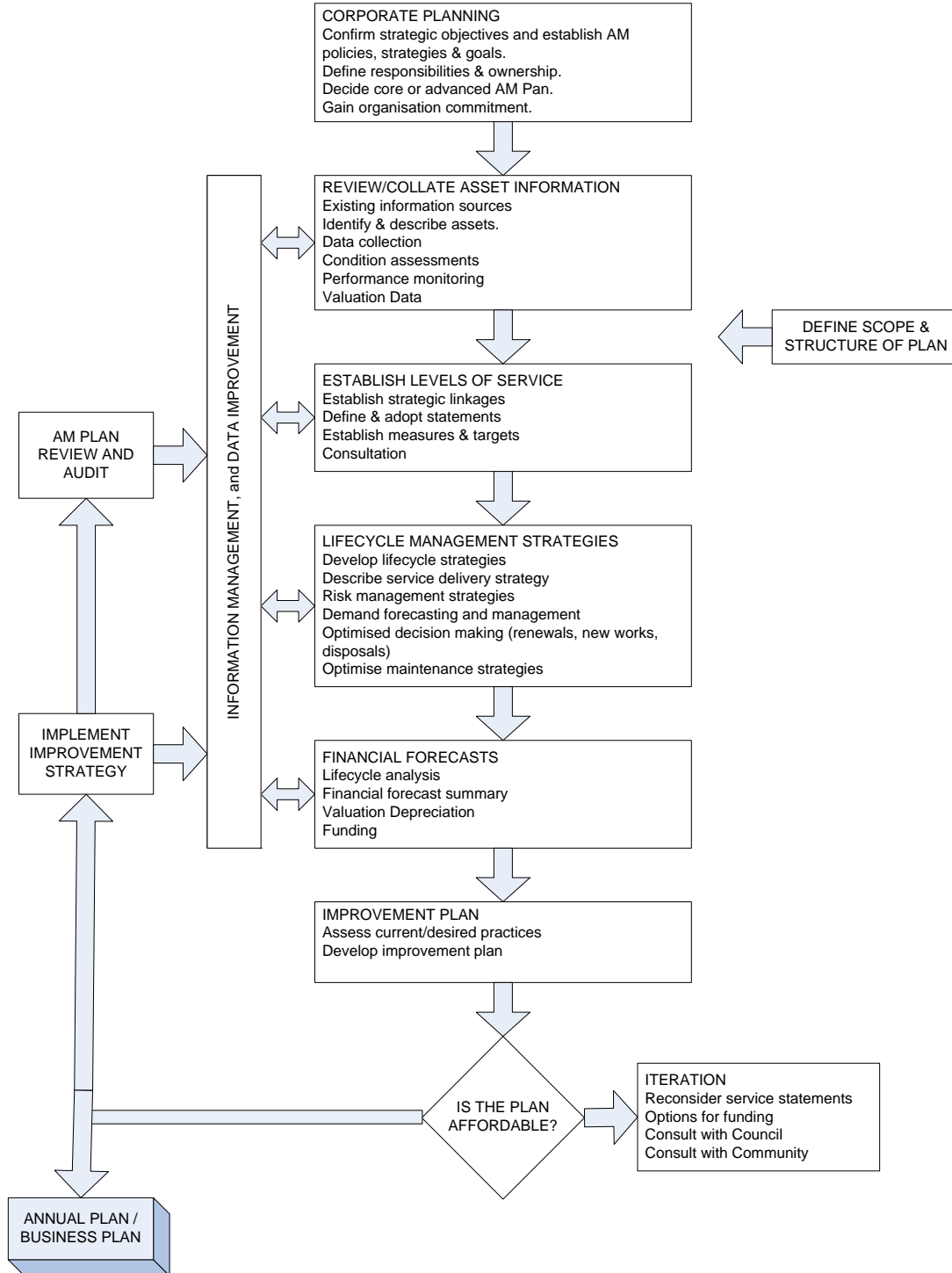
A road map for preparing this asset management plan is shown below in Fig 2.3.0.

¹ IIMM 2006 Sec 1.1.3, p 1.3

Fig 2.3.0

Road Map for preparing an Asset Management Plan

Source: IIMM Fig 1.5.1, p 1.11



2.4 Core and Advanced Asset Management

This asset management plan is prepared as a 'core' asset management plan for the aquatic centres in accordance with the International Infrastructure Management Manual. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels.

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

Council has recently conducted a Community Survey (2009). This and future surveys will be investigated for future updates of the asset management plan. Comparison with the 2006 survey has customer opinion declining only slightly.

There are always some requests for service in this area. There exists a back log of works that need addressing. This may have contributed to the very small drop in customer satisfaction.

3.2 Legislative Requirements

Council has to meet legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.2.0 Legislative Requirements

Legislation	Requirement
NSW Local Government Act	Sets out: role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery
NSW Department of Local Government Water Safety Guidelines	Set out: facility operational standards & equipment, life saving practices, law enforcement powers
NSW Public Health Act & Regulations	Stipulates public health risks: prevention, mitigation & eradication plus closure of public swimming pools; also disinfection, cleanliness, inspection & testing requirements
NSW Health Department Guidelines	Set out: comprehensive water quality and water turnover rate guidelines plus health & disease risks; also disinfection, cleanliness, inspection & testing guidelines
National Occupational Health & Safety Regulations & Guidelines	Stipulates: OHS skills, training and licensing; safe usage of plant & equipment, workplace injury & disease prevention, storage and handling of dangerous goods & hazardous substances; noise management

3.3 Current Levels of Service

Council has defined service levels in two ways:

Community Levels of Service relate to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.

Technical or Operational Measures of Performance are developed to ensure that minimum community levels of service are met. These technical or operational measures relate to and rationalise service criteria such as:

Table 3.3.0 Service Criteria

Service Criteria	Technical measures may relate to
Safety	Number of injury accidents
Availability	Mobility access and general opening times
Water Quality	Frequency & results of tests and compliance requirements

4. FUTURE DEMAND & OPTIONS

4.1 Demand Forecast

Factors affecting demand include population change, changes in demographics, seasonal factors, economic factors, customer preferences and expectations and competition from newer more contemporary facilities.

Demand factor trends and impacts on service delivery are summarised below in Table 4.1.0.

Table 4.1.0 Demand Factors and Projections

Demand Factor	2005/2006	2006/2007	11 Year Ave 1996/07	3 Year Ave 2004/07	Projection
LGA Population		61,880 (2006 Census)			96,000 (2026)
Visitations – Maitland Pool	73,480	68,467	96,000	79,000	97,500
Visitations – East Maitland Pool	49,614	47,287	55,000	51,000	63,000

The long-term trend has been declining visitations for both centres, but particularly at Maitland Aquatic Centre. However, the overall visitation rate is 2.1 per head of population (based on 2006 Census data), which is at industry averages when compared to similar areas with similar populations and aquatic infrastructure.

It is assumed that the Maitland community will want aquatic facilities for the life of this plan. However, potential growth in visitation numbers will be limited by the lack of year-round heated indoor facilities. Consequently, tabled proportional projection rates are based solely upon the industry average rate stated above.

4.2 Changes in Technology

Technology changes are forecast to affect the delivery of services covered by this plan as shown in Table 4.2.0 below.

Table 4.2.0 Changes in Technology and Forecast effect on Service Delivery

Technology Change	Effect on Service Delivery
Pool Heating	New, more efficient or cheaper heating technology and techniques to replace or augment the existing solar heating systems, potentially enabling year-round centre operation
Material/Repair Methods	New materials and methods to deliver cheaper, more efficient and more effective asset repair and renewal solutions
Water Quality Management	Fully automated and more accurate chemical treatment and testing technology to facilitate better control of water quality, reduce chemical usage, improve data collection and reduce wear on plant infrastructure and subsequent maintenance costs

4.3 Demand Management

Demand for new services will be managed through a combination of maintaining existing assets, upgrading existing assets and providing new assets to meet demand. Demand management practices include non-asset solutions, insuring against risks and managing failures.

4.4 New Assets from Growth

It is not anticipated that new assets from growth will be acquired within the next 10 years. However, in the longer term, Council will need to consider how it will provide new and improved aquatic assets to meet community expectations.

4.5 Future Options

During the next 10 years, Council will need to consider how it will provide new and improved aquatic assets to meet community expectations. A range of options will need to be considered including:

- Retain Existing Aquatic Centres.
- Acquire Alternative Aquatic Centres.
- Acquire Additional Aquatic Centres.
- Dispose of Existing Aquatic Centres.

4.5.1 Retain Existing Aquatic Centres

This option essentially involves two possible scenarios: maintain existing assets & levels of service or improve existing assets & levels of service. The first scenario is the one that is followed in this Asset Management Plan. It involves retaining both Maitland and East Maitland Aquatic Centres in their current locations and at a reasonable level of service.

The second scenario is the one that is considered in the SGL Group Strategy & Options Paper June 2008. This strategy involves developing Maitland Aquatic Centre as the principal municipal/district aquatic facility & East Maitland Aquatic Centre as a local aquatic facility. Maitland Aquatic Centre would be progressively redeveloped as an indoor aquatic & leisure centre with comprehensive modern facilities.

4.5.2 Acquire Alternative Aquatic Centres

This option enables Council to establish new aquatic facilities in other locations that would satisfy future needs of the community. This is particularly evident with the locations of new residential areas on the fringes of established urban areas e.g. Rutherford North, Aberglasslyn, Thornton North & Gillieston Heights.

This option would also provide a strategic path to wind down and decommission one or both of the existing Aquatic Centres over a 10 to 20 year period. The overall economic burden would ultimately involve the purchase or reallocation of Council land in these new areas and similar infrastructure costs to developing new aquatic facilities on the existing sites.

4.5.3 Acquire Additional Aquatic Centres

A new site in Rutherford has already been proposed which would service residents living in the growing western part of the local government area (LGA). Similarly, a new site in the growing eastern part of the LGA could be desirable.

The overall economic burden would ultimately involve the purchase or reallocation of Council land in these new areas and similar infrastructure costs to developing new aquatic facilities on the existing sites.

4.5.4 Dispose of Existing Aquatic Centres

This option involves the concept of Council electing not to provide any aquatic facilities for the community. In effect this allows private enterprise or neighbouring councils to develop more or improved aquatic centres. To a large extent this is already happening with Port Stephens & Cessnock Councils building new leisure centres in recent years and attracting Maitland LGA residents. Plus local private aquatic centres already exist at East Maitland and Thornton.

This option would require a strategy to wind down and decommission both of the existing Aquatic Centres over say a 10 to 20 year period. The overall economic effect would be to relieve Council of the ongoing financial burden and also the need to either upgrade or relocate the existing aquatic facilities.

5. LIFECYCLE MANAGEMENT

Lifecycle management details how Council plans to control and operate the assets at the agreed levels of service whilst optimising whole of life costs. Levels of service are defined in Section 3.

5.1 Background Data

5.1.1 Physical Parameters

The assets covered by this asset management plan and their age are detailed below in Table 5.1.1.0 and shown on aerial photographs in Appendix C.

Table 5.1.1.0

Asset Descriptions and Age

Asset Location	Asset Description	Number of Assets	Age of Assets (Years)
Maitland Aquatic Centre	Swimming Pools – Olympic, Learners & Toddlers	3	25
	Concourse	1	25
	Water Treatment Plant & Pipelines	1	25 (90%), 70 (10%)
	Buildings – Plant Room & Amenities/Offices/Kiosk	2	25
	Building - Grandstand	1	13
	Building - Pavilion	1	16
	Ancillary Assets - Shade Structures (5) /Picnic Shelters (5) /Childrens Playground /Landscaping / Lighting /Perimeter Fence	14	Varies – maximum 25
East Maitland Aquatic Centre	Swimming Pools – Olympic & Toddlers	2	33
	Concourse	1	33
	Water Treatment Plant & Pipelines	2	33
	Buildings – Plant Rooms & Amenities/Offices/Kiosk	3	33
	Building - Grandstand	1	25
	Building – Pavilions	2	25
	Buildings – Storage Sheds	2	25
	Ancillary Assets - Shade Structures (3) /Picnic Shelters (8) /Childrens Playground /Landscaping / Lighting /Perimeter Fence	15	Varies – maximum 33
	TOTAL	51	

Maitland Aquatic Centre

The existing swimming pools, ancillary assets and most of the buildings and plant infrastructure were constructed in 1985. These structures replaced the original infrastructure which was constructed when the Centre first opened in 1940. The pavilion was constructed in 1994 and the grandstand in 1997. Solar heating was installed in 2004. The liquid chlorination and tank storage system was replaced with a dry chlorination system in 2007. Amenities and Offices were substantially improved and upgraded in 2007. The only original infrastructure still in use at the Centre is: two of the four sand filter cells and adjoining dewater pit & holding tank

The existing toddlers pool is currently being replaced with a modern water playground, which is due for completion in December 2010. The toddlers and learners pools are covered by shade structures, as will the new water playground.

East Maitland Aquatic Centre

The Centre was constructed and opened in 1977. The grandstand, pavilions and steel storage shed were constructed in the 1980's. A new accessible amenities and storage area was added to the existing amenities/offices/kiosk building in 2008. Solar heating was installed in 2004. The liquid chlorination and tank storage systems were replaced with dry chlorination systems in 2007. The existing toddlers pool plant room was upgraded in 2010.

5.1.2 Asset Capacity and Performance

Council's services are generally provided to meet design standards where these are available. Whilst Table 5.1.2 below lists aquatic infrastructure with known service deficiencies, these assets are managed appropriately such that they are safe for all pool users.

Table 5.1.2.0 Known Service Performance Deficiencies

Asset Description	Service Deficiency
All Swimming Pools	Outdoor facilities limit opening season to only seven warmer months each year, reduce usage in adverse weather conditions and increase artificial heating cost options
Maitland Olympic Pool	Wall cracks compromise overall structural integrity, water loss through leaking joints, deck pebblecrete cracking and spalling, wet deck gutter and return channel dimensions restrict ability to increase water turnover rates
Maitland Learners Pool	Deck pebblecrete cracking and spalling, fibreglaze lining nearing end of service life
Maitland Toddlers Pool	Subsidence compromises overall structural integrity and water quality, raised centre water feature and deck perimeter compromise child safety
East Maitland Olympic Pool	Deep end floor slab cracks compromise structural integrity, water loss through leaking joints, under-sized raised deck gutter and return channel dimensions restrict ability to increase water turnover rates, lacks accessible facility for mobility impaired users
East Maitland Toddlers Pool	Surface tiling nearing end of service life, raised deck perimeter compromises child safety
All Water Treatment Plant & Pipelines	Nearing end of service life, insufficient hydraulic capacities restrict ability to increase water turnover rates to recommended levels
All Concourses	Nearing end of service life, structural cracking and joint movement potentially compromise user safety
Amenities & Kiosks	Dated facilities restrict and detract from usage
Grandstands	Lack accessible areas for mobility impaired users
Shade Structures	Replace deteriorated sails to provide required shade for users

The above service deficiencies were identified from the experience of Council operational, maintenance and management staff, various technical & consultant condition assessment reports and community feedback.

5.1.3 Asset Condition

Condition is measured using a 1 – 5 rating system.²

Rating	Description of Condition
5	Only planned maintenance required.
4	Minor maintenance required plus planned maintenance.
3	Significant maintenance required.
2	Significant renewal/upgrade required.
1	Unserviceable.

² IIMM 2006, Appendix B, p B:1-3 ('cyclic' modified to 'planned')

Overall, the asset condition of the aquatic facilities in Maitland is 3, being of average condition with significant maintenance required. This being the average means that there are some areas of the aquatic facilities with conditions rating from 1 through to 5. Overall, 80% of the aquatic facilities have a rating of 3 to 5, and 20% of the network has a rating of 1 to 2. The target standard for the aquatic facilities is to keep them at this standard.

Table 5.1.3.0 Condition of Asset

ASSET	CURRENT WRITTEN DOWN VALUE	CURRENT REPLACEMENT VALUE
Aquatic Centres	\$10,300,000	\$14,802,000
Estimate of works required to bring Aquatic assets up to satisfactory standard (based on Aquatic upgrade and replacement survey)		<u>\$1,190,000</u>
Estimate of annual expense of maintaining aquatic assets to that standard (consisting of maintenance and renewal works)		<u>\$292,403</u>

To bring the aquatic centre assets up to satisfactory condition would be to replace, repair or upgrade those assets rated two or below. An estimated cost to bring these aquatic centre assets up to satisfactory condition is \$1,190,000 and is set out below in Table 5.1.3.1.

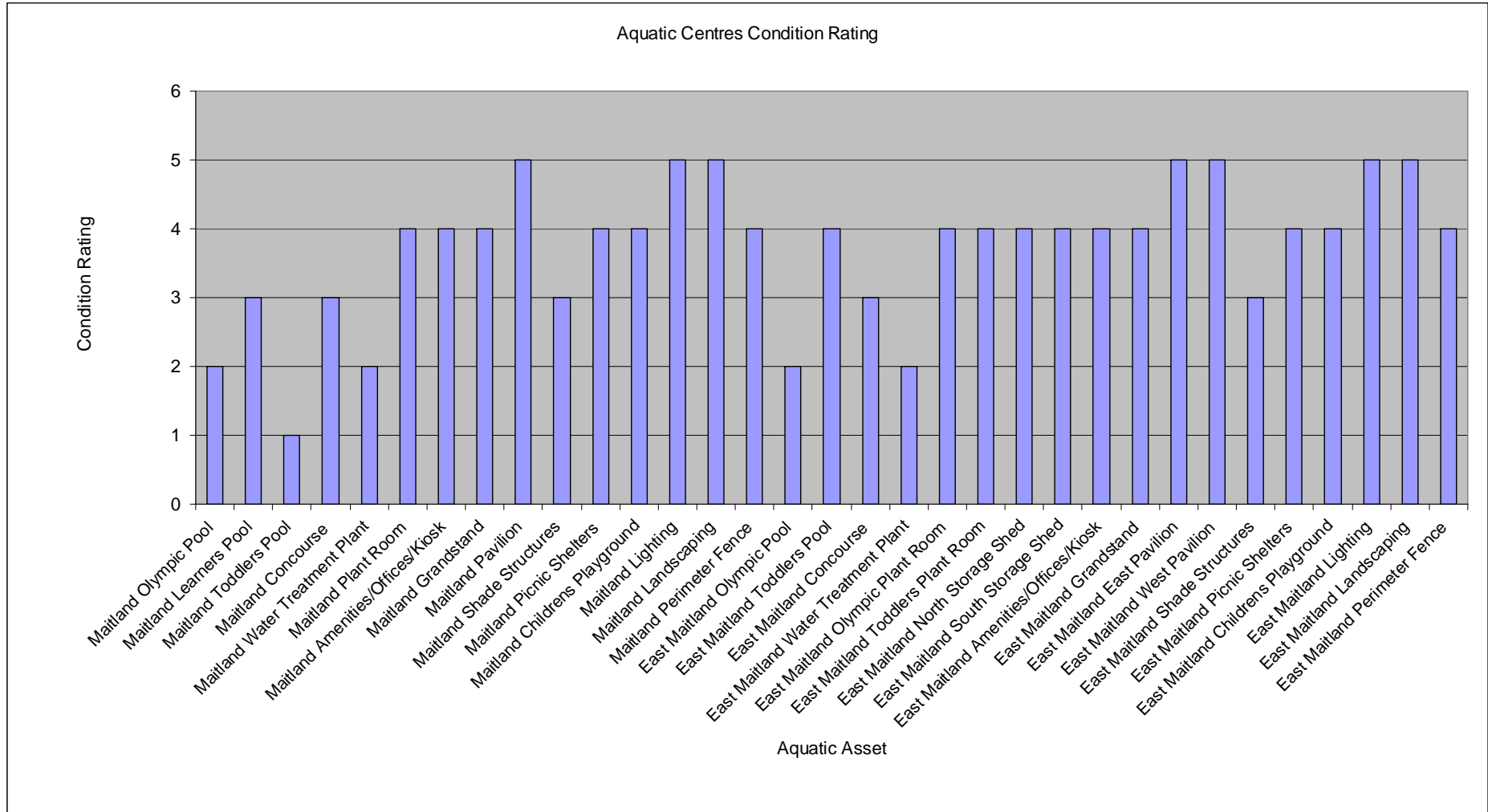
These deficiencies also appear as projects within Council's Capital Works Program and Appendix C.

Table 5.1.3.1 Cost to Bring Deficient Assets to Satisfactory Condition

Location	Service Deficiency	Cost to Bring to Satisfactory Condition
Maitland Aquatic Centre	New Water Playground to Replace Existing Toddlers Pool (480K), Olympic Pool Major Structural Repairs (300K), Learners Pool Reline Shell & Tile Deck (60K), Concourse Repairs (30K), Shade Sail Replacement & Kiosk Upgrade (30K), Grandstand Accessibility Upgrade (10K), Amenities & Other Infrastructure Upgrades (30K)	\$940,000
East Maitland Aquatic Centre	Olympic Pool Structural Floor Repairs & Accessible Ramp Upgrade (150K), Concourse Repairs (30K), Shade Sail Replacement & Kiosk Upgrade (30K), Grandstand Accessibility Upgrade (10K), Amenities & Other Infrastructure Upgrades (30K)	\$250,000

The condition profile of Council's assets is shown overleaf in Figure 5.1.3.0.

Fig 5.1.3.0 Asset Condition Profile



5.1.4 Asset Valuations

The value of assets at June 2010 covered by this asset management plan is summarised below. Assets are valued using unit rates from either similar past works undertaken by Council or from estimates quoted in the consultant condition assessment reports. Future replacement of these assets will involve demolition of existing aquatic infrastructure.

Current Replacement Cost (cost of replacing current aquatic assets)	\$14.8M
Depreciable Amount	\$4.5M
Depreciated Replacement Cost (Current Written Down Value)	\$10.3M
Annual Depreciation Expense	\$156,996
Amount to bring up to satisfactory condition	\$1.19M

Cause and Effect Method of Assumption

The premise is – if the aquatic structures stock is well maintained and the elements are renewed in a timely manner then the whole aquatic centre should conceivably last 200 years. There are many examples of buildings and structures in excess of 100 years in our local area and have been well maintained and are still safely used by the community. However, aquatic plant and pipeline stock will have a much shorter lifespan because of continuous operation in aggressive chemical environments which cause excessive wear and sometimes catastrophic failures.

The calculation of useful life can be achieved by summing the element renewal costs and the ultimate replacement cost which will account for the true consumption of the asset.

This is a sound financial representation of asset deterioration. The renewal program - located in Appendix D - sets out the probable element renewal and likely replacement for the next 75 years.

Annual Economic Cost (Depreciation) = Annualised Element Renewal + Annualised Replacement

$$= \$ 156,996$$

This translates to an Economic Life (or useful life for accounting purposes)

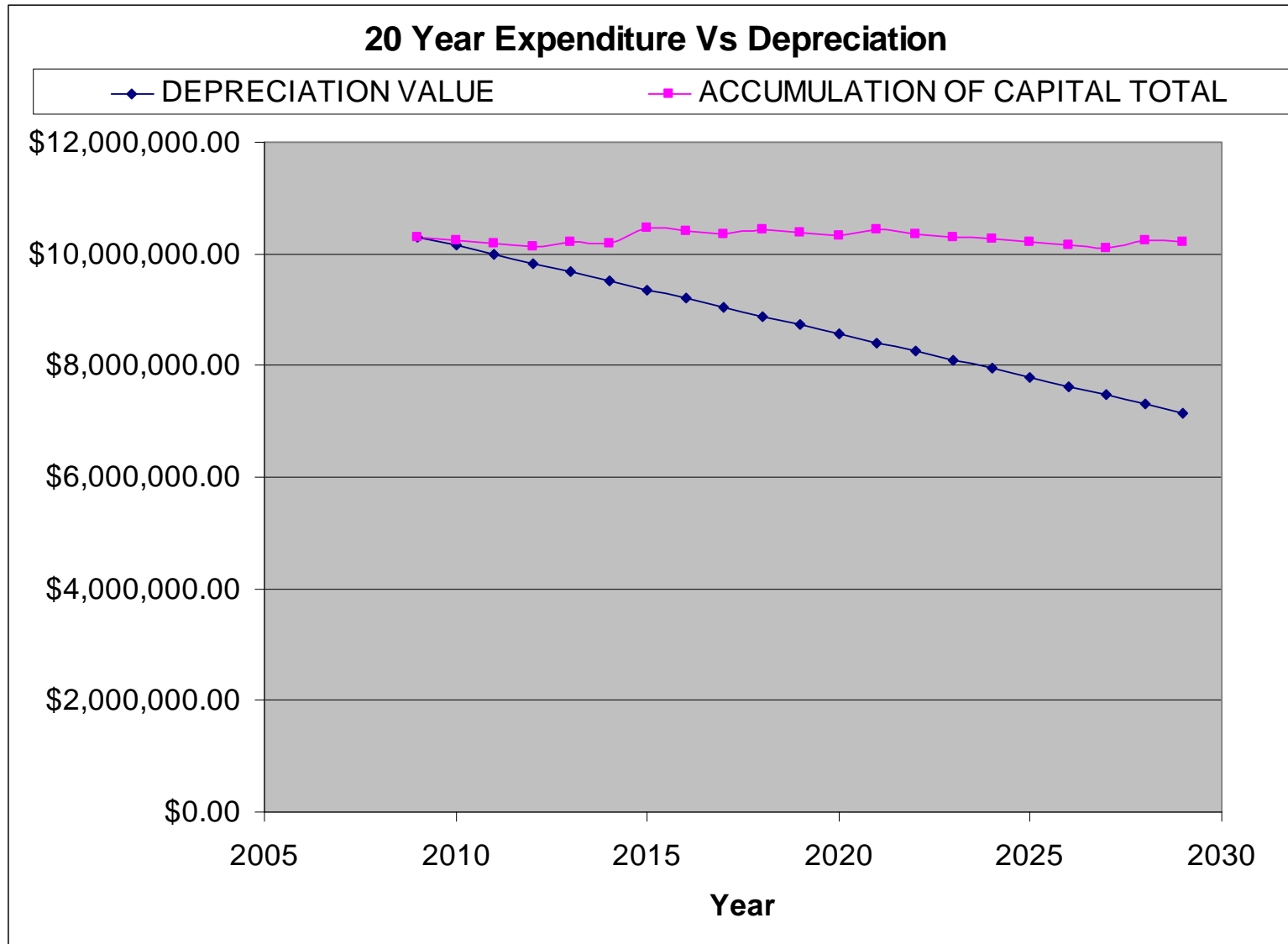
$$= \$14.8M / \$156,996$$

$$= 94 \text{ years}$$

This information provides a well considered format for use in Depreciating accounting and the ten (10) year financial plan.

Fig 5.1.4.0 below shows the depreciation of the asset stock versus the forecasted expenditure expected on the stock over a 20 year period based upon a useful life of 94 years.

Fig 5.1.4.0 Expenditure & Depreciation



As indicated from the graph above, the current expenditure from an annualised point of view is higher than the forecast depreciation

5.2 Risk Management

The assessment of risks associated with service delivery from aquatic infrastructure assets is managed by Council's Assets & Infrastructure Planning Department. Operational risks particularly those associated with public safety are managed directly by Council pool staff. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

5.3 Routine Maintenance

Routine maintenance is the regular 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.

5.3.1 Maintenance

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 the Annual Plant Maintenance Program (PMP) and Bi-annual Building Maintenance Inspection Program (BMIP). PMP inspections are undertaken by Civil Works & Services (CW&S) in consultation with Assets & Infrastructure Planning (A&IP) and recorded on checklists for all plant assets. BMIP inspections are undertaken by A&IP and spreadsheets with photographic records are produced for all other assets. PMP and BMIP inspections are undertaken by Council officers with experience in plant or building maintenance respectively and involve giving each asset element a condition rating and priority rating.

If further assessment or specialised testing is required then A&IP will engage, or authorise CW&S to engage, a consultant to undertake this additional work.

Cyclic maintenance is replacement of higher value components of assets that is undertaken on a regular cycle including repainting and equipment replacement. This work generally falls below the capital works threshold.

Maintenance expenditure trends are shown below in Table 5.3.1.0.

Table 5.3.1.0 Maintenance Expenditure Trends

Year	Maintenance Expenditure	
	Reactive	Planned
2007/08	\$31,264	\$140,846
2008/09	\$41,712	\$85,295
2009/10	\$33,990	\$101,417

Planned maintenance work is on average 75% of total maintenance expenditure.

Maintenance expenditure levels have been recently higher than planned forecast expenses due a decision by Council to improve the standard of aquatic stock and redress previous periods of under expenditure. Future revision of this asset management plan will include linking required maintenance expenditures with required service levels.

5.3.2 Standards and Specifications

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

- Building Code of Australia
- Australian Standards
- Manufacturer's requirements for proprietary products

5.3.3 Summary of Future Maintenance Expenditures

Future maintenance expenditure is forecast and detailed below in Table 5.3.3.0. Note that all costs are shown in current 2009/10 dollar values.

Table 5.3.3.0 Planned Maintenance Expenditure

Maintenance Activity	Frequency (years)	Annual Cost \$ 2009/10
Building Maintenance Inspection Program	2	\$1,000
Annual Plant Maintenance Inspection	1	\$1,500
Fire Protection Equipment Inspection	6 months	\$200
Security Services	Continual	\$3,500
General Maintenance	1	\$95,000
TOTAL		\$101,200

This reflects a total planned maintenance budget of \$101,200 per annum for both Aquatic Centres and an estimated reactionary maintenance budget of \$34,000.

Deferred maintenance, ie 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.

Maintenance is funded from Council's operating budget and grants where available. This is further discussed in Section 6.2.

5.4 Element 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.

5.4.1 Renewal Plan

Assets requiring renewal are identified from estimates of remaining life obtained from the asset register worksheets on the 'Planned Expenditure template'. Candidate proposals 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 programmes. The priority ranking criteria is detailed below in

Table 5.4.1.0.

Table 5.4.1.0 Renewal Priority Ranking Criteria

Criteria	Weighting
Fit for purpose - traffic volumes	25%
Safety	50%
Maintenance requirements	25 %
Total	100%

5.4.2 Renewal Standards

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

- Building Code of Australia
- Australian Standards
- Project-specific Technical Specifications

5.4.3 Summary of Future Renewal Expenditure

Projected future renewal expenditures are forecast for each renewal activity are shown in Table 5.4.3.0 below. Note that all costs are shown in current 2009/10 dollar values.

Fig 5.4.3.0 Projected Capital Renewal Expenditure

Renewal Activity	Frequency (years)
Substructure	50
Superstructure	50
Fittings - Fitout	20
Services	30

This will require a total renewal/replacement budget of **\$156,996 per annum**.

The 75 year Aquatic Centre Renewal Plan is included in Appendix D

Deferred renewal, ie 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.

Renewals are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2.

5.5 Creation/Acquisition/Upgrade/Replacement 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. These assets from growth are considered in Section 4.4.

Projected future replacement expenditures forecast for each replacement activity are shown in Table 5.5.0 below.

Fig 5.5.0 Projected Capital Replacement Expenditure

Asset Description	Refurbishment Cycle (Years)	Unit Rate
Swimming Pool Structure	40	\$300,000
Concourse	15	\$30,000
Water Treatment Plant & Pipelines	30	\$100,000
Ancillary Assets	5	\$7,000

5.5.1 Selection Criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed in Table 5.5.1.0 below.

Table 5.5.1.0 New Assets Priority Ranking Criteria

Criteria	Weighting
Development Requirements/Contributions	50%
Age	25%
Condition	25%

5.5.2 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 5.4.2.

5.5.3 Summary of Future Upgrade/New Asset Expenditure

Planned upgrade/new asset expenditures are summarised in Fig 5.5.3.0. The planned upgrade/new capital works program is shown in Appendix D. All costs are shown in current 2009/10 dollar values and only detail the cost replacement of the current configuration of bridge.

Fig 5.5.3.0 Planned Capital Upgrade/New Asset Expenditure

Project Building Capital Works	Description	Allocation
2010 - 2011		
Maitland Pool	Infrastructure Upgrades - Kiosk Refurbishment	\$20,000
East Maitland Pool	Infrastructure Upgrades - Kiosk Refurbishment	\$20,000
2011 - 2012		
East Maitland Pool	Olympic Pool Repairs - Deep End Floor Slab & Lateral Joints	\$100,000
2012 - 2013		
Maitland Pool	Replace Shade Sails & Various Infrastructure Upgrades	\$50,000
East Maitland Pool	Replace Shade Sails & Various Infrastructure Upgrades	\$70,000
THREE YEAR TOTAL		\$260,000

New assets and services are to be funded from Council's Capital Works Program and grants where available. This is further discussed in Section 6.2.

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation.

It is not anticipated that any aquatic assets will be disposed of within the next 10 years. However, longer term options are discussed in Section 4.5.

Where cash flow projections from asset disposals are not available, these will be developed in future revisions of this asset management plan.

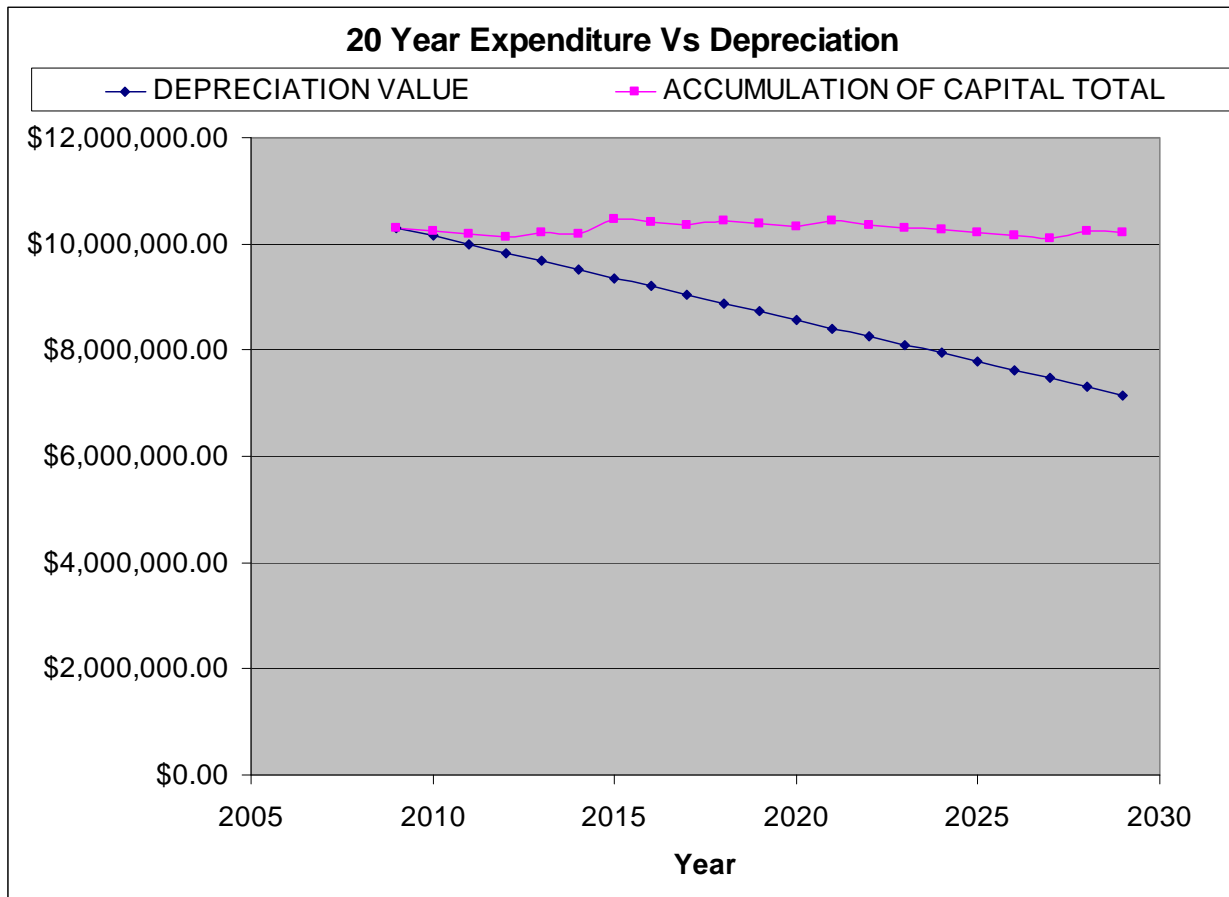
6. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service and current and projected future asset performance.

6.1 Financial Statements and Projections

The financial projections are shown in Fig 6.1.0 for planned operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets).

Fig 6.1.0 Planned Operating and Capital Expenditure



Note that all costs are shown in current 2009/10 dollar values.

6.1.1 Sustainability of Service Delivery

There are two key 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 15 year financial planning period.

Medium term – 15 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 over a 15 year period for input into a 15 year financial plan and funding plan to provide the service in a sustainable manner. See Table 6.1.1.0 for a detailed financial outlook (without annual CPI).

Table 6.1.1.0

Projected Budget 15years without CPI

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Capital/Renewal	\$99,550	\$99,550	\$99,550	\$249,550	\$136,550	\$436,550	\$99,550	\$99,550	\$224,925	\$106,550	\$106,550	\$252,897	\$99,550	\$99,550	\$106,550
Maintenance	\$135,407	\$135,407	\$135,407	\$135,407	\$135,407	\$135,407	\$135,407	\$135,407	\$135,407	\$135,407	\$135,407	\$135,407	\$135,407	\$135,407	\$135,407
TOTAL	\$234,957	\$234,957	\$234,957	\$384,957	\$271,957	\$571,957	\$234,957	\$234,957	\$360,332	\$241,957	\$241,957	\$388,304	\$234,957	\$234,957	\$241,957

6.2 Key Assumptions in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

7. PLAN IMPROVEMENT AND MONITORING

7.1 Performance Measures

The effectiveness of the 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 long term financial plan and Strategic Management Plan;
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan;

7.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 7.2.

Table 7.2 Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

7.3 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 4 years and is due for revision and updating within 2 years of each Council election.

REFERENCES

- DVC, 2006, 'Asset Investment Guidelines', 'Glossary', Department for Victorian Communities, Local Government Victoria, Melbourne,
<http://www.dvc.vic.gov.au/web20/dvclgv.nsf/allDocs/RWPI C79EC4A7225CD2FCA257170003259F6?OpenDocument>
- IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au

APPENDICES

Appendix A Abbreviations and Glossary of Terms

Appendix B Aerial Photographs

Appendix C Projected 75 year Capital Renewal Works

Appendix D Asset Descriptions and Replacement Values

Appendix E SGL Group Strategy and Option Paper June 2008

Appendix A Abbreviations and Glossary of Terms

GLOSSARY

Annual service cost (ASC)

An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operating, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset class

Grouping of assets of a similar nature and use in an entity's operations (AASB 166.37).

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset management

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Assets

Future economic benefits controlled by the entity as a result of past transactions or other past events (AAS27.12).

Property, plant and equipment including infrastructure and other assets (such as furniture and fittings) with benefits expected to last more than 12 month.

Average annual asset consumption (AAAC)*

The amount of a local government's asset base consumed during a year. This may be calculated by dividing the Depreciable Amount (DA) by the Useful Life and totalled for each and every asset OR by dividing the Fair Value (Depreciated Replacement Cost) by the Remaining Life and totalled for each and every asset in an asset category or class.

Brownfield asset values**

Asset (re)valuation values based on the cost to replace the asset including demolition and restoration costs.

Capital expansion expenditure

Expenditure that extends an existing asset, at the same standard as is currently enjoyed by residents, to a new group of users. It is discretionary expenditure, which increases future operating, and maintenance costs, because it increases council's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital funding

Funding to pay for capital expenditure.

Capital grants

Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure

See capital expenditure definition

Capital new expenditure

Expenditure which creates a new asset providing a new service to the community that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operating and maintenance expenditure.

Capital renewal expenditure

Expenditure on an existing asset, which returns the service potential or the life of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it has no impact on revenue, but may reduce future operating and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital upgrade expenditure

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operating and maintenance expenditure in the future because of the increase in the council's asset base, eg. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Carrying amount

The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets

See asset class definition

Component

An individual part of an asset which contributes to the composition of the whole and can be separated from or attached to an asset or a system.

Cost of an asset

The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, plus any costs necessary to place the asset into service. This includes one-off design and project management costs.

Current replacement cost (CRC)

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Current replacement cost "As New" (CRC)

The current cost of replacing the original service potential of an existing asset, with a similar modern equivalent asset, i.e. the total cost of replacing an existing asset with an as NEW or similar asset expressed in current dollar values.

Cyclic Maintenance**

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, cycle, replacement of air conditioning equipment, etc. This work generally falls below the capital/ maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Depreciable amount

The cost of an asset, or other amount substituted for its cost, less its residual value (AASB 116.6)

Depreciated replacement cost (DRC)

The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset

Depreciation / amortisation

The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life

See useful life definition.

Expenditure

The spending of money on goods and services. Expenditure includes recurrent and capital.

Fair value

The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Greenfield asset values **

Asset (re)valuation values based on the cost to initially acquire the asset.

GPT

A GPT is a Gross Pollutant Trap. These devices collect gross pollutants such as bottles, cigarette butts, and other rubbish washed into the drainage system preventing it from ending up in waterways.

Heritage asset

An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss

The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets

Physical assets of the entity or of another entity that contribute to meeting the public's need for access to major economic and social facilities and services, eg. roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no market value.

Investment property

Property held to earn rentals or for capital appreciation or both, rather than for:

- (a) use in the production or supply of goods or services or for administrative purposes; or
- (b) sale in the ordinary course of business (AASB 140.5)

Level of service

The defined service quality for a particular service against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental, acceptability and cost).

Life Cycle Cost **

The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises annual maintenance and asset consumption expense, represented by depreciation expense. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure **

The Life Cycle Expenditure (LCE) is the actual or planned annual maintenance and capital renewal expenditure incurred in providing the service in a particular year. Life Cycle Expenditure may be compared to Life Cycle Expenditure to give an initial indicator of life cycle sustainability.

Loans / borrowings

Loans result in funds being received which are then repaid over a period of time with interest (an additional cost). Their primary benefit is in 'spreading the burden' of capital expenditure over time. Although loans enable works to be completed sooner, they are only ultimately cost effective where the capital works funded (generally renewals) result in operating and maintenance cost savings, which are greater than the cost of the loan (interest and charges).

Maintenance and renewal gap

Difference between estimated budgets and projected expenditures for maintenance and renewal of assets, totalled over a defined time (eg 5, 10 and 15 years).

Maintenance and renewal sustainability index

Ratio of estimated budget to projected expenditure for maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

Maintenance expenditure

Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality

An item is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial report. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances.

Modern equivalent asset.

A structure similar to an existing structure and having the equivalent productive capacity, which could be built using modern materials, techniques and design. Replacement cost is the basis used to estimate the cost of constructing a modern equivalent asset.

Non-revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operating expenditure

Recurrent expenditure, which is continuously required excluding maintenance and depreciation, eg power, fuel, staff, plant equipment, on-costs and overheads.

Pavement management system

A systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

Planned Maintenance**

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

PMS Score

A measure of condition of a road segment determined from a Pavement Management System.

Rate of annual asset consumption*

A measure of average annual consumption of assets (AAAC) expressed as a percentage of the depreciable amount (AAAC/DA). Depreciation may be used for AAAC.

Rate of annual asset renewal*

A measure of the rate at which assets are being renewed per annum expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade*

A measure of the rate at which assets are being upgraded and expanded per annum expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Reactive maintenance

Unplanned repair work that carried out in response to service requests and management/supervisory directions.

Recoverable amount

The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure

Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operating and maintenance expenditure.

Recurrent funding

Funding to pay for recurrent expenditure.

Rehabilitation

See capital renewal expenditure definition above.

Remaining life

The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining life is economic life.

Renewal

See capital renewal expenditure definition above.

Residual value

The net amount which an entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.

Revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management

The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment

A self-contained part or piece of an infrastructure asset.

Service potential

The capacity to provide goods and services in accordance with the entity's objectives, whether those objectives are the generation of net cash inflows or the provision of goods and services of a particular volume and quantity to the beneficiaries thereof.

Service potential remaining*

A measure of the remaining life of assets expressed as a percentage of economic life. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (DRC/DA).

Strategic Management Plan (SA)**

Documents Council objectives for a specified period (3-5 yrs), the principle activities to achieve the objectives, the means by which that will be carried out, estimated income and expenditure, measures to assess performance and how rating policy relates to the Council's objectives and activities.

Sub-component

Smaller individual parts that make up a component part.

Useful life

Either:

- (a) the period over which an asset is expected to be available for use by an entity, or
- (b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the council. It is the same as the economic life.

Value in Use

The present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate new cash flows, where if deprived of the asset its future economic benefits would be replaced.

Water Sensitive Urban Design (WSUD)

A new comprehensive approach to management of stormwater. WSUD aims to build on traditional objective of local flood protection by having multiple outcomes:

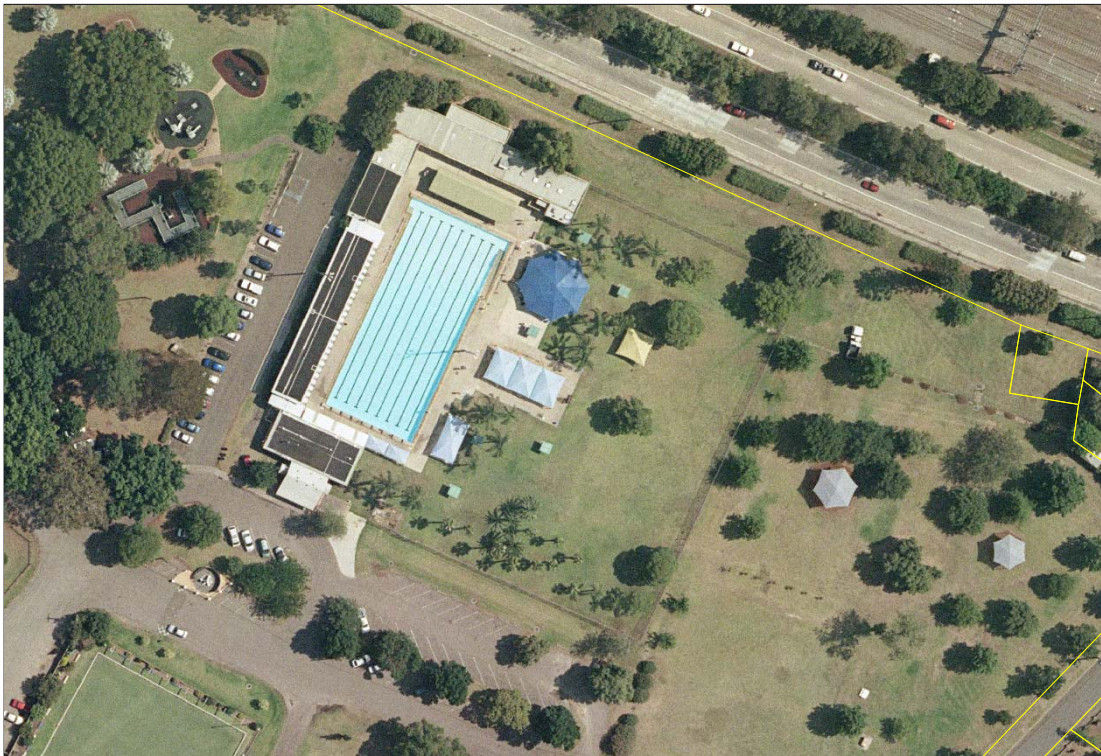
- Improved water quality management
- Protecting ecosystems
- Providing liveable and attractive communities.

Source: DVC 2006, Glossary

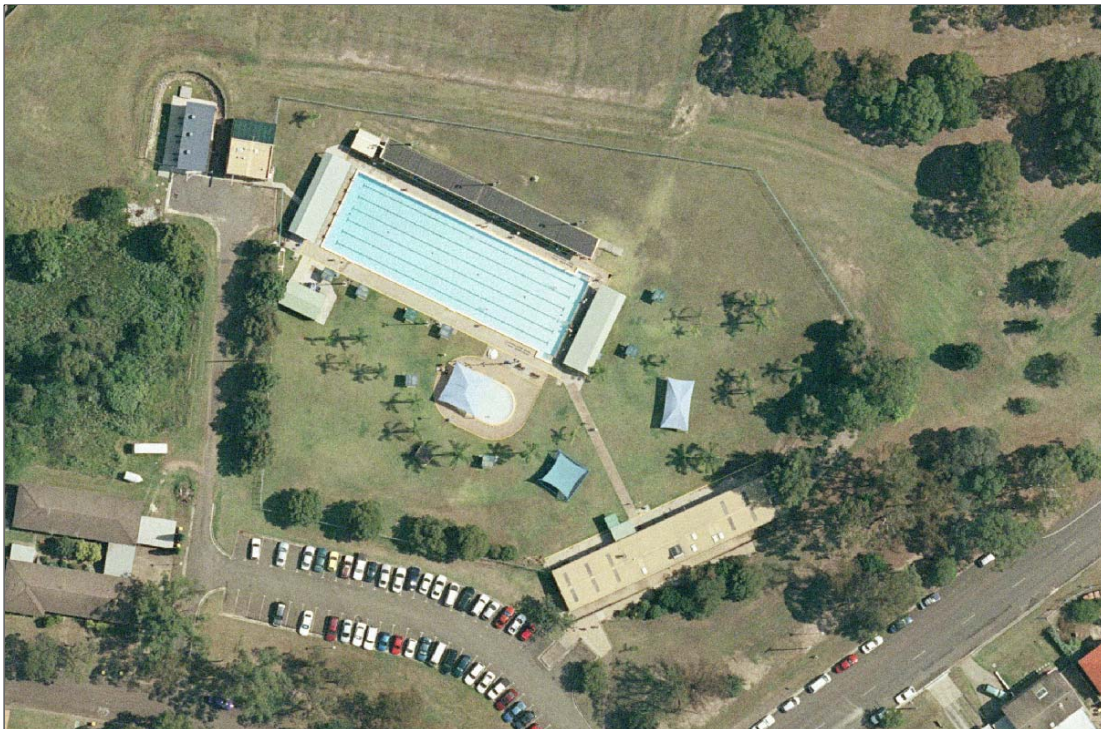
Note: Items shown * modified to use DA instead of CRC
Additional glossary items shown **

Appendix B Aquatic Centres – Aerial Photographs

Maitland Aquatic Centre



East Maitland Aquatic Centre



Appendix C Projected 75 year Capital Renewal Works

Appendix D Asset Descriptions and Replacement Values

Asset category	Number of Assets	Quantity/Basis	Rate Estimate	Replacement Value
Maitland Olympic Pool	1	50m x 21m	Becca 2008 + 10%	\$2,750,000
Maitland Learners Pool	1	17m x 7.5m	Becca 2008 + 10%	\$550,000
Maitland Toddlers Pool	1	8m diameter	Becca 2008 + 10%	\$110,000
East Maitland Olympic Pool	1	50m x 16m	80% Maitland Olympic Pool	\$2,200,000
East Maitland Toddlers Pool	1	11m x 7m Oval	Maitland Toddlers	\$110,000
Concourses	2	1,750 + 1,100 sqm	\$100	\$285,000
Maitland Water Treatment Plant	1	Item	Becca 2008 + 10%	\$1,100,000
East Maitland Water Treatment Plant	2	Item	Becca 2008 + 10%	\$1,320,000
Maitland Plant Room	1	2008 MCC Finance	\$402,000 + 10%	\$440,000
East Maitland Plant Rooms	2	2008 MCC Finance	(\$175,000 + \$50,000) +	\$250,000
East Maitland Storerooms	2	Recent MCC Equivalent	\$50,000 each	\$100,000
Amenities/Offices/Kiosk Buildings	2	2008 MCC Finance	(\$1,485,000 + \$825,000) +	\$2,540,000
Grandstands	2	1998 MCC Finance	\$412,000 each + 80%	\$1,500,000
Pavilions	3	1994 MCC Finance	\$250,000	\$750,000
Shade Structures	8	450 + 150 sqm	\$150	\$90,000
Picnic Shelters	13	Recent MCC Equivalent	\$5,000	\$65,000
Childrens Playgrounds	2	Recent MCC Equivalent	\$50,000	\$100,000
Lighting	2	1994 MCC Finance	\$150,000	\$300,000
Landscaping	2	1994 MCC Finance	\$100,000	\$200,000
Perimeter Fences	2	220m + 300m	\$80	\$42,000
TOTAL	51			\$14,802,000

Appendix E SGL Group Strategy and Options Paper June 2008