

Aquatic Leisure Facility Development Strategy



Background Research

HM Leisure Planning Pty Ltd Prior + Cheney Pty Ltd
Geoff Nannes Fong and Associates VOS Group Pty Ltd

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1.0 AQUATIC ASSETS IN THE CITY OF SYDNEY

1.1 INTRODUCTION

This Chapter provides both a review and assessment of the City of Sydney aquatic facilities –including the City’s current development projects-- and a review of the wider array of venues and services available in the wider inner metropolitan area. The intent of these reviews is to establish an understanding of the context of the existing provision and to provide a basis for the development recommendations.

The technical review provided is a summary of a far more detailed report which has been prepared by the aquatic engineers, Geoff Ninnes Fong and Partners Pty Ltd.

1.2 Assets Overview

The nature and condition of the City’s existing aquatic centres indicates that while each venue has a number of strengths, there is also a need for works which will enhance or update the physical condition of the assets and ensure their continued service to the community.

It is of interest to note that none of the City’s pools now meets what could be considered as the Sydney “ideal”: a strong, social and competition-based outdoor set of pools *together with* a number of indoor all-year pools designed to meet all-year lap, learn to swim, training and health needs. Similarly, only the Cook and Phillip Park Pool has what can be considered as a sufficient level of provision of dry health and fitness facilities –and even these are under substantial pressure and will require expansion if longer term needs are to be effectively met.

Looked at from another perspective, none of the existing venues effectively cater for the major demand of recent years for hydrotherapy/secondary hydro opportunities from sports people with injuries, older residents who are simply wishing to improve their health, accident rehabilitees, the wider number of people with disabilities who are now active members of the community and people seeking gentle exercise and relaxation.

These findings have major implications to the mix of facilities (and programs) which should be provided at any new venues in the City and through future redevelopments of the existing resources.

1.3 ASSET CONDITION OF COS FACILITIES

Andrew "Boy" Charlton Pool

Description

The Andrew "Boy" Charlton Centre has very recently been totally refurbished and upgraded, in terms of structure, architecture, pools and plant. The two level centre comprises, on the lower level, a totally refurbished 50 metre pool reusing the existing shell, a babies/learners pool, change rooms and plant rooms, with a café/restaurant on the upper level with the entrance and some facilities rooms. The building and pools are supported by piles on the shoreline of Woolloomooloo Bay.

Summary

As would be expected of a centre having recently been significantly upgraded, renewed and augmented, the Andrew "Boy" Charlton Centre is in overall excellent condition as far as could be ascertained visually. The crazing of the lower slabs should be rectified for cosmetic and long term durability reasons, and checks should be made regularly (say every two years) on the surface condition of the exposed steelwork.

Technical Condition

Building Structures

The building structures are in very good condition, not unexpected given the recent major works and new works carried out at the centre. No evidence of any major slab cracking or deflections was observed.

A major feature of the new work is the significant extent of exposed architectural and structural steelwork in a marine environment. The steelwork appears to have been properly treated in terms of corrosion resistant protective coatings, but should be checked regularly to ensure any corrosion is effectively removed.



A small defect noted is crazing cracking of the slabs at the lower level, which we believe to be superficial and almost certainly limited to the cracking of a cosmetic topping layer. It will continue to crack if not rectified and should be further investigated to ascertain the cause(s) and to determine an appropriate treatment.

A minor defect which was noted in particular in the plant room is the lack of suitable floor grading to prevent minor ponding during water spillage or cleaning of the floors.



Pool Structures

The refurbished pools and all plant are in excellent condition, as would be expected given their age. New pool furniture (starting blocks, hand rails, grab rails etc.) and new tilework are a feature of the upgraded centre, and are also in excellent condition.



Filtration and water treatment plant

The new plant comprises four reinforced concrete pressure sand filters for the 50 metre pool and a separate similar filter for the babies/learners pool; a new chemical treatment plant, and totally new reticulation systems. Prominent chemical testing and dosing systems are installed, disinfection is by use of sodium hypochlorite solution, pH control is by acid, and all treatment systems are new and in excellent condition. Similarly, all pipework, strainers and valves are new and in excellent condition. The systems are essentially simple to use and control, and we would expect few problems, particularly requiring any significant expenditure, in the short or medium term future.

The centre complies with the requirements of the NSW Health Department's Public Swimming Pool and Spa Pool Guidelines in terms of turnover periods and rates for all pools.

Cook and Phillip Park Aquatic Centre

Description

The centre comprises three pools, a 50 metre competition pool, a leisure/wave pool and a hydrotherapy pool all located on the lower level of the building. Also on this level are the pool plant room, all change facilities, a café, a large public outdoor space and a smaller enclosed outdoor space, and offices and a dry sports hall for basketball etc. The pool entrance, turnstiles and member facilities are located on a mezzanine level together with numerous offices and other facilities.

The roof over most of the facility is a trafficable open space “community park” with precast concrete slab panels supporting large water ponds and features, a café and very large open paved areas. The roof over the leisure and hydro-therapy areas is a steel framed system with fully louvre-windowed sloping roof planes.



The roof and top level pavement areas are supported by precast concrete beams and columns, with central prefabricated steel support columns. An inclined precast concrete panel system has been used in the trafficable roof over the dry sports hall, together with triangular windows to provide natural lighting to the hall. The inclined panels are supported on steel beams hung by steel rods from higher level beams.

Technical Condition

While the pool structures and the pool plant are generally in very good condition issues relating to water proofing and roof structure have previously been identified and works programmed for the 05/06 year.

Pool Structures/Facilities

The existing pool structures are in good structural condition, with little evidence of deterioration or structural defects such as significant cracking or leaks. Evidence was observed of deterioration of the timber bench areas adjacent to the leisure pool. Tile cracking has occurred in a small number of areas, although this would be expected in a seven-year-old facility of this type.

Similarly the change rooms should be considered for an upgrade to ensure service level and amenity is provided for patrons. This is currently planned for 2005/06 financial year capital works.

Filtration and water treatment plant

Four different filtration and water treatment plant systems are installed at this centre, to cater separately for the 50 metre, leisure/wave and hydrotherapy pools and the water features (the latter now disused). The original ozone treatment systems (ozonation plant plus GAC filters) have been replaced with UV systems in all cases. The multimedia filter originally used for the hydrotherapy pool has been replaced by a single commercial scale diatomaceous earth precoat filter, and this pool's recirculation pumps have all been replaced. All recirculation pumps for the 50 metre pool have been replaced by new similar capacity pumps.

The above upgrading has ensured that the filtration and water treatment plant for the centre is now all in good to excellent working order, and no significant costs due to equipment failure or necessary replacements are expected in the short to medium term future.

The centre complies with the requirements of the NSW Health Department's Public Swimming Pool and Spa Pool Guidelines in terms of turnover periods and rates for all pools.

Victoria Park Pool

Description

The centre comprises two outdoor swimming pools and a facilities building that was renovated at ground floor level approximately seven years ago. The facilities building at ground floor level includes a central entry area, a café, all change room facilities, a crèche/child minding area and a gymnasium. These facilities were all upgraded in the recent works. The facilities building has, unusually, a reinforced

concrete roof slab. A lower level plant room is located centrally under ground floor, and houses the filters, boiler and all treatment plant. No work was done on this area.



A complex arrangement of fabric shade membranes covers the toddlers pool and adjacent areas, supported in part by the concrete roof slab of the building and by steel struts and ties located on plinths around the toddlers pool concourse area.

The existing centre's aquatic facilities comprise a 50 metre pool and an irregular shallow babies/toddlers pool. Both pools have scum gutter soiled water collection systems and use a common balance tank and reinforced concrete gravity sand filters located in a subterranean plant room centrally positioned under the facilities building. The plant room is in very poor condition and the services, particularly the electrical works and control board, are in dire need of upgrading. Backwash water is released at an uncontrolled rate to stormwater.

The centre is in the process of being upgraded via a current 3 million dollar building and services contract in terms of replacement of the filtration and heating systems and construction of a new ground level plant room, construction of a new toddlers pool and limited upgrading of the ancillary facilities.

There is the potential to upgrade the existing plant room to accommodate a gymnasium or other fitness facilities at this stage. Additional costs will obviously be incurred structurally and architecturally when and if the lower area is upgraded, which will necessitate inclusion of a lift.



Victoria Park: Summary

The Victoria Park centre is undergoing upgrading works that should provide facilities that do not require any upgrading or rectification works of any significant cost within the next 10 to 15 years, particularly in the case of the filtration and water treatment works and the building works. The fabric sails may require replacement after perhaps a further life of 5 years.

At some future date, the only remaining upgrade work required to the 50 metre pool should be undertaken ie: the conversion of the pool to a wet deck gutter system, at a cost in the order of \$200,000 to \$300,000, dependent on the level of associated tile repair or replacement required. This upgrade would enable full compliance with the Guidelines when carried out in conjunction with the installation of another DE filter, for which space has already been allowed in the new plant room. Allow possibly another \$150,000 for this filter's installation and reticulation alterations etc.

Technical Condition

Building Structures

The main building structure housing the facilities noted above is in reasonably good condition given its age, and can be expected to remain viable for many years to come. The lower level structures housing the plant room are in reasonable condition, but would need significant upgrading to enable commercial use of the downstairs area. The new pool treatment plant is to be housed in a new plant room at the eastern end of the existing building and will have a predicted life commensurate with the design requirements of current codes to which it is designed. A twenty-five year life would be expected of the new plant room structure before it may need significant upgrading or repair works.

Pool Structures

The 50 metre pool has recently (five years ago) had its central filtered water return line to enable capacity to cope with a compliant turnover rate at a future upgrade date. All defective tile work and other surface defects were rectified at that time, and only minor and isolated defects are currently evident. The pool's balance tank is being upgraded as part of the current upgrading works.

The toddlers pool is being removed and rebuilt with a wet deck soiled water removal system. The associated shade fabric structures over are to be renovated, the connections upgraded where necessary and adequate footings installed to ensure long term stability. A new balance tank/suction sump is being constructed for the toddlers pool.

A new backwash tank is being constructed to retain backwash water and enable release to sewer at the maximum 2l/s rate permitted by Sydney Water.

Filtration and water treatment plant

The centre is undergoing a total plant upgrade that will bring the centre into compliance with the Guidelines, noting that the 50 metre pool will operate under a slightly increased turnover period and hence slightly reduced turnover rate given dispensation by the NSW Health Department in consideration of the enhanced efficiency of the new DE filters being installed. The two pools will have totally separate filtration, water treatment and heating systems. The toddlers pool turnover period and rate will be in accordance with the Guidelines. The new plant being installed comprises commercial precoat diatomaceous earth filters, with sodium hypochlorite solution for disinfection and carbon dioxide for pH control.

Prince Alfred Park Pool

Description

This pool centre is ageing, and all facilities associated with it reflect that age. The pools comprise a 50 metre pool still in use and a babies pool whose use was discontinued several years ago. An ice skating rink was also an element of the original facilities, but was closed and the rink removed many years ago.

The centre's buildings include a main facilities building housing a large entrance, counter, kiosk, toilets and club rooms on the upper level, with an extensive plant room area on both the upper and lower levels. The pool plant is generally on the lower level, and the skating rink plant has been retained, mainly on the upper level. Vehicle access is available into the building at lower floor level. This area also includes several unused large rooms. The stair between levels is unlikely to comply with current BCA requirements.

Another small single storey stud-framed building houses the changing rooms and shower facilities, which are primitive by modern day standards, and are generally open-air with minimal roofed area.



The entire site has a large unused space component, in part due to the removal of the skating rink, but also due to the enormous area available and the little use made of it in terms of aquatic or other facilities.

Prince Alfred Park: Summary

The 55 yd pool's current turnover period is somewhere around 10 to 12 hours and is totally non-compliant with the Guidelines. The pool's operation's should be brought into compliance. Notwithstanding the pools water quality has met all required health standards.

The ancillary facilities need major upgrading works to provide facilities of any comparable standards both functionally and aesthetically. Some alterations/renovations could be undertaken with the main services/plant building, but it is difficult to see this work being more economical than complete replacement of these facilities.

Technical Condition

Building Structures

The main building is a concrete framed system up to the upper level where the floor comprises suspended slabs supported by concrete beams on columns and load-bearing walls. While we cannot make any definite comments about the state of the concrete works without testing, from visual observations the structure appears to be in sound condition. While not aesthetically pleasing, it is free of the commonly found concrete spalling and reinforcement corrosion in structures of this age and use.

The walls, both load-bearing and non-load-bearing, show some minor signs of cracking in discreet locations but in general still appear to be structurally sound.

Pool Structures

The 55 yd pool is in typical condition for its age, and cannot be reviewed beyond saying that little settlement appears to have taken place and little structural cracking is observable. It is possible that significant chloride ingress and carbonation has occurred in the concrete, but this would need to be confirmed by testing. If significant chloride ingress has occurred, it is likely that reinforcement corrosion would commence in the near future, a factor that would generate major structural problems and repair costs.



We note that the pool would need to be altered in major ways to obtain the compliance with the regulations. The upgrade work would provide a pool compliant in terms of the Guidelines but with a structural life limited by the life expectancy of the pool's old base tank structure, perhaps 10 to 15 years, and possibly less if the concrete is in poor condition.

The disused babies pool is also in fairly ordinary condition, although it does incorporate a wet deck soiled water removal system. The reticulation pipework and the return to pool plumbing would not permit turnover rates in compliance with the Guidelines. The pool's structure and reticulation piping would need major upgrading works to obtain compliance.

Filtration and water treatment plant

The filtration system comprises two large reinforced concrete gravity sand filter cells and three ageing pumps that have undergone various stages of refit, the pumps being kept running on a crisis management basis. An air scour system is partially effective and requires overhauling. The chemical dosing system is in relatively good condition in contrast with the rest of the plant components. Sodium hypochlorite is stored in a partially compliant “bunded” area adjacent to the roller shutter door lower level entry.

The pool’s turnover period is currently in the order of 10 to 12 hours and as such is totally non-compliant with the NSW Guidelines, which for this pool recommend a turnover period of approximately 2 hours. To upgrade the pool to enable compliance, major structural works need to be carried out on the pool, and the filtration plant and reticulation system needs to be completely replaced.



1.4 POOL MARKET CATCHMENTS

THE MARKET PERFORMANCE OF THE POOLS

Market performance can be measured in a number of ways. These include:

- € the *number of visits* attracted to a venue on an annual basis and any changes in visit levels
- € the number of *different people* using a venue
- € the financial performance of a venue (income, expenditure, operational deficit/surplus and cost per visit)
- € the number of *different types of activities* offered and the range of community members they serve
- € the geographic reach, or *catchment*, of a venue
- € the number of *visits per head* of the municipal and catchment population
- € *user satisfaction* and enjoyment regarding a venue, and
- € the *long term benefits* (eg: health, life satisfaction, competitive and other achievement) which a venue is delivering to a community.

The data which exists for City of Sydney venues is reviewed in the following paragraphs. Data relating to the fourth item, the geographic reach of a venue, has been collected from time to time at several City of Sydney pools over the past 12 months and additional data was been collected for the present study.

It is recommended that efforts should be made to collect data on all of the items listed above on a regular (though not necessarily annual) basis. This data will contribute substantially to understanding the markets being served and to ensuring that Council and venue managers provide an appropriate and effective service to the community.

POOL MARKET CATCHMENTS

The four existing City of Sydney aquatic centres serve catchments which are of a very different size, reach and demographic make-up. At one end of the scale, the Prince Alfred Park pool serves a very small, local catchment while at the other, the Cook and Phillip Park Pool serves a far-reaching, regional market. The catchment differences clearly reflect the differing opportunities offered by the four venues. They highlight the limited scope of opportunities offered at the traditional outdoor pools and the seasonality of several of them as opposed to the diverse, all year offerings of Cook and Phillip Park Pool.

Between the very localised Prince Alfred Park and the Cook and the regional Phillip Park pools, the Andrew “Boy” Charlton and Victoria Park pools serve niche markets

with a strong focus on life style and sub-regional, inner south and western suburban lap swimming users respectively. These users are very different to those catered for by the other two pools and as such, they complement each other quite well.

Of interest is the fact that the catchments of the Cook and Phillip Park Pool and both the Andrew “Boy” Charlton Pool overlapped, but that otherwise, there was a negligible overlapping of catchments. Overlapping catchments is not necessarily a “problem” as the Cook and Phillip Park Pool is so different to the other two that they effectively meet different needs in the community. However, overlapping catchments highlights the need to *build on the differences* rather than allow similarities to emerge. More importantly, however, the overlapping which occurs –especially in the north of the City of Sydney – indicates that these parts of the City are very well serviced, if not *over-serviced*. By comparison, none of the pools draws a major component of its clientele from the southern part of the Council, indicating that *these areas are poorly served at present*. As a consequence, a major role for the proposed Southern Local Government area will be to provide local opportunities for residents of the southern sector of the City. Significantly, the venue will also need to provide something akin to the broad mix of opportunities provided by the City’s four other present pools if it is to effectively meet community needs across this area.

2.2.1 Catchments – Detailed Analysis

Introduction

An important component of the market analysis conducted for the present study was the plotting of the catchment served by each pool. The catchments which have been mapped are the “expressed” catchments: that is, the catchments from which pool users presently come.

An expressed catchment is likely to be different from the “latent” catchment, a ‘political’ catchment or a ‘market’ catchment. A “latent” catchment is the area which research shows has residents and workers who would *like* to use a particular facility but who cannot, because of one type of barrier or another (eg: cost, knowledge, ability to reach a venue, inappropriate facilities, programs). A “political” catchment is the area which a facility is politically determined to serve –this usually being part or all of a particular municipality or region-- while a “market” catchment is the area which management has determined to reach through its advertising and programming.

The expressed catchments of the existing City of Sydney aquatic venues were mapped using data collected through user surveys at each of the pools within the past 12 months. This data predominantly focused on user origins (as indicated by home postcodes) regardless of the gender, age, cultural background, visit purpose or other characteristics of the trip to the venue.

Research in other Councils around Australia has shown marked differences in the catchments from which different client groups are drawn when more detailed data on user characteristics are collected. Such data should be collected through regular user

surveys in future so that the changing catchments and markets can be monitored. It must be complemented by wider household surveys to identify *non*-users (ie: latent demand) , to determine whether non-users would like to be users and if so, what programming or other changes might be needed to attract their custom.

The catchment analysis for City of Sydney pools has indicated marked differences between the venues in both the distribution and concentration of users. Each is discussed in the following paragraphs. This information was used in the previous section on the performance analysis of the venues and has also been used as an input to determining the most appropriate area of the City or the wider region that each pool might best service and the types of programs and services which might best be provided.

Prince Alfred Park Pool

Users of Prince Alfred Park Pool were surveyed in October and November 2004 specifically to provide data for the present study. Some 2,379 users were interviewed in October 2004 and 3,287 in November. A report on the data collected was prepared by Ms Tracy Southern, Senior Project Manager for LeisureCo, the company which manages the pool for the City of Sydney. The survey collected data from all customers during the two months included casual swimmers and those purchasing multi-passes, seasonal passes and spectators.

Table 2.2 following records the origin of users from those postcodes / suburb which accounted for 0.5 percent or more of all users.

Total attendance 04/05 (seasonal use only)		44,812
Postcode	Suburb	Percent of Users
2010	Darlinghurst, East Sydney, Surry Hills, Taylor Square	91.8
2016	Redfern	4.3
2017	Victoria Park, Waterloo, Zetland	1.4
Other	16 postcodes of < 0.5% each	2.5

Table 2.2: Postcodes and suburbs of origin of Prince Alfred Park Pool users, Oct-Nov. 2004

Table 2.2 shows that 91.8 percent of all Prince Alfred Park Pool users came from one postcode, that being 2010 which covers the suburbs of Darlinghurst, East Sydney, Surry Hills and Taylor Square. Further, only *three* postcodes accounted for more than 0.5 percent of users. A further 16 postcodes accounted for less than 0.5 percent of users each. Most of these were located close to the pool with some bias toward the eastern suburbs.

Figure 2.1 shows the distribution of Prince Alfred Park Pool users across the three main postcodes. It is evident that the heaviest concentration surrounds the venue. Six categories of shading have been used on the map, these being:

- Category 1. Postcodes contributing 30.1 +% of the market
- Category 2. Postcodes contributing 20.1 – 30.0% of the market
- Category 3. Postcodes contributing 10.1 – 20.0 % of the market
- Category 4. Postcodes contributing 5.1 – 10.0 % of the market
- Category 5. Postcodes contributing 1.1 – 5.0 % of the market
- Category 6. Postcodes contributing 0.5 – 1.0% of the market.

Postcodes generating *less than* 0.5 percent of users ie: only one of every 200 visits, have been excluded from Figure 2.1 and each of the subsequent maps. That said it should be noted that for larger venues, 0.5 percent of users could actually represent of the order of several thousand people.

It is clear from the Prince Alfred Park Pool user data that the venue serves an extremely localised clientele. This reflects the close community association with the pool, the quite limited range of opportunities offered and the fact that anyone contemplating travelling some distance to reach the venue would have a wide range of “intervening”, alternate and competing opportunities available to them. As the alternate venues generally offer more diversity of activities than does the Prince Alfred Park Pool, there is generally no point in more distant residents travelling to the venue unless they were meeting friends and relatives or visiting for a change of setting. This does occur, but generally it accounts for a very small proportion of total use.

Table 2.3 presents the age distribution and total population resident in those postcodes served by the Prince Alfred Park Pool which supplied 0.5 percent or more of the market. Data on the personal income levels of residents in the postcodes and in the total catchment are provided in the Appendices.

Table 2.3 shows that the Prince Alfred Park Pool catchment postcodes had a total of 42,132 residents at the 2001 Census. Over half that population, 25,143, resides in postcode 2010 – covering Darlinghurst, East Sydney, Surry Hills, Taylor Square – and as Table 2.2 indicated, that postcode supplied 91.8 percent of users.

A catchment of 42,000 would generally be considered quite sufficient to achieve the quite viable operation of the centre. Yet, the fact that nearly half of the catchment population provides only 8 percent of the pool users suggests that the venue is potentially quite marginal. However, it can be expected that the population will be boosted an additional 20,000 people over the coming years with the major urban renewal being proposed for the Redfern and Waterloo areas. That said and as has been noted, *the mix of opportunities* provided at the centre is very narrow and unless

new, broader opportunities are provided, Prince Alfred Park Pool will not have the capacity to provide appropriate activities for many within the existing community or newer residents to the area.

The long term feasibility of retaining a pool which serves such a small *physical* catchment such as that for the Prince Alfred Park Pool would generally be questioned on the grounds that in attracting users from such a small area, the venue is failing to meet the best interests of the wider City community unless other opportunities are provided elsewhere in the Council to compensate for this.

In keeping with the last point, it is highly likely that the rate of use of the Prince Alfred Park Pool by its catchment population will be low, and will be lower than the comparable rates for the other City of Sydney pools.

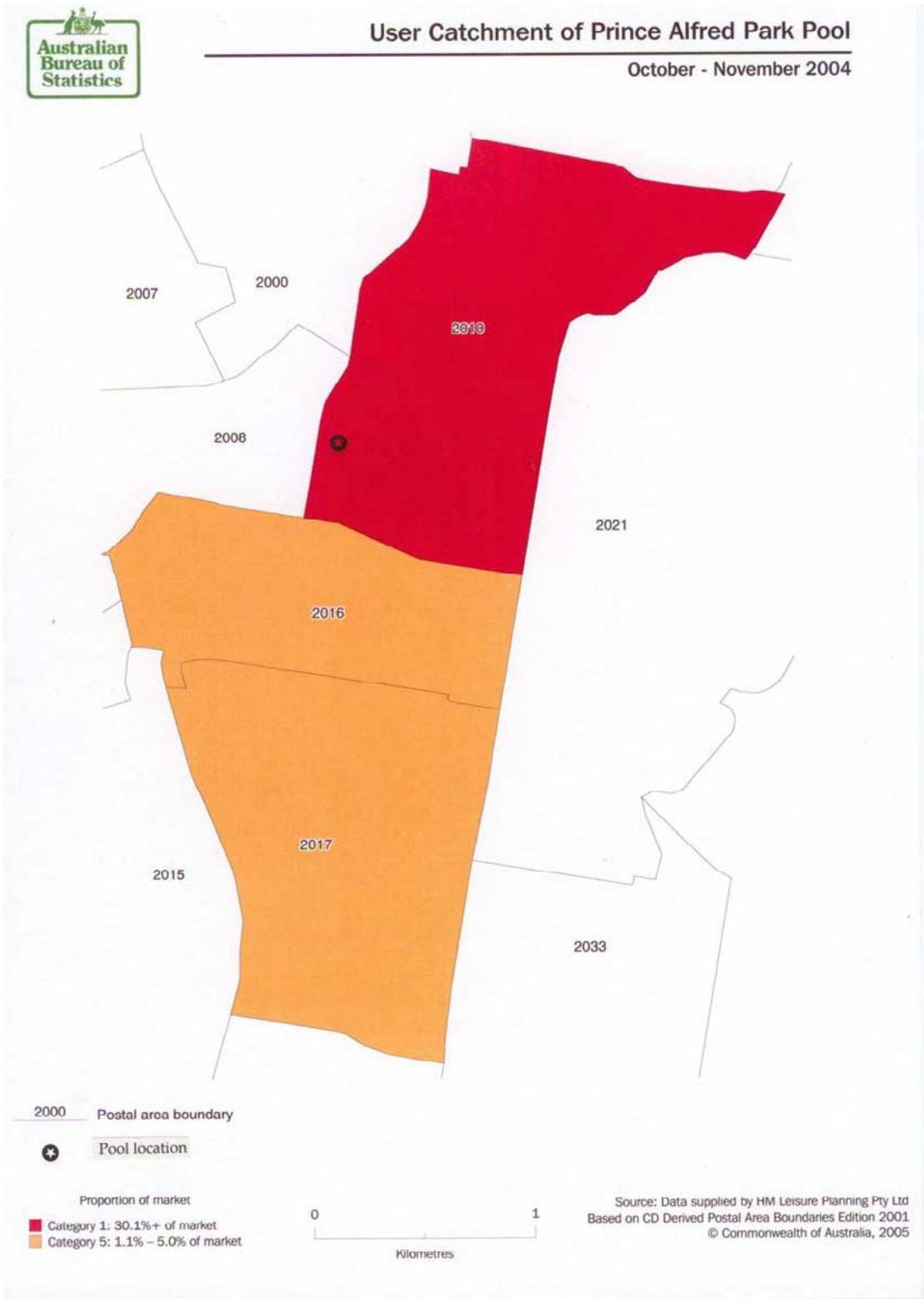


Figure 2.1: The postcode distribution of Prince Alfred Park Pool users, 2004

	2010	2016	2017	Total
0-4 years	697	371	236	1304
5-9 years	604	303	278	1185
10-14 years	671	284	297	1252
15-19 years	927	469	356	1752
20-24 years	2831	1218	331	4380
25-29 years	4124	1548	375	6047
30-34 years	3487	1326	394	5207
35-39 years	2563	1052	365	3980
40-44 years	1982	844	361	3187
45-49 years	1585	689	373	2647
50-54 years	1465	643	407	2515
55-59 years	990	510	337	1837
60-64 years	820	478	417	1715
65-69 years	729	434	378	1541
70-74 years	612	401	352	1365
75-79 years	464	327	280	1071
80-84 years	320	191	140	651
85 years and over	272	114	110	496
Total	25143	11202	5787	42132

Table 2.3: The age distribution and size of the population living in the postcodes catchment of Prince Alfred Park Pool (where 'catchment' equals postcodes providing at least 0.5% of users)

Andrew “Boy” Charlton Pool

The postcodes served by the Andrew “Boy” Charlton Pool and their contribution to the total user market are reported in Table 2.4. This data has been drawn from a report prepared by Louisa Teo, a researcher employed to conduct a customer satisfaction survey for the venue managers, Belgravia Leisure, and the City of Sydney. The survey was undertaken in March 2004.

Total Attendance 04/05 (seasonal use only)		124,980
Postcode	Suburb	Percent of Users
2011	Elizabeth Bay, Kings Cross, Rushcutters Bay, Woollahmooloo	21
2010	Darlinghurst, East Sydney, Surry Hills, Taylor Square	12
2021	Centennial Park, Moore Park, Paddington, Victoria Barracks	7
2000	Australia Square, Darling Harbour, Sydney, Sydney South, The Rocks	2
2025	Woollahra	2
2026	Ben Buckler	2
2027	Darling Point, Edgecliff, Point Piper	2
2029	Rose Bay, Woollahra Park	2
2031	Clovelly, Randwick	2
2028	Double Bay, Woollahra Point	1
2041	Balmain, Birchgrove, Longnose Point, Mort Bay, Simmonds Point, Snails Bay	1
2065	Crows Nest, Gore Bay, Gore Hill, Greenwich, Greenwich Point, St Leonards, Wollstonecraft	1
2069	Castle Cove, Roseville, Roseville Chase	1
Other	Not available	33

Table 2.4: Postcodes and suburbs of origin of Andrew “Boy” Charlton Pool users, March 2004

The results of the Andrew “Boy” Charlton Pool user surveys shows a far broader catchment for the pool than at Prince Alfred Park pool. The catchment is mapped in Figure 2.2. Unfortunately, data was not available from the report to indicate how many postcodes registered between 0.5 and 1.0 percent of users. As such the mapped catchment is shown as being smaller by comparison with the other centres than would have been the case if full data was available.

Unlike Prince Alfred Park pool, users of Andrew “Boy” Charlton Pool came from a far larger number of postcodes with the most important, 2011 (Elizabeth Bay, Kings Cross, Rushcutters Bay, Woollahmooloo) providing only 21 percent of the total visits.

Even with a cut-off of 1 percent, the pool attracted users from more than 4 times the number of postcodes (14) than did Prince Alfred Park pool (3).

The data and the Belgravia Leisure report indicate that the Andrew “Boy” Charlton Pool market spreads predominantly to the inner east and east of the pool with a strong focus on suburbs along the southern shore of Sydney Harbour.

In support of this, the Belgravia Leisure report states that “two-thirds of postcodes are concentrated in Sydney’s east and inner east”. Yet there are also important market components to the west (Australia Square, Darling Harbour, Sydney, Sydney South, The Rocks and Balmain, Birchgrove, Longnose Point, Mort Bay, Simmonds Point, Snails Bay). Smaller numbers of users also have origins from across the harbour bridge (Crows Nest, Gore Bay, Gore Hill, Greenwich, Greenwich Point, St Leonards, Wollstonecraft and Castle Cove, Roseville, Roseville Chase). This latter reach most probably reflects the “softer” and somewhat more attractive setting of the Andrew “Boy” Charlton Pool when compared with the North Sydney pool which otherwise offers very similar facilities. It could also reflect the workplace of users, ease of access, the “niche” nature of some clientele groups and better parking opportunities.

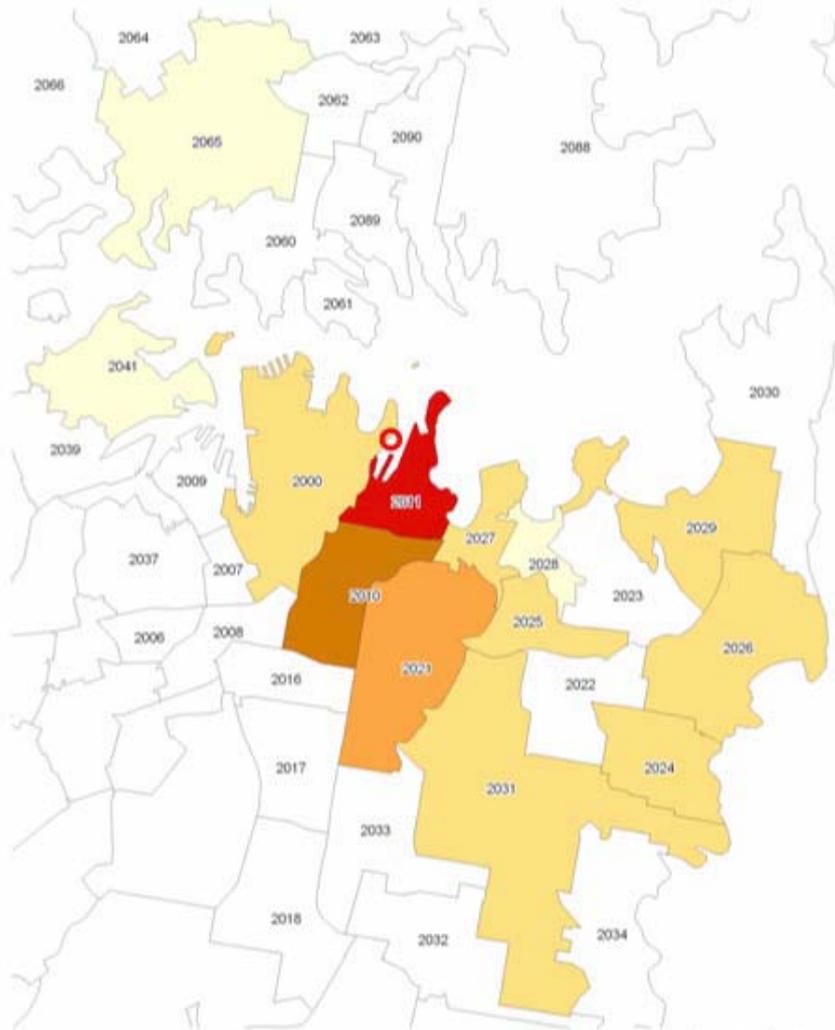
Of interest is the fact that the catchments of the Andrew “Boy” Charlton and Prince Alfred Park pools only overlap in one postcode, that covering Darlinghurst, East Sydney, Surry Hills and Taylor Square. This suggests that in general, the two venues offer quite different experiences and opportunities and that this allows them to attract a different clientele.

Table 2.5 records the age distribution and total population resident in those postcodes which supplied 1.0 percent or more of the Andrew “Boy” Charlton Pool market. The Table indicates that the Andrew “Boy” Charlton Pool has a catchment of 233,015 – close to six times that of Prince Alfred Park Pool – with this spread across a wider number of postcode origins. Such a catchment would have no difficulty in supporting the operation of the venue for, even though the array of uses is limited, the base market from which support is drawn is very much larger.



User Catchment of Andrew Boy Charlton Pool

March 2004



Andrew Boy Charlton Pool

- Proportion of market
- Category 2: 20.1% – 30.0% of market
 - Category 3: 10.1% – 20.0% of market
 - Category 4: 5.1% – 10.0% of market
 - Category 5: 1.1% – 5.0% of market
 - Category 6: 0.5% – 1.0% of market

2000 Postal area boundary



Source: Data supplied by HM Leisure Planning Pty Ltd
Based on CD Derived Postal Area Boundaries Edition 2001
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Figure 2.2: The postcode distribution of Andrew “Boy” Charlton Pool users, 2004

	2011	2010	2021	2027	2026	2031	2000	2024	2029	2028	2041	2065	2069	Total
0-4 years	479	697	570	238	1459	1756	777	555	518	179	669	1268	779	9944
5-9 years	400	604	452	203	1194	1299	771	487	539	157	535	848	880	8369
10-14 years	562	671	445	301	1141	1200	1121	481	496	150	536	793	864	8761
15-19 years	725	927	491	341	1270	1559	1932	539	507	182	554	1082	827	10936
20-24 years	1912	2831	1164	433	2964	3213	3759	589	628	319	891	2110	809	21622
25-29 years	3051	4124	2092	663	4528	3845	3612	1024	843	492	1566	3424	602	29866
30-34 years	2788	3487	1916	683	3960	3462	2948	1094	858	422	1761	3029	652	27060
35-39 years	2017	2563	1332	500	2748	2887	2708	963	670	291	1366	2183	842	21070
40-44 years	1638	1982	990	469	2117	2236	2405	829	596	286	1114	1771	936	17369
45-49 years	1350	1585	869	417	1795	2013	2394	641	598	265	1104	1603	944	15578
50-54 years	1280	1465	1002	587	1670	1779	2243	676	644	323	1125	1578	937	15309
55-59 years	996	990	799	480	1223	1441	1620	479	463	264	814	1235	719	11523
60-64 years	679	820	584	410	994	1081	1139	373	357	202	556	776	510	8481
65-69 years	587	729	360	319	867	906	946	350	288	142	396	715	466	7071
70-74 years	531	612	326	423	818	936	740	342	318	152	323	685	397	6603
75-79 years	424	464	242	438	784	837	493	340	285	162	257	600	334	5660
80-84 years	278	320	170	351	507	607	230	275	246	118	177	447	279	4005
85 years and over	321	272	156	328	464	564	154	426	198	105	148	387	265	3788
Total	20018	25143	13960	7584	30503	31621	29992	10463	9052	4211	13892	24534	12042	233015

Table 2.5: The age distribution and size of the population living in the postcodes catchment of Andrew “Boy” Charlton Pool (where ‘catchment’ equals postcodes providing at least 0.5% of users)

Victoria Park Pool

Table 2.6 records the postcode origins of users of Victoria Park Pool and the catchment is mapped in Figure 2.3. The table and map indicate that as with Andrew “Boy” Charlton Pool, users of Victoria Park Pool come from a far broader area than that served by the Prince Alfred Park pool. In fact, the pool serves nearly 7 times the number of postcodes than does Prince Alfred Park Pool (with the same number generating 1.0 percent or more of the users as does Andrew “Boy” Charlton Pool).

Total Attendance 0/05 (all year use)		166150
Postcode	Suburb	Percent of Users
2037	Forest Lodge, Glebe, Glebe Point	27.7
2042	Enmore, Newtown	20.7
2008	Chippendale, Darlington, Eveleigh	10.9
2038	Annandale	5.7
2010	Darlinghurst, East Sydney, Surry Hills, Taylor Square	4.3
2016	Eveleigh Railway, Redfern	3.6
2043	Erskineville	2.7
2048	Stanmore, Westgate	2.5
2050	Camperdown	2.5
2204	Marrickville	2.5
2007	Broadway, Ultimo	1.6
2040	Leichhardt, Lilyfield, Orange Grove, Taverners Hill	1.5
2044	St Peters, Sydenham, Tempe	1.2
2049	Lewisham, Petersham	1.0
2015	Alexandria, Beaconsfield	0.8
2026	Ben Buckler	0.8
2031	Clovelly, Randwick	0.8
2041	Balmain, Birchgrove, Longnose Point, Mort Bay, Simmonds Point, Snails Bay	0.8
2011	Elizabeth Bay, Kings Cross, Rushcutters Bay, Woolloomooloo	0.5
2017	Victoria Park, Waterloo, Zetland	0.5
2130	Summerhill	0.5
Other	38 postcodes of < 0.5% each	6.9

Table 2.6: Postcodes and suburbs of origin of Victoria Park Pool users, December 2004

It is evident from Figure 2.3 that the Victoria Park Pool catchment generally extends quite some distance in all directions from the pool. The reach to the west and south-west is strongest with significant numbers visiting from as far afield as Petersham. The weakest area of visits is from Sydney’s eastern suburbs. This pattern of visits reflects the location of the pool -with easy access from the south and west- the mix of

local recreational use and *regional* lap swimming in its market , pricing, and the availability of alternate venues to the north-east.

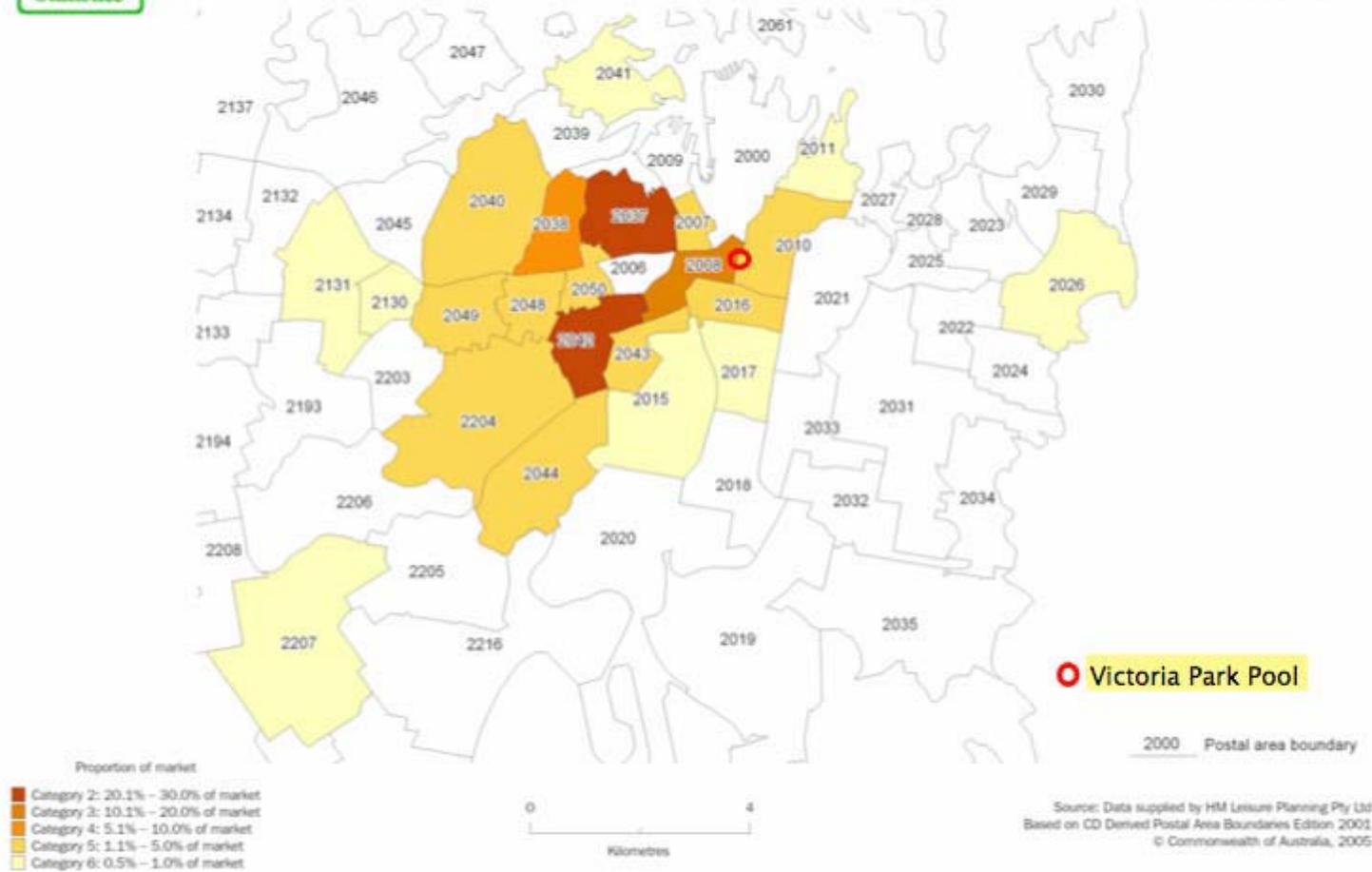
As is the between the Andrew “Boy” Charlton and Prince Alfred Park Pools, there is a limited overlap of catchments between Victoria Park Pool and the two previous pools reviewed. The only substantive overlap between Victoria Park Pool and both Andrew “Boy” Charlton and Prince Alfred Park pools occurs in the Darlinghurst, East Sydney, Surry Hills, Taylor Square postcode while Prince Alfred Park pool also overlaps in the Eveleigh Railway, Redfern area (2016). Further, there is a weak overlap in the outer areas of each pool catchment (eg: Clovelly, Balmain and Elizabeth Bay in the case of Andrew “Boy” Charlton Pool and Victoria Park/Zetland alone in the case of Prince Alfred Park Pool.

Table 2.7 records the age distribution and total population resident in those postcodes served by the Victoria Park Pool which supplied 0.5 percent or more of the market. The Table indicates that the catchment of Victoria Park Pool has 291,168 residents with these again being distributed across the individual postcodes of the catchment. This provides a very healthy market for the venue although, as with both Prince Alfred Park Pool and Andrew “Boy” Charlton Pool, the array of user activities is somewhat restricted. As a consequence, the *total* catchment community would not be effectively served by the venue.



User Catchment of Victoria Park Pool

December 2004



	2037	2042	2008	2038	2007	2010	2016	2040	2043	2044	2049
0-4 years	509	629	141	444	159	697	371	1072	224	351	527
5-9 years	459	426	98	303	143	604	303	870	180	307	399
10-14 years	605	381	108	246	130	671	284	721	141	299	376
15-19 years	909	557	325	317	330	927	469	811	165	368	487
20-24 years	1732	1849	1253	714	847	2831	1218	1506	482	553	887
25-29 years	1900	2611	1146	1007	722	4124	1548	2211	828	655	1004
30-34 years	1446	2274	734	1123	449	3487	1326	2531	782	656	1111
35-39 years	1076	1670	567	905	317	2563	1052	2018	582	631	912
40-44 years	934	1132	445	658	242	1982	844	1547	412	559	794
45-49 years	900	847	357	580	224	1585	689	1313	307	509	700
50-54 years	859	746	314	550	219	1465	643	1239	208	450	599
55-59 years	650	533	200	376	132	990	510	877	164	331	454
60-64 years	468	378	121	266	120	820	478	676	107	268	356
65-69 years	331	324	116	211	88	729	434	607	97	229	278
70-74 years	400	278	92	167	90	612	401	590	68	212	273
75-79 years	272	187	69	147	67	464	327	467	41	141	172
80-84 years	166	124	36	109	42	320	191	295	37	78	124
85 years and over	131	81	16	105	19	272	114	285	38	70	133
Total	13747	15027	6138	8228	4340	25143	11202	19636	4863	6667	9586

	2050	2048	2204	2011	2015	2017	2026	2041	2130	2131	2207	Total
0-4 years	161	341	1541	479	253	236	1459	669	334	1146	1872	13615
5-9 years	95	263	1415	400	145	278	1194	535	324	1043	1723	11507
10-14 years	77	217	1307	562	137	297	1141	536	284	943	1524	10987
15-19 years	135	373	1507	725	157	356	1270	554	321	1174	1632	13869
20-24 years	397	742	2025	1912	484	331	2964	891	460	1655	1758	27491
25-29 years	612	855	2583	3051	737	375	4528	1566	685	2139	2009	36896
30-34 years	581	856	2685	2788	827	394	3960	1761	725	1986	2014	34496
35-39 years	432	677	2440	2017	556	365	2748	1366	664	1949	2098	27605
40-44 years	298	534	2177	1638	425	361	2117	1114	543	1710	1811	22277
45-49 years	213	456	1834	1350	320	373	1795	1104	464	1476	1693	19089
50-54 years	207	434	1524	1280	275	407	1670	1125	373	1249	1647	17483
55-59 years	125	318	1247	996	203	337	1223	814	242	903	1372	12997
60-64 years	107	264	1044	679	99	417	994	556	190	763	1161	10332
65-69 years	100	238	938	587	96	378	867	396	198	788	980	9010
70-74 years	82	190	761	531	79	352	818	323	163	727	963	8172
75-79 years	49	146	540	424	68	280	784	257	146	592	841	6481
80-84 years	29	89	387	278	37	140	507	177	98	498	726	4488
85 years and over	22	64	438	321	28	110	464	148	118	687	709	4373
Total	3722	7057	26393	20018	4926	5787	30503	13892	6332	21428	26533	291168

Table 2.7 Part A & B: The age distribution and size of the population living in the postcodes catchment of Victoria Park Pool (catchment = postcodes with 0.5%+ of users)

Cook and Phillip Park Aquatic Centre

Figure 2.4 and Table 2.8 record the postcode origins of users of the Cook and Phillip Park Aquatic Centre. Tables 2.9 records the age distribution and total population resident in those postcodes served by the pool which supplied 0.5 percent or more of the market.

It is evident from both Tables 2.8 and 2.9 and from Figure 2.4 that the Cook and Phillip Park Aquatic Centre serves a very large market when compared with the other Council pools. Some 25 postcodes contributed 0.5 percent or more of the venue users while a further 183 contributed smaller numbers. This reflects the high patronage by CBD workers who although might not live in the City or surrounding areas access the facility during their work/ after work hours. Table 2.9 indicates that the total catchment of the pool is 357,374 – a total which is just on 9 times that of Prince Alfred Park Pool and around 25 percent and 30 percent larger than the Victoria Park and Andrew “Boy” Charlton Pool catchment populations respectively.

It is without doubt that the Cook and Phillip Park Aquatic Centre will also be serving a greater proportion and cross-section of its catchment population than the other City of Sydney pools, given the wider mix of facilities and services which are offered. As noted with regard to Prince Alfred Park Pool, the rates of use of each pool by its catchment population will be reviewed when the relevant data becomes available.

The Cook and Phillip Park Aquatic Centre market is dominated by the immediate inner east and central City of Sydney suburbs. However, the reach of the catchment stretches throughout the entire eastern suburbs and, to a smaller extent than the Victoria Park Pool, into the inner west. This indicates the strong *local, municipal* and *regional* role played by the venue.

Another point of significance which is not recorded in Table 2.8 is that the Cook and Phillip Park Aquatic Centre attracts significant levels of visitor use from interstate and overseas. The survey reported above recorded 117 interstate users (with over half from South Australia) and 55 overseas users. These accounted for 3.4 percent and 1.5 percent of all users respectively.

Total Attendance 04/05 (all year facility)		830,604
Postcode	Suburb	Percent of Users
2010	Darlinghurst, East Sydney, Surry Hills, Taylor Square	17.7
2000	Australia Square, Darling Harbour, Sydney, Sydney South, The Rocks	15.6
2011	Elizabeth Bay, Kings Cross, Rushcutters Bay, Woolloomooloo	8.3
2021	Centennial Park, Moore Park, Paddington, Victoria Barracks	5.2
2026	Ben Buckler	4.4
2008	Chippendale, Darlington, Eveleigh	2.0

2012	Strawberry Hills	2.0
2009	Pymont, Black Wattle Bay	1.6
2015	Alexandria, Beaconsfield	1.6
2024	Bronte, Charing Cross, Waverley	1.6
2029	Rose Bay, Woollahra Park	1.6
2034	Coogee, South Coogee	1.5
2025	Woollahra	1.4
2016	Eveleigh Railway, Redfern	1.2
2022	Bondi Junction, Queens Park	1.0
2035	Lurline Bay, Pagewood	1.0
2007	Broadway, Ultimo	0.9
2030	Diamond Bay, Dover Heights, Rose Bay North, Vaucluse, Watsons Bay	0.9
2023	Bellevue Hill	0.8
2027	Darling Point, Edgecliff, Point Piper	0.8
2031	Clovelly, Randwick	0.8
2040	Leichhardt, Lilyfield	0.7
2041	Balmain, Birchgrove, Longnose Point, Mort Bay, Simmonds Point, Snails Bay	0.7
2028	Double Bay, Woollahra Point	0.6
2043	Erskineville	0.5
2037	Forest Lodge, Glebe, Glebe Point	0.5
Other	183 postcodes < 0.5% each	25.1

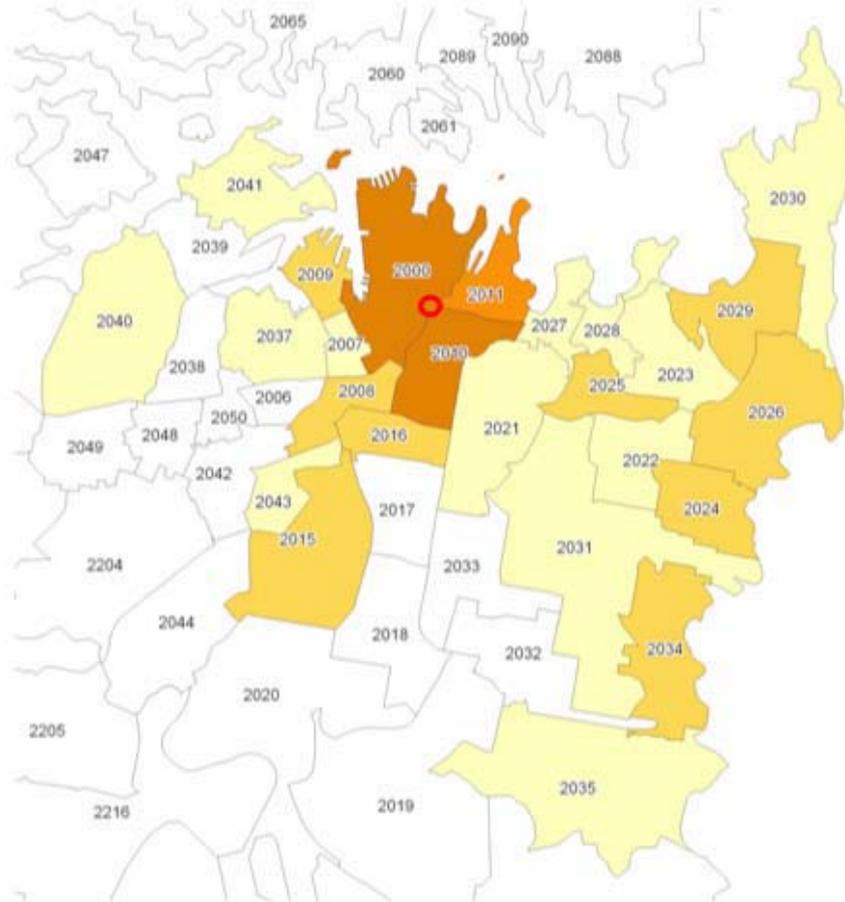
Table 2.8: Postcodes and suburbs of origin of Cook and Phillip Park Aquatic Centre users, December 2004

Given its reach, it is not surprising to find that there is quite a degree of overlap between the Cook and Phillip Park Pool and other of the City of Sydney pools. The overlap is greatest with Andrew “Boy” Charlton Pool, where three of the top four postcodes overlap, and with Prince Alfred Park where the two venues share their prime postcode.



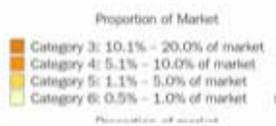
User Catchment of Cook and Phillip Park Pool

December 2004



 Cook and Phillip Park Pool

 Postal area boundary



Source: Data supplied by HM Leisure Planning Pty Ltd
Based on CD Derived Postal Area Boundaries Edition 2001
© Commonwealth of Australia, 2005

	2000	2010	2011	2008	2009	2015	2016	2021	2024	2025	2026	2029
0-4 years	777	697	479	141	299	253	371	570	555	352	1459	518
5-9 years	771	604	400	98	220	145	303	452	487	260	1194	539
10-14 years	1121	671	562	108	206	137	284	445	481	296	1141	496
15-19 years	1932	927	725	325	438	157	469	491	539	267	1270	507
20-24 years	3759	2831	1912	1253	1357	484	1218	1164	589	497	2964	628
25-29 years	3612	4124	3051	1146	1769	737	1548	2092	1024	727	4528	843
30-34 years	2948	3487	2788	734	1108	827	1326	1916	1094	719	3960	858
35-39 years	2708	2563	2017	567	663	556	1052	1332	963	538	2748	670
40-44 years	2405	1982	1638	445	486	425	844	990	829	481	2117	596
45-49 years	2394	1585	1350	357	451	320	689	869	641	499	1795	598
50-54 years	2243	1465	1280	314	429	275	643	1002	676	545	1670	644
55-59 years	1620	990	996	200	311	203	510	799	479	479	1223	463
60-64 years	1139	820	679	121	224	99	478	584	373	379	994	357
65-69 years	946	729	587	116	136	96	434	360	350	261	867	288
70-74 years	740	612	531	92	131	79	401	326	342	262	818	318
75-79 years	493	464	424	69	79	68	327	242	340	241	784	285
80-84 years	230	320	278	36	40	37	191	170	275	183	507	246
85 years and over	154	272	321	16	21	28	114	156	426	178	464	198
Total	29992	25143	20018	6138	8368	4926	11202	13960	10463	7164	30503	9052

Table. 2.9 – The age distribution and size of the population living in the catchment of Cook and Phillip Park Aquatic Centre

Ian Thorpe Aquatic Centre

In addition to its existing City aquatic facilities, Council is presently proceeding with the construction of a new indoor complex, the Ian Thorpe Aquatic Centre, in Ultimo. The intent is to provide what might be described as a 'sub-municipal' facility to serve the needs of the inner and eastern sectors of the City, the inner City workforce, university students and areas to the further west including parts of Leichhardt.

1.5 OTHER AQUATIC VENUES IN THE SYDNEY DISTRICT

The Sydney metropolitan area has some 625 health and fitness centres –12 of which include swimming pools-- and 86 stand-alone swimming pools, *not* including coastal rock pools. There is also a handful of specialist hydrotherapy/health pools, two of which are in inner Sydney.

While the majority of the health and fitness centres are privately owned and operated, a greater proportion of the stand-alone pools are Council-owned as are the majority of the venues with a mix of health and fitness facilities and pools. The specialist hydrotherapy/health pools are in the State government-operated South Sydney Community Health Centre and the Prince of Wales Hospital in Randwick.

City of Sydney residents have access to a considerable number of the health and fitness, combined health and fitness and aquatic and stand-alone aquatic facilities found in metropolitan Sydney. In fact, with four Council-owned venues already operating, another under construction and a sixth venue proposed, the City will soon have more municipal aquatic venues than any other NSW local government authority. Further, there are significant numbers of dry health and fitness, fitness/pool and stand-alone pool facilities in the City and in the Councils surrounding the City, with these being offered by both private operators and Councils. A number of the pools are seasonal while others operate on an all year basis.

The stand-alone aquatic venues and health and fitness venues with aquatic facilities which are accessible to City residents are listed in Table 2.10 and mapped in Figure 2.6. The colour codes are used in the chart to group like facilities. In the “Swimming Pools Only” category, the letters in brackets indicate outdoor “O” and indoor “I” pools. Where both occur, the major pools focus is shown first. In addition to swimming pools, there are over 50 private health clubs and fitness centres within the inner metropolitan area and the inner North Shore which would be accessible to City of Sydney residents. These have not been recorded in the Table as it has not been possible to adequately define the market sectors they service so as to determine the extent to which they might complement or compete with Council venues. The general experience is that private operators often service niche markets which draw a clientele from a wide array and/or they have a loyal customer base. These types of markets are not readily captured by new and/or public venue, nor are some elements of the services offered (eg: body building, boxing) the types of markets which municipal facilities seek to service. A review of the data in the Tables together with venue inspections and discussions with a number of the providers identified in the Table has identified the following:

Aquatic provision

There are least 25 outdoor or indoor 50 metre pools within a ten kilometre radius of the City of Sydney. This level of provision reinforces the view that the region is well catered and that any further provision by Council should focus on providing alternate forms of water and programming space. Given the general ageing of the community and the greater focus on health-related programs, this suggests that it would be more appropriate to put a far

stronger focus on *program*-related pools and on a *number* of smaller pools capable of better meeting health, relaxation, exercise and learn to swim programs and activities rather than, for example, on 50 metre pools to meet the needs of sports and lap swimming.

Map Number	Centre Name
	Multi-purpose Centres with Pools
1	Andrew 'Boy' Charlton Pool, The Domain
2	Col Jones Swim Centre, 23 Toyer Street, Tempe
3	Cook and Phillip Park Aquatic Centre, 4 College St., Sydney
4	Hurstville Aquatic Leisure Centre, Cnr Kings Rd & Forest Rd Hurstville Hurstville
5	Lane Cove Olympic Swimming Pool, Little St., Lane Cove
6	Leichhardt Aquatic Centre, Mary St, Leichhardt
7	Ryde Aquatic Centre, Karen Mouras Dve., Ryde
8	Tasker Park Aquatic & Fitness Centre, Phillips Avenue, Canterbury
9	Unigym, University of NSW
10	Sydney University Aquatic Centre
11	Victoria Park Pool, Camperdown
12	Willoughby Aquatic and Leisure Centre, Small St., Willoughby
	Swimming Pools only
13	Ashfield Swimming Centre, Cnr Frederick and Elizabeth St Ashfield (O/I)
14	Bexley Swim Centre, Preddys Rd., Bexley (O)
15	Botany Bay Aquatic Centre & Waterslides, Cnr Myrtle St and Jasmine St., Botany (O)
16	Col Jones Swimming Academy, Railway Pde, Hurstville (I)
17	Dawn Fraser Swimming Pool, Fitzroy Ave., Balmain (O)
18	Des Renford Aquatic Centre, Robey St., Maroubra (I)
19	Enfield Swim Centre, Portland St., Enfield (O/I)
20	Enmore Pool, Black St., Enmore (I)
21	Maroubra Swimming School, Maroubra Rd., Maroubra (I)
22	North Sydney Olympic Pool, Olympic Place, North Sydney (I)
23	Petersham Pool, Station St., Petersham (O)
24	Prince Alfred Park Pool, Surry Hills (O)
25	San Souci Olympic Pool, Rocky Point Rd., San Souci (O)
	Specialist Pools
26	Prince of Wales Hospital Hydrotherapy Pool
27	South Sydney Community Health Centre (former Royal South Sydney Hospital), Joynton Ave., Zetland

Table 2.10: Aquatic and aquatic/leisure venues in inner Sydney area and the inner North Shore

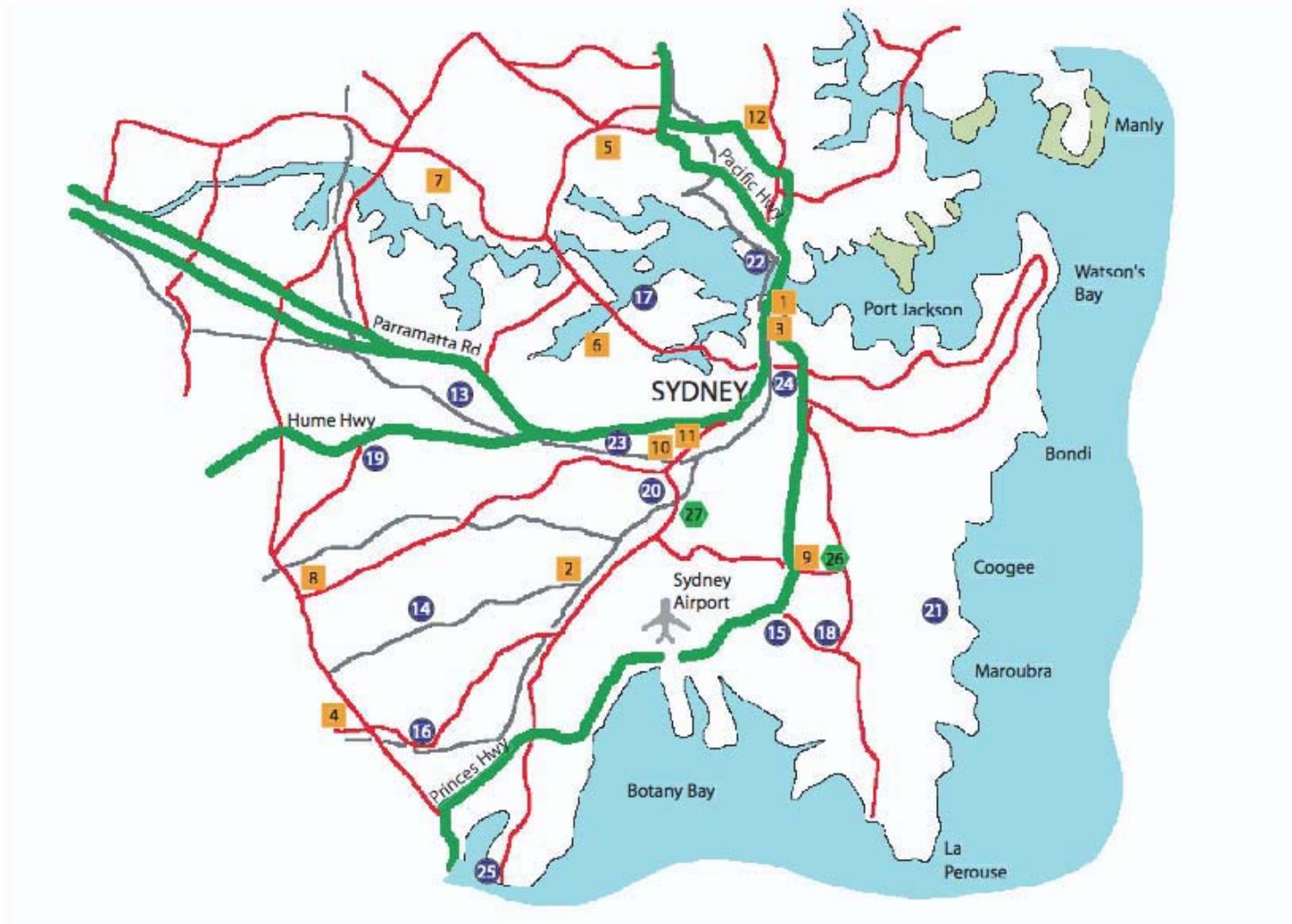


Figure 2.6: Aquatic facilities provision in inner Sydney and the inner North Shore

The clear lack of hydrotherapy and secondary therapy/health pools in the region is evident with the ageing South Sydney Community Health Centre and the Prince of Wales Hospital pool being the only major resources. Both these centres are operated on a bookings-only basis and are not open to the general public for casual or informal. This is a substantive deficiency given the growing recognition of the health role of warm water program pools and the ageing of the population.

Perhaps most importantly, the distribution of facilities shown in Figure 2.6 indicates a paucity of modern public aquatic facilities in the inner south and eastern suburbs –although the south-west is quite well-served. The only major facilities in the south are those at the University of NSW and in Botany Bay Council, with the first of these being restricted in terms of community access and the second being an ageing outdoor venue. This lack of provision reflects the impact of several different factors, these being the historically lower populations in the inner south due to the high level of industrial land use, the weak financial capacity of the Councils in the area and, in the eastern suburbs, the constraining impact of the coast and the sea pools and the lack of flat land. Combined, *these factors mean that the area will have a major gap in terms of aquatic leisure opportunities once the projected population growth occurs.*

Most of the public facilities within the region have outdoor lawn and social areas that are, according to the operators, well used for leisure and relaxation purposes by the public. Those that had updated café provision within the centres to encourage social interaction and relaxation indicated that this was critical to the mix. A number of the venues have undergone some upgrading over recent years or are planning some redevelopment. However, the extent of these works has been somewhat limited in most cases with the extent of development at most being the upgrading of the main outdoor pool and the enclosure an existing 25 metre pool or the addition of such a facility. While valuable, these initiatives do not really create a new mix of leisure opportunities for the community or attract a wide mix of new users. Rather, they enhance conditions for *existing* users and strengthen the capacity to accommodate the burgeoning learn to swim market.

The learn to swim market is not catered well for across the City of Sydney with only the Cook and Phillip Park Pool making a major contribution. As a result, residents are probably using venues outside the City including commercial venues in the eastern suburbs and the Col Jones Swimming Centre in Tempe. Facilities in other Councils --such as Marrickville Council's Enmore Pool-- are restricted by poor facilities. However, Leichhardt Pool is reported to have a swim school enrolment of over 3,000 students and it is likely to be attracting a share of this from the City of Sydney.

Health and fitness provision

There is a high level of supply, particularly for weights, circuit, pilates, yoga and cardio-style programs. Some specialization toward body building and health services occurs. However, many of the venues are comparatively small and there are few of the “major players” in the area. These factors suggest that there is a significant opportunity for a high quality, large health and fitness venue in the City, particularly in the south where it would be away from the inner western centres and the CBD-based providers.

CONCLUSION

The review of the wider regional provision of aquatic leisure facilities, pools and health and fitness venues has indicated that while there is a significant level of aquatics provision in inner metropolitan Sydney, there are some important gaps in the types of provision and in the distribution of facilities. The types of facilities in which the area is most deficient are smaller pools capable of better meeting health, relaxation, exercise and learn to swim programs and activities; aquatic water play venues; modern health and fitness facilities, and hydrotherapy facilities. In terms of location, the major gaps in provision existed in the inner southern suburbs and in the eastern suburbs.

In support of the last point and perhaps of greatest significance from a longer term planning perspective, is the fact that the catchment analysis has demonstrated very clearly that none of the existing City of Sydney aquatic centres effectively serves the southern part of the City. As a consequence, there is a readily identifiable need for provision in this area and this need will grow as redevelopment of the district continues. It is improbable that the community in the southern part of the City would make great use of opportunities available at venues outside the City as those available –such the Botany Bay swimming centre and the facilities in Marrickville and Canterbury Councils-- are predominantly outdoors, are ageing and offer little which is different to the experiences offered by the Prince Alfred Park Pool. As the research on that pool has shown, the drawing power of such pools is very weak.

2

FACTORS IMPACTING ON AQUATIC DEMANDS IN THE CITY OF SYDNEY

2.1 INTRODUCTION

The demand for aquatic leisure facilities in any community is influenced by a range of factors. These include:

- € the demographic characteristics of the population, and
- € the changing leisure interests in the community.

These influences and their implications to future aquatic leisure provision in the City of Sydney are discussed in this chapter.

DEMOGRAPHICS

Demographics - Population Size and Change

Key Features:

Because of the high capital and operational costs of aquatic leisure facilities, the size of the 'catchment' population is critical to their long term operational and financial viability. It is generally accepted that of the order of 40,000 residents is required to support a modern, multi-component wet and dry aquatic leisure venue with a 25 m. indoor pool and that 70,000 residents are needed to support a similar venue with a 50 m. indoor pool. Lower populations can lead to facilities which are under-used –due to a lack of a sufficient market—and to high operational deficits.

The City of Sydney is a major economic driver for Sydney and Australia. It has experienced economic and employment growth in excess of the Australian and metropolitan average. The City's workforce is now at 345,000 and is anticipated to grow by a further 20,000 over the next five years.

The City's population has grown rapidly over the past decade in response to increasing employment opportunities, improved inner city amenities and urban consolidation. By 2009 the City's population is expected to increase by 30,000 people to 180,000.

Some of the key features of population size and change in the City of Sydney are noted below.

City of Sydney	1996	2004	2009
Residents	105,000	150,000	180,000
Businesses	20,300	20,800	22,000
Workforce	310,000	345,000	365,000
Hotel Guests (nightly)	19,053	23,923	25,000
Daily Visitors	370,000	400,000	415,000
Daily Shoppers	70,000	75,000	80,000

The residential profile shows the diversity of the community. Almost 50% of the City's residents were born overseas, and almost 30% speak a language other than English, the most common being Chinese. The City is home to one of Sydney's largest Aboriginal peoples.

Fifty percent of the City's residents are aged 20 and 40, and more than 50% have never married.

The average income of city residents is higher than the Sydney metropolitan average. This disguises a significant disparity of wealth: more than 25% of adult residents have a weekly income of over 1000 a week, while more than 20% receive less than \$200 a week.

Whilst the majority of residents live in a family household, nearly 25% live alone and 20% in group households of unrelated individuals. This reflects that 20% of resident adults are undertaking post school education at University or TAFE.

Less than 60% of households own a car, compared to more than 85% for the Sydney Metropolitan area.

The major growth areas at present, and projected for the next decade, are:

- € Green Square: where a current population of 5,000 will grow to 29,000 – plus 43,000 employees – by 2016
- € Redfern Waterloo Authority Area – expected additional 20,000 people over the next decade.
- € Pyrmont-Ultimo: a population of 15,000-20,000 is projected over the next 20 years while the daily workforce will grow to 30,000-35,000 people
- € CBD: residential towers in central Sydney are expected to have delivered around 10,800 units and 23,000 residents between 1998 and 2006

- € significant population growth is also occurring in the Broadway/CUB site area; Surry Hills and St Margaret's Hospital; Children's Hospital site, Camperdown and on the Ashmore estate at Erskinville

Implications For Aquatic Facility Development

Some of the key implications are the population size and projected growth are:

- € the population size is already sufficiently large to support one or more major aquatic facilities. This capacity will increase over time. However, the City has *four* existing pools, a fifth already planned, and a possible sixth being mooted. There is also a significant number of other pools within easy reach of the Council area. As a result, market competition could detrimentally impact on the financial and operational performance of City facilities unless they are well promoted, carefully programmed and targeted at particular sectors of the community
- € programming will need to be designed to *retain* swimmers who presently drop out as a result of age and ethnic groups who do not traditionally swim
- € the huge City workforce can be expected to make significant demands on aquatic leisure facilities before work, during lunch hours and after work. If this population can be 'tapped', it can be 'used' to generate important 'base' use levels which will enhance overall viability while allowing more niche targeting to meet local resident needs
- € there will be high and undue demands on existing infrastructure unless upgrading and quality provision action is taken in parallel with the population growth, and
- € there is the potential to lose resident custom to pools in surrounding
- € Councils if action to match modern provision trends are not pursued.

Population Age and Marital Status

Key Features:

Users of aquatic leisure centres are predominantly young to family age, although swimming continues into much older age groups than many other recreation activities. The key characteristics of the age and marital status of the City of Sydney population are:

- € 48 percent of all residents are aged 20-40 years, well above the metro Sydney average of 31 percent
- € the median age of the population is 33.7 years, one of the lowest of all Sydney Councils where the metro average is 34.9 years
- € some 53 percent of the population is male while 47 percent are female: this is a high male:female ratio

- € there is a large percentage of young, single residents. Some 53.5 percent of all residents aged 15 years and over are single compared with only 33 percent for metro Sydney
- € there is a lower *percentage* of children, teenagers and older people than across metro Sydney although there are still thousands of residents in these age groups
- € the age of residents in the suburbs of the City are not homogeneous. Thus:
 - € the southern areas of Rosebery, Zetland and Waterloo have greater proportions of children as do Alexandria, Beaconsfield, Erskinville and Glebe
 - € the inner suburbs of Camperdown, Chippendale, Pyrmont, Ultimo and Haymarket which are near the Universities and Sydney TAFE, have far higher proportions of students aged 19-24 years
 - € by comparison, residents in their 30s predominate in the east around Darlinghurst, Potts Point, Elizabeth Bay, Rushcutter's Bay and Surry Hills. They are also well represented in Zetland, Rosebery and Waterloo
 - € residents over 65 years were most heavily concentrated in Waterloo and Redfern with other concentrations in Elizabeth Bay, Rushcutter's Bay, Woolloomooloo and Millers Point. Over 25 percent of residents in these areas are over 55 years compared with around 15 percent in other suburbs

Implications:

Some of the age and marital differences in the City clearly reflect different periods of settlement and development and sequent generational occupancy of different suburbs. Others reflect the nature of housing availability and the presence of nearby educational institutions. Overall, the aquatic leisure provision implications of the age and marital status characteristics of the City of Sydney population include:

- € a need for a wide range of opportunities for participation in active pursuits
- € a need for opportunities attractive to young adults, teenagers and children
- € a need for social opportunities attractive to people from lone person households
- € a need for facilities attractive to single males
- € a need for flexibility of facilities as the age mix will change over time, but
- € a capacity to target different types of facilities and programs to different age groups in different suburbs of the City, and

- € longer term provision of opportunities for older residents.

Cultural Background/Ancestry

Ethnicity is a critical influence on the viability of aquatic leisure facilities and to the mix of facilities and programs which are provided. This is because many cultural groups have little or no traditional involvement with aquatics as does the anglo-saxon Australian population. This leads to very low comparative use rates.

Key Features:

Some of the features of the current ethnicity of the City of Sydney population are:

- € almost half (43%) of the City residents were born overseas, compared with 33 percent across metro Sydney
- € almost 25 percent of migrants living in Sydney arrived in the past three years and 60 percent had arrived since 1986, and
- € almost 30 percent of City residents speak a language other than English at home.

Implications:

The most important implications of the ethnic mix of the City population include:

- € a possible significant drop in the rate of aquatic centre use from past years as a result of the changing ethnic mix of the community
- € the need for comprehensive information and educational programs in association with other agencies providing services to ethnic groups to promote aquatic leisure resources to them
- € the provision of different types of aquatic leisure experiences if non-anglo community groups are to be attracted to them and benefit from their use, and
- € the possible need to review the objectives of continued and further aquatics provision and a rigorous cost:benefit analysis of that provision vis-à-vis other forms of recreation provision.

From a community well-being perspective, *Council will need to make a conscious decision as to the extent to which its operation of aquatic leisure facilities is to be driven by financial consideration as opposed to community service considerations.* To illustrate, attracting say, 800,000 visits pa. to the City's pools may ensure their financial viability. But it will be of limited social and community benefit if it is found that these visits are made largely by the young, well-off, anglo-saxon component of the community.

Income, Education and Employment

These three socio-economic measures generally go hand in hand in reflecting a community's ability to afford a variety of recreation opportunities. Even though some aquatic leisure facility and program fees are comparatively low when compared with many other forms of recreation, low income communities can often not afford regular use, particularly if that regular use is dependent on membership and lesson fees. Further, people with a lower education generally seek simpler and less personally-developing use experiences while the unemployed can have severe constraints on their ability or desire to use modern aquatic leisure facilities.

Key Features:

Some of the key income, education and employment features of the City of Sydney community are:

- € the City has higher proportions of both high and low income households than the Sydney metropolitan area, this reflecting higher qualification levels, higher student numbers and higher levels of lone person households
- € the median weekly income of all households was \$1013 while the median income of residents aged over 15 years was \$605, a figure some 36 percent higher than the metropolitan median
- € 15 percent of residents earned over \$1500 a week as individuals compared with only 7 percent across metropolitan Sydney; 17 percent of households earned more than \$2000 a week yet 30 percent earned less than \$300 a week
- € 27 percent of City residents are attending an educational institution with 20 percent taking a post-school course. This compares with only 10 percent across metropolitan Sydney. 19,000 of the City's residents aged over 15 years are university or TAFE students. These groups are potentially significant markets but markets with often lower disposable incomes and variable time availability and *times* of availability
- € levels of overall tertiary and post-tertiary qualifications in the City are significantly higher than for the rest of Sydney with rates for post-school, bachelor and post-graduate degrees being as much as 50 percent higher than for metro Sydney
- € 33 percent of City workforce are professionals and another 14 percent on associate professional occupations. 22 percent were in business and property services and 10 percent in each of retail and hospitality. Over 6 percent were employed in each of health and community services, manufacturing, education, and cultural and recreational services, and
- € at the time of the 2001 Census, 6.8 percent of the City population was unemployed.

Implications:

Overall, the income, education and employment data indicate a strong capacity and propensity in the City resident and workforce community to use aquatic leisure venues. However, this is offset to some extent by the large numbers of students with far lower incomes and the significant percentage of households with low incomes. These data suggest a need for programming which commands a range of prices so that important groups within the community are not discriminated against.

Family Structure

Family make-up can be quite influential in its affect on the levels and types of recreation activity. Families with children pursue more group and social activities directed at the skills and needs of the children, and/or are heavily involved in sports. Families without children generally spend far greater time and money on social, commercial, health and fitness and personal pursuits. By comparison, lone parents and lone person households are frequently restricted by the lack of immediate partners, by age (which is frequently associated with being alone, especially amongst women, and constraints on their capacity to afford recreation opportunities.

Key Features:

The key features of the structure of households in the City of Sydney are:

- € some 60 percent of City of Sydney residents live in families with two adults and/or dependent children or other relatives
- € the proportion of households *with* children is 10 percent lower than the State average although the other sub-categories are largely similar
- € as noted previously, 23 percent of City of Sydney residents live in lone person households, and
- € 17 percent of residents live in group households and 10 percent live in one parent households.

Implications:

Amongst the implications of the household structure in the City of Sydney are:

- € a need for a wide mix of activities across the City's venues
- € opportunities to target different types of programs at differing resident groups at different venues, and
- € a possible need to actively seek out, program for and provide specific support services for some groups in the community (eg: lone householders) if they are to be encouraged to use the venues.

Car Ownership

In the absence of good public transport services, car ownership –or the lack of it– significantly influences the ability of a community to reach recreation opportunities. That car ownership and multiple car ownership is closely related to both age and socio-economic status, intensifies these impacts.

Key Features:

The key features of car ownership in the City of Sydney are:

- € only 58 percent of City of Sydney households owned a car in 2001 compared with 86 percent for the Sydney metropolitan area, and
- € at 0.7, the average number of cars per household was half that of metropolitan Sydney.

Implications:

Amongst the implications of car ownership in the City of Sydney are:

- € a need to ensure that households with no car, and in particular, disadvantaged households, have access to alternate travel resources if they need to reach Council's aquatic leisure facilities
- € provision of quality alternate transport services for youth, the disabled and older residents in the City, and
- € action to ensure that aquatic leisure facilities in the City are equitably distributed.

Other Demographic Issues

Several other points warrant noting regarding the demographic characteristics of the City of Sydney as these are likely to have a greater or lesser bearing on the nature of aquatic leisure provision in the City. The points are:

- € the level of **inter-state and overseas tourism** visits to Sydney. These visits tally many millions annually and while there is little or no Australian research to indicate that tourists use public aquatic leisure centres, they may well do or might be encouraged to as an additional market
- € visits to the City from **residents of neighbouring Councils**. At present, most neighbouring Councils have aquatic leisure facilities of their own. However, a clear exception to this are Sydney's eastern suburbs where coastal beaches have long fulfilled this role. Changing leisure needs mean that these resources are no longer able to meet the full mix of community needs. Recent research in Woollahra, Waverley and Randwick has identified a growing demand for non-beach aquatic facilities, a demand which is increasingly difficult to meet due to

financial and space constraints. As a consequence, the City of Sydney facilities currently serve these communities for many of their needs. This can be expected to continue and to be strengthened by the provision of more modern and diverse facilities in Sydney.

- € Similarly, recent research in the inner west of metro Sydney has found that good municipal facilities will attract residents away from local venues (as is happening for instance between Marrickville and Leichhardt). Thus, the provision of new or extensively upgraded facilities in Prince Alfred Park or, for instance, in Green Square, could be expected to attract significant use from residents of surrounding Councils. The nature and levels of this use will need to be monitored

- € provision for **people with disabilities**. In a major oversight, *none* of the studies or reports reviewed in the following chapter raise the issue of the program and support needs of people with disabilities. There are many people in the community *with a wide range of constraints* and this oversight is a major shortcoming. The needs of these groups will need researching and Council must ensure that any designs for new or redeveloped facilities pay full attention to the requirements of the federal Disability Discrimination Act and other related federal and state statutory requirements, and

- € the **data** reported in the present study is derived from the 2001 Census, a range of other surveys and in-house monitoring by the City of Sydney. As such, it is recent and past data and should only be used as a *guide* to what actions are appropriate. The rate of demographic change in the City means that continual monitoring of these changes and their impact on the demand for aquatic leisure facilities will be essential. Similarly, the *facilities* which are provided and the ways in which they are *programmed* and *promoted* will need to be sufficiently flexible to respond to future demographic changes and trends in leisure need and participation.

Demographic Implications: Overview

It is evident from the foregoing material that the demographics of the City of Sydney have a wide range of implications as to what is done in terms of aquatic leisure *facilities, programs* and *services* over the coming years. Most significant are:

- € the size and projected growth of the population . Projected to increase to 180,000 by 2009.
- € the vary large and growing workforce in the City
- € spatial variations in the rates of growth and the projected total populations of different suburbs

- € the youthful overall age of the population and the spatial variations in age in response to educational opportunities and the age of suburban development
- € the changing cultural mix of the City community and the implications to market size, programming and promotion
- € variations in residential types across the City
- € the generally high socio-economic status of the community but the persistence of pockets of disadvantage
- € the high level of lone person households
- € low car ownership

In addition, the review has indicated that:

- € markets will be lost if quality facilities are not provided
- € good quality City of Sydney facilities can be expected to attract use from residents of adjoining Councils, and in particular, those to the east
- € there will be a need to monitor changing demands and tourism demands
- € the needs of people with disabilities will need to be given considerable attention from each of a facilities, programs and services perspective.

These characteristics and variations within the community lend strong support to the development focus proposed in the recent *Aquatics Development Strategy. Preliminary Directions* which pursues a process of aquatic leisure facilities development which distinguishes between the various centres by developing what amounts to a *hierarchy* of opportunities and through niche market development and niche programming.

Finally, it warrants repeating that in determining how to respond to some of the City's demographic characteristics, *Council will need to make a conscious decision as to the extent to which its operation of aquatic leisure facilities is to be driven by financial considerations and community service considerations.*

CONCLUSIONS

The demographic analysis has indicated that there are substantial and growing residential and workforce markets in the City from which to draw aquatic and related facility users. These populations are also quite young, relatively affluent and as a consequence, will be quite demanding in terms of the quality of the resources they seek and will use. That said, there are also important pockets of disadvantage on the basis of ethnicity and socio-economic standing and these must not be overlooked. Further, the substantial ethnic population is known to have low aquatics participation rates and this will act as a potentially major damper on future demands. In the light of these population characteristics, each demographic group in the population will require specific facility, programming and marketing responses if the opportunities provided are to achieve and retain viability.

In addition to the above, what is provided will need to be capable of responding to changes of needs over time. In particular, the demographic characteristics and projected longer term changes in the age and socio-economic characteristics of the community are likely to mean a reduced focus on larger pools and a greater need for water and dry spaces capable of providing a more diverse and more specialised array of health and specialist programs as well as social and family opportunities.

2.2 AQUATIC LEISURE TRENDS

THE BENEFITS OF AQUATICS PROVISION

There is now a wealth of research which shows that people participate in leisure and recreation because of the *benefits* they gain from that participation. The benefits are wide-ranging and include a number of psychological outcomes --such as feelings of achievement, acceptance and well-being-- as well as the benefits of developing and demonstrating leadership skills, of challenge, risk, excitement, rest, improved health and well-being, contemplation and family togetherness.

The benefits of recreation have been found to be greater from aquatics than for many other recreation pursuits. This is because aquatics can be pursued:

- € by people of every age
- € by people at every level of ability
- € socially, at low competitive levels or at elite international competition levels
- € alone, in formal and informal groups or in teams, and
- € at all times of the day, week and year if appropriate facilities are provided.

The research has also shown that aquatic activities are of profound value to people with disabilities, those undertaking rehabilitation programs to overcome injuries caused by accidents and other sports, and people suffering from asthma, arthritis and somewhat ironically, injuries from other sports --amongst a wide range of other ailments.

Well-planned aquatic leisure provision also deliver other, wider benefits. These include:

- € *social* benefits including improved community well-being and cohesion, reduced vandalism and enhanced community health
- € *economic* benefits, through job creation, the purchase of goods and services, and a healthier, more productive workforce, and
- € *environmental* benefits through the optimum use of energy, land and financial resources, the protection of natural areas and enhanced urban amenity.

Finally, recent research has shown that aquatics programs and the related programs can act as stepping stones to achieving other positive personal and social benefits. Recent examples include triathletes using aquatics programs as part of their training regime, women using aquatic leisure centres to get fit and lose weight before moving back into the workforce and venue users building up social contacts with members of the wider community through participation in group activities. These benefits reach well beyond what is purely 'leisure'.

It is evident that aquatics facilities are of major personal and social value to the community and that they can have significant economic and environmental outcomes. These values and benefits generally far outweigh those of most other recreation activities. As a consequence, a strong case can be put for Council to give a high priority to the delivery of high quality aquatic facilities for its community. To lose the existing assets through neglect would seriously disadvantage the community; to retain some of them at their current standard should be seen as a minimal response –but not sufficient to deliver all the benefits which could be provided-- while to gain the full benefits they offer, far wider actions which reflect the changing nature and needs of the community will be needed. This is particularly so given the dramatic changes in the size and make up of the City of Sydney population over recent years *and* the projections for the future.

Broad Recreation Changes

There have been quite dramatic changes in the leisure and recreation interests of the community over recent years *and* in the types of leisure and recreation opportunities available to the community. These changes have been driven by higher education levels, changed work and business hours, greater community affluence, a willingness to pay for high standard experiences, insurance and litigation issues, the changed cultural mix of the community, greater expectations of quality and professional service, a greater awareness of the benefits of recreational involvement, and the ageing of the population.

The broad social, economic and attitudinal changes occurring in society have led to the following changes in community leisure behaviour:

- A trend toward participation in non-competitive, active informal and passive activities rather than traditional formal sports

- A desire for more flexibility and diversity in leisure pursuits rather than a commitment to a small number of activities with this diversity ranging from an increasingly elite level to a basic and casual participation level for many activities

- Dramatic falls in some traditional team and small group sports – including tennis and lawn bowls – but with the recent exceptions of junior soccer and Australian Rules Football and touch

- Significant increases in non-competitive but active pursuits such as cycling, walking, travel and swimming

- Greater support for and more involvement in informal, community-focused activities including community days, carnivals, festivals, music concerts and markets

- Participation in recreation activities across a wider period of the day and week with a major move to week day evening sports *participation* and weekend involvement with non-sporting pursuits and spectating

- Continuing growth in home-based leisure entertainment

- A search for more personalised leisure venues and services, as evidenced by the use of personal trainers, 'boutique' health and fitness providers, personal training and fitness videos and home gyms. Research has also found a need for

far greater personalization of provision and staffing where non-Anglo saxon communities are being provided for

A significant growth in concern for the protection and well-being of the natural environment and open space resources in general

The use of natural and wilderness areas for a wide diversity of often conflicting uses. These include conservation and nature studies, educational activities, bushwalking, skiing, four wheel driving, abseiling, rockclimbing and bouldering, hang gliding, caving, canoeing/rafting, and BASE jumping

Acquisition and use of a wide range of recreational equipment. This ranges from computers and video/DVD equipment to SCUBA gear, boats, hang gliders and aircraft, off road vehicles, metal detectors etc

Provision and use of a diversity of culturally and socially-focused recreation opportunities including restaurants, bookshops, amusement parlours, music outlets (recorded and live), hotels, theatres and galleries

Increased focus on risk management and escalating public liability premiums as a major concern for land managers, clubs and groups, and

A growing trend for families to share recreational activities or to pursue related activities at one venue rather than pursuing a wide range of *different* activities.

Not all the above changes have implications for any proposed new or upgraded aquatic leisure facilities in the City of Sydney, although a number do.

The trends and changes suggest that any new or upgraded aquatic facilities should:

add to the mix of recreation opportunities available to the community

be provided at a high standard at each of the facility, management and programming level with attention being given to targeted, personalised service, particularly for the array of special or disadvantaged groups in the community

develop a focus on informal and formal recreation programming which is suitable to and attractive to a wide range of ages, offers interesting user experiences and which delivers long term personal and community *benefits*

have a strong *family* focus

pursue *integrated provision* of opportunities to optimise family and social outcomes and investment returns

promote any new or upgraded provision as a destination in its own right and also a base for wider recreation programs, including potentially, those provided by others, and

be programmed for different types of users and uses at differing times of the day and week.

These conclusions are quite strongly supported by the findings of a number of the past

reports on recreation provision in the City of Sydney which are reviewed in the following chapter. In preparing the recommendations of the present report, the broad leisure trends reviewed above and appropriate responses to them have been taken into consideration in determining the mix of facilities to provide. It will also be essential that the promotion of any new or replacement facilities take these issues into consideration.

Some Key Aquatic Trends

In addition to the broad recreation trends outlined above, a number of specific trends have emerged in the field of aquatics provision. Key amongst these are:

research evidence of the strong links between aquatic participation and personal and community health. This has led to a growing focus on healthy living and well-being programs and on action to ensure that aquatic leisure facilities are accessible to all residents regardless of their skills or physical abilities

a significant diversification in the mix of aquatic facilities. This is reflected in an increase in the number of different pools provided at aquatic centres so as to better meet different market needs. For instance, there has been an increase in specialist pools for learn to swim, water safety for children, rehabilitation and therapy, self-programmed health activities, school programs, squads, youth activities and unstructured family activities

as part of the above, the growing provision of health focused program pools to cater for a wide range of health, sports injury and special needs uses. These are increasingly being provided with ramp, step and hoist access facilities

the provision of support facilities and services for parents and families. All recently built aquatic complexes provide child care facilities and family/disabled change rooms with the first of these now being mandatory in most States

modern aquatic complexes (whether co-located or separate) are expected to cater for *at least* three quite different market sectors with the balance between them, depending on catchment age profile, being:

- i. recreation and leisure (which generate on average, 60% to 70% of users)
- ii. competitive, training and fitness market (accounting for 20-30 % of users), and
- iii. health and therapy markets (with 10-20% of users).

To meet these markets, there is a need for facilities which can be used all year

a growing percentage of the population is pursuing swimming as a recreation activity and there is an increasing number of participants *of all ages*. This reflects the aquatics-health link; the greater availability of improved, heated and all-year indoor facilities; the continuing position of swimming as a school

curriculum activity, and the continuing international successes of Australian swimmers

in response to the combined impact of the previous items, there has been a significant increase in the number of indoor aquatic venues throughout Australia over the past two decades. As a result, the community has greater choice and a greater awareness of standards and services. Venues which do not reflect these improvements will not attract the markets they need to be viable

the 'packaging' of programs and services to make pools attractive to a range of groups in the community. These groups include in particular, public and private health providers, seniors in the community, schools and swimming clubs

concerns over skin cancer have led to indoor pools being favoured over or in addition to outdoor facilities

virtually no pool-only developments have occurred in the past two decades due to their assessed poor operational viability. Pool-only venues which were built in the past have progressively had a mix of other facilities added to them to strengthen their performance and market capacity eg: Leichhardt, Victoria Park

new aquatic facilities are now almost universally provided in association with a widening range of other dry sporting, health (physiotherapy, massage, dieticians), fitness, quality food services and social facilities. This co-location reflects several factors: the user benefits gained from co-use programming; wider client use of additional services and facilities; major capital cost savings in the shared provision of toilet, change, cafe/food, parking and other support services, and the capacity to cross-subsidise costly aquatic programs with other more lucrative dry health, fitness and social uses

virtually no new 50 metre pools, whether indoor or outdoor, have been built outside the metropolitan areas or major regional centres in Australia in the past 15 years except for where they will support State, national or international competitions and carnivals. This is due to capital and operational costs, lower use flexibility and the fact that where 50 metre pools are provided, other smaller pools *still need to be provided* to ensure that community needs are effectively meet

Further, many of Australia's 50 metre pools were built following the country's successes at the Melbourne Olympics of 1956. Since then, the international aquatics federation, FINA, has instituted 25 metre 'short course' regulations and world championships and the need for 50 metre pools has become far less important

over recent years, a number of the more modern facilities have been developed as indoor *and* outdoor venues. This has taken two main forms: first, provision of both indoor and outdoor pools (or water *features* rather than *pools*) in order to meet the assessed mix of community needs (Leichhardt, North Sydney,

Canterbury, Sutherland, Ashfield) and second, through the construction of pools which can be opened up in summer and enclosed in winter (as at Inverell)

As an addendum to the above point, it warrants noting that the provision of indoor/outdoor venues through the use of removable fabric enclosures have generally been a failure. This is because of the cost and difficulty of removing the covers, the ease with which covers are damaged, and because of the generally poor use conditions under the enclosure (noise, humidity, temperatures)

at an increasing number of aquatic centres, indoor and outdoor *non-pool* aquatic and non-aquatic areas are being developed. These include toddler water play areas, barbeque facilities, café areas and the like. Toddler water play areas are increasingly inter-active and do not have pools. Rather, they have matting-based play areas with user-operated sprays and sprinklers set on what is essentially a large shower base

in keeping with the above, there is an increasing provision of *non-aquatic* areas. Indoor and outdoor venues are providing beach volleyball, picnic lawn areas, dry play facilities, social areas and multi-purpose rooms for teaching, group change and indoor activities in poorer weather. The latter spaces are also used for meetings, art shows, workshops, occasional care etc. All are supported by existing amenities and services

because of the increased 'supply' of aquatic leisure venues in metropolitan areas, more people 'shop around' to try out different venues (especially with children, friends) while others seek a venue which best fits their specific aquatic and other needs (eg: health). Similarly, users will select one venue as a 'home' base and then make use of numerous other venues for more specialist services. In face of this, facility quality, diversity of opportunity and quality staff and programs are essential to attracting and retaining a growing proportion of users

in keeping with the above., there is now a major growth in specialist, commercial 'boutique' health and fitness centres. These are often no larger than a single shop, have restricted memberships and offer totally personalised service. Many such facilities exist in and around inner Sydney. Significantly, the evidence suggests that while successful, these providers avoid some key markets (such as the aged, disabled, women) who would benefit greatly from access opportunities. These opportunities can be successfully tapped by local government providers

aquatics venues are increasingly being designed with the capacity to allow staged additions so that emerging and changing needs in the community can be met in the future. The aquatics and health and fitness industry has evolved so rapidly over recent years that venues which were considered to be industry leaders 10 years ago are now seen as outdated. Unless changes can be made and new opportunities added, new venues will face the same long-term threat to their viability, and

despite the high expectations of the 1990s, there is less than a handful of pools which have been built and operated under BOO (where a commercial developer builds, owns and operates a venue with some form of initial Council input) or BOOT (build, own, operate and eventually, transfer ownership to Council) schemes. A number of developments which were initiated in this way have reverted to Council operation.

Each of these emerging trends has potentially significant implications for future aquatics provision in the City of Sydney. Many are strongly supported by the Green Square Community Facilities S94 Paper. A number of the trends in fact, essentially establish quite stringent design and component requirements for any new or redeveloped aquatic leisure venues. All have been given detailed consideration and have been used as one checklist of the components which have been included in the design options presented later in this report.

Looked at in the light of the trends discussed above, it could be said that an “ideal” modern public aquatic leisure venue in Sydney would include:

indoor and outdoor 25 m. or 50 m. lap pools to guarantee all year availability to a very wide cross section of the community. There might also be the possibility that one of the outdoor pools remainder open all year to provide the outdoor experience so enjoyed by many swimmers and to take pressure off the indoor facilities

a number of other pools and water features. These could be expected to include a warm water therapy or “secondary hydrotherapy” and health pool; learn to swim pool (which could double up with the warm water therapy pool if it has an adjustable floor), indoor and outdoor interactive water play for children and mothers/carers; spas; a child/teenager water play features such as indoor and/or outdoor water slides of varying sizes, lazy rivers, Waveriders and wave machines, diving pools and facilities capable of being closed off for private group use by eg: people with disabilities, aged, ethnic groups

a range of dry health and fitness spaces to accommodate aerobics, circuit training, weights, spinning, yoga, pilates etc

a mix of meeting and programmable activity spaces for group activities, classes, training, staff programs, commercial program hirers

social and café areas for visitors and staff

rooms/offices for resident or visiting specialist service providers eg: masseuse, chiropractor, hair salon, personal trainers

marshalling areas for user clubs eg: walkers, swimmers, triathletes, schools

high quality and flexible support services and designs including ramps, lifts, family change, blind-appropriate

outdoor social and café facilities

outdoor informal sports areas for eg: badminton, beach volleyball, basketball, bocce, and

links to outdoor trails, parkland.

The review of the assets of the City of Sydney pools indicates that *none of the City's pools can boast this mix of opportunities.*

Aquatic Leisure Participation in the Community

There is now extensive data to show that as part of the changing focus of recreation and leisure on the part of the Australian population, aquatic recreation activities and a range of associated health and fitness and dry pursuits are amongst the most popular pursuits in the community.

Australian Sports Commission data quoted in the *Aquatics Development Strategy. Preliminary Directions* report prepared by officers of the City Council in 2004 show that with a 14.9 percent participation rate amongst the NSW population, swimming is second only to walking (31%) in popularity. Data from community surveys undertaken by Stratcorp as part of the South Sydney City Council *Recreation and Open Space Needs Study (2004)* identified similar levels of support. The survey found, in fact, that close to 80 percent of residents saw swimming facilities as being either very important or important recreation opportunities.

These results attest to the importance of aquatics in the community and justify the future development initiatives being contemplated by Council.

CONCLUSIONS

The analysis of the changing leisure determinants in the Australian community and of the recreation and aquatic provision implications of these has provided what amounts to a checklist or a set of criteria by which future provision initiatives should be judged. The analysis has identified a number of facility components and programs which must essentially be regarded as 'mandatory' in any new development. These include health-related programs; full disability access; a diversity of structured, unstructured, wet , dry, social and competitive facility *and* program opportunities; creche and other parental support services; multi-pool provision; all year access; indoor and outdoor multi-use leisure opportunities; packaging of programs for key target groups in the community; co-location of a range of facilities, programs and services; flexible building designs which allow later or staged development, and last, but certainly not least, quality provision, programming and management. All of these conclusions are strongly supported by the past research and planning studies reviewed in the following chapter.

These 'provision criteria' noted above have been used to guide a number of the keys decisions regarding the development strategies recommended.

3

CITY OF SYDNEY LEISURE STUDIES AND POLICIES

INTRODUCTION

This Chapter provides a review of existing City of Sydney documents and other relevant documents which are likely to provide direction for or impact on the redevelopment of existing aquatic venues and the scale and nature of future aquatic facilities provided by the City.

The review is divided into three key sections. These are first, broad Council policy statements which set the theme for Council actions; recreation and recreation-related planning studies, and aquatic-specific reports.

3.1 CITY OF SYDNEY POLICY DOCUMENTS

City of Sydney Corporate Plan, 2005-2007

The *City of Sydney Corporate Plan, 2005-2007* provides the framework for all Council actions over the 2005-2007 period. The Plan covers the newly-created City of Sydney as of February 6, 2004 with all of the former City of South Sydney included.

The Plan lists 15 objectives for action by the City with these being underpinned by 10 core principles, known as the “Melbourne Principles for Sustainable Cities”, which were adopted at the World Summit on Sustainable Development in Johannesburg, South Africa.

The Plan provides an overview of the physical, social, economic and built environments of the City before detailing a set of Key Focus Areas. Those relevant to the present study are:

- urban renewal in Green Square, Redfern and Waterloo: the need to provide appropriate infrastructure and services to meet resident and worker needs

- caring for and building communities: supporting a diverse range of cultural events and programs for the diverse mix of cultures and groups in the City

- planning and public amenity: improving residential amenity, preservation of heritage

- a city of villages: restoration and promotion of unique and distinct community identities across the City through revitalising local communities; integrating transport and land uses; basing village centres around community-owned buildings; linking village places with pedestrian and bike routes.

Although specific reference is not made to built and indoor sporting and recreation infrastructure in the Corporate Plan, it is evident that any redevelopment of existing Council aquatic leisure facilities or any new facilities will need to be developed in a manner which reflects the key issues and principles outlined above.

3.2 CITY OF SYDNEY RECREATION STUDIES AND PLANS

Prince Alfred Park Recreation Feasibility Study, 1992

The *Prince Alfred Park Recreation Feasibility Study* was prepared for the City of Sydney by Manidis Roberts Consultants. The intent of the Study was to develop proposals for the northern part of the Park in particular, the disused ice rink facilities and the swimming pool. More specifically, the report was intended to:

- examine the nature, scope and use of the facilities
- identify present and future active and passive recreation needs, and
- develop a plan for the upgrading and/or redirection and/or elimination of the facilities in order to better meet present and future needs.

Although the report is now 12 years old, a number of the findings are of value to the present study.

Management data collected at the time of the 1992 Study indicated that the Pool attracted 80,000 visits over its 26 week October-March opening season. A survey of users indicated that on average, users visited 11 times pa., thereby leading to the conclusion that the pool was used by around 7,500 different people. However, the report noted that “a small portion of those users –about 750- account for almost 70% of the visits” (p. 8).

Further, the user survey found that 65 percent of users were residents, 31 percent were workers in the area and 5 percent visitors to the district. Residents came predominantly from Surry Hills (34%), Redfern (20%) and the City (1%). Another 12 percent of resident users came from the eastern suburbs. In the wider context, user surveys estimated that the overall Park attracted 626,000 visits by 142,000 different people.

Asked about the pool and its assets, the user survey found “a strong positive attachment to the pool... and very widespread agreement on the need for fairly modest improvements to the general amenities and environment.

A wider community survey (but which only attracted 68 responses) supported this view although there were also some proposals to either or both enclose the pool or add an indoor pool to the existing facilities. The report notes that “the need for upgraded pool facilities (ie: change rooms, hot indoor showers etc) was more frequently raised than the request for an upgraded pool as was the request for more trees, shade and landscaping around the pool” (p. 21). Other resident requests covered extended opening hours, cleaner environment, providing barbeque and picnic facilities and replacing the abandoned ice facilities with lawn.

In identifying a future for Prince Alfred Park, the *Prince Alfred Park Recreation Feasibility Study* listed 8 optional strategies. Those which related to the Pool were:

retain the Park it with no major capital works

demolish all buildings on the Park and revert their sites to open space

undertake 'minor' improvements to the Pool to provide pool heating, a new filtration system, new change facilities/amenities, new administration facilities, expanded lawn areas and enclosure of the pool

build a new indoor pool on the site of the former ice rink to complement the existing and upgraded outdoor facility

replace all the existing facilities (tennis, Coronation Recreation Centre, Pool, ice rink) with a new, integrated aquatic and dry community leisure centre, with this to include sports halls, indoor 25 metre pool, spa, sauna, squash, fitness/weights/ aerobics, meeting rooms, tennis, and service/administration areas.

A review of the main options with a series of focus groups identified the following responses:

demolishing all buildings was seen as inappropriate as it was argued these add to the diversity of the Park and offer often cheap or free local opportunities. At worst, retention of the Park as is was supported in preference

covering the pool with a winter bubble to create an all year venue –but once which was open in summer– was strongly supported with a permanent enclose gaining lesser support. However, the poor condition of the existing pools were seen as a shortcoming of this approach

retention of a 50 metre pool was seen as a strength for lap swimmers and schools

removal of the remaining ice facilities and provision of barbeques and picnic facilities were supported

over-development raised concerns as to the ability of local children and schools to afford use

provision of a second, indoor heated pool was supported but concern was expressed as to whether there was a sufficient market to support two pools, as to the need for off street parking and fee increases

provision of an indoor 25 metre pool alone –if the existing outdoor 50 metre pool was found to structurally unsound – was felt to be an inadequate solution

provision of a new integrated community leisure centre was considered to “be of broad benefit” and would allow the development of a new pool. However, concerns were raised about the impact of a larger venue with many more users would deter current users, the aged etc It was also argued that such a venue would generate noise, that the tennis facilities had recently been upgraded and were better separated from other activities

Overall, it was agreed that extension of the swimming season should be supported but that a new pool may be need. It was argued that a 50 metre pool was the

preferred option, along with other ground and service improvements provided that these were not costed at a level which excluded local users.

Sections 7 and 8 of the *Prince Alfred Park Recreation Feasibility Study* reviewed the existing population and potential market share which a winter enclosed and permanent 25 metre indoor pool in the Park could attract. It then determined the financial performance which such an initiative would achieve. This material is now out of date and is not reviewed in detail here. However, it warrants noting that a sufficient market to justify the development of an integrated aquatic leisure centre was identified and such an initiative found to achieve a 67 percent cost recovery which was far superior to all other options.

The report concluded with the recommendation that the Prince Alfred Park Pool be redeveloped through the addition of a *permanent* enclosing structure and the addition of new administrative and support facilities together with the replacement of the pool filtration system.

A winter-only bubble was rejected on the grounds of aesthetics and the short renewal time frames for a bubble. Development of the major integrated aquatic leisure centre option was rejected on the basis of the argument that such a facility “would be more appropriate near the Central Business District” (p. 51).

Prince Alfred Park Sports Centre Feasibility Study, 1996

The Prince Alfred Park Sports Centre report was prepared by Peter Willet Architects. The report, based around a series of land use and design plans, is based around the concepts of replacing the Coronation Recreation Centre and developing, in two stages, a new sports centre. The basis of the project being commissioned or of the developments proposals is not provided.

The report posits the development of new sports facilities “along the railway edge of the park” thereby creating a buffer for the rest of the park. A successive set of plans analyse surrounding building heights and forms; existing and historic sightlines within and into the Park; pedestrian movement lines to and through the Park; additional avenues and “gateway” plantings, and a set of conceptual development designs. These entailed various landscaping initiatives, retention and enclosing of the pool in its existing location, division of the pool into two to create separate lap and hydrotherapy pools and provision of sporting facilities along the north-west park edge, with or without the retention of the existing pool or construction of a replacement pool.

The final Stage 2 plan, while appearing to be quite a attractive parkland and sports centre design, has made no provision for either a retained or new pool. No rationale is provided for this.

Green Square Community Facilities S94 Paper, 2002

The *Green Square Community Facilities S94 Paper* was prepared by the Planning Unit of the former City of South Sydney. The purpose of the report was “to provide a reliable basis to enable the levying of S94 contributions for the community facilities

required to meet the needs of the new resident and worker populations of Green Square” (p. 2)

The paper has three key components, these being:

an inventory and assessment of existing community facilities in the then South Sydney Council

a comprehensive needs assessment using normative (demographic) assessments; the review of relevant community needs studies; an analysis of leisure trends; professional needs assessments; comparisons with similar development areas in Melbourne, Brisbane and other parts of Sydney, and community facilities benchmarks, and

drawing on the first two components, a set of sized and costed Green Square community facility requirements.

Part 5 of the *Green Square Community Facilities S94 Paper* details the recommended provision components. These were:

library, information and learning services

family and children facility and services

general community spaces and services

arts and cultural facilities, and

recreation and leisure facilities.

With regard to the recreation and leisure facilities, a “multi-purpose Green Square district recreation, youth, families and children’s centre... in or near the Green Square city centre” was proposed, with this being “located adjacent to a public open space” (p. 47). The recommended components of the centre and the areas allocated to them were:

Recreation and sport:

Aquatic:

50 m. laps pool

Hydrotherapy pool

Learn to swim

Adventure/leisure

Seating for 200 people

Change rooms

Toilets

Storage, circulation, admin., staff areas

(Total space 4,700 sq. m.)

Dry:

Ball sports courts (2)

Seating for 300 people

Exercise room for yoga, aerobics, gymnastics, dance
(Total space 4,600 sq. m.)

Change rooms

Toilets

Storage, circulation, admin., staff areas

Youth space:

Space for reading, listening to music, information and referral, study, leisure activities, hanging out, meeting friends

(Total space 450 sq. m.)

General Community:

Space for community gatherings, functions, events, ceremonies

Concert, theatre, exhibition, information spaces

Rooms for community education, seminars, community/ group meetings, programs

Community group offices

(Total space 640 sq. m.)

The four elements detailed above were costed at just below \$19 m.

Overall, the mix of opportunities outlined above would appear to be a very good reflection of the research reviewed in the S94 Paper and the findings of the other recreation planning work reported in this Chapter. It is probable, however, that some elements of this provision mix would benefit from a review –and may be changed– in the light of *existing* and *proposed* aquatic and dry provision elsewhere in the City and in neighbouring Councils. The mix and scale may also be changed in the light of the hierarchical position which the proposal is given within the broader City context. To illustrate, if it is determined that an existing Council pool or a pool in a nearby Council is already set up for and is far better suited to competitive programming, it would be pointless to duplicate that at Green Square. The needs and opportunities analyses conducted as part of the present study may also lead to recommended changes to the components and sizes of any future Green Square initiative. Finally, it warrants noting that care must be taken to not make any new development too big, to ‘glamorous’ or too fully integrated with commercial, retail and other civic spaces. This can reduce the ability to develop a sense of community and also, deter use by key needs groups who feel compromised by the scale, quality and other users of such facilities.

The S94 Paper supported the provision of the above facilities in the Green Square city centre on the basis of:

transport and physical accessibility

the opportunity for integrated development with retail, commercial and residential uses

immediate links to open space

opportunities for wider co-location of community facilities

opportunities for integration with other civic facilities, and

a capacity for flexible development with the ability to “adapt and respond to changing community needs” (p. 53).

In conclusion, the *Green Square Community Facilities S94 Paper* is a sound and comprehensive document which has provided an excellent guide to the probable mix of recreation facility, program and service needs which will emerge in the Green Square area over the coming years.

Green Square Leisure Centre. Options Paper, 2002

The *Green Square Leisure Centre Options Paper* was prepared as a result of the recommendations and conclusions of the previous report, the Green Square Community Facilities S94 Paper. It assesses “best practice design and location options” for the Green Square Leisure Centre.

The report reviewed the current and projected demographic and socio-economic characteristics of the Green Square population. Some of the key features identified were:

the population will grow from the 2001 level of 5,000 to 28,000 in 2016

in 2016, the population will be youthful: 15.7 % will be children; 5% will be teenagers; 39% will be in their 20s and 30s; only 7% will be aged 65 years and above

the majority of the population will be employed and 30 percent will earn over \$800 a week, and

there will be large numbers of couples without children (40%), lone person households (15%), and group households (21%).

The findings of the community forum and resident survey conducted by Stratcorp as part of the *Recreation and Open Space Needs Study* are presented in the report. As these are detailed in section 4.3.4, they are not provided here. Suffice it to say that these consultations identified aquatics and health and fitness provision as high community priorities.

Youth needs reported in the study included informal games and social areas, café facilities, and adjoining library, lawn and leisure centre facilities were supported.

Section 3.4 of the *Green Square Leisure Centre Options Paper* reported on the terms of the agreement between the former South Sydney Council and the South East Area Health Service. In buying the former Royal South Sydney Hospital site, the former Council agreed to provide space in the vicinity of the former hospital for the following:

a hydrotherapy pool compatible with that of the Prince of Wales pool at Randwick

a gym, attached to the hydro pool and comparable with the then existing facilities

a frail aged day care centre to cater for up to 50 people and able to offer entertainment, exercise and social activities for the aged comparable with the then existing facilities

general medical practitioner accommodation also comparable with the then existing facilities.

In the light of the above analysis, the *Green Square Leisure Centre Options Paper* concluded that a leisure facility in Green Square would need to include:

wet and dry facilities

structured, unstructured, passive and active leisure opportunities

a capacity to meet resident and worker needs

a capacity to meet youth needs including possibly, a skate park

provision for families, and resident and worker's children and child care

access to open space, transport, pedestrian and cycle facilities, and

facilities which meet the requirements of the agreement between the former South Sydney Council and the South East Area Health Service.

The *Green Square Leisure Centre Options Paper* drew on the social impact assessment of the Green Square Masterplan to reiterate four key criteria for the design of community facilities. These were a design which:

has a distinctive theme or character

incorporates a focal point or landmark

provides visual interest and individuality, and

is in accordance with the Safety by Design Principles promoted by the NSW Police.

Ten best practice design principles for community facilities which had been prepared by the former South Sydney Council Draft Community Facilities Plan were listed in the *Options Paper* report, together with best practice trends for the recommended five main facility components, these components being aquatic, health and fitness, stadium, youth and childcare. Because of the length of both the best practice design principles and the best practice facility trends, readers are referred to this material and it is not repeated in this report. However, the information has been used in association with the trends material provided in Chapter 3 as a key input to the design of new and redeveloped aquatic leisure facilities provided in subsequent chapters of this report.

In identifying the recommended facility components, the *Green Square Leisure Centre Options Paper* directly listed those recommended in the Section 94 Paper reviewed in the previous section.

Section 5.2 of the *Green Square Leisure Centre Options Paper* presented a set of best practice location principles to guide the siting of a new recreation venue in Green Square. These were drawn directly from the City of South Sydney Draft Community Facilities Plan and covered:

- access and mobility
- co-location
- community safety
- parking
- pedestrian access
- public domain (ie: siting facilities in association with other public assets)
- public transport routes
- retail facilities, and
- separation (ie: location so as to contain/separate noisy uses from residential areas).

A sites assessment for a future new leisure centre concluded that a 1.89 ha. site at the Joynton Avenue/Epsom Road Council site (132-138 and 140 Joynton Avenue) was the preferred site. This was ranked ahead of the Council depot at 956-960 Bourke Street, Zetland and the Plaza Buildings adjacent to the Green Square Train Station.

The *Green Square Leisure Centre Options Paper* provides a valuable guide to the develop-ment of any future aquatic leisure centre in Green Square and will be referred to in the development of design and siting recommendations.

Multipurpose Sports and Community Facility Feasibility Study, 2002

This *Multipurpose Sports and Community Facility Feasibility Study* was completed for South Sydney City Council in 2002. The study focused entirely on identifying sites and developing schematic designs and costings for a new indoor dry sports and fitness centre.

The recommended development site was Redfern Oval in conjunction with existing rugby facilities. The design proposals ranged in cost from around \$6 m. to \$77 m. depending on the scale of spectator seating proposed.

Were Council to proceed with such a development at this location, it would be too close to existing swimming facilities to warrant aquatics provision as part of the project.

Recreation and Open Space Needs Study, 2004

The *Recreation and Open Space Needs Study* was prepared for the former South Sydney City Council and was completed in 2004. The report addressed the following issues and materials:

- existing recreation opportunities in South Sydney
- the demographic characteristics of the former municipality
- past planning studies addressing or relevant to recreation
- trends in recreation participation
- community participation in sporting and recreation activities, and
- an analysis of the recreation and open space issues identified.

It is of note that with regard to the **existing Council recreation facilities**, the report concluded that:

- the distribution of facilities across south Sydney is poor
- there was only one purpose-built indoor centre and this catered exclusively for basketball
- there was no indoor or outdoor aquatic centre
- schools have limited provision of sport and recreation facilities, and
- there appeared to be few opportunities for new or upgraded provision through school initiatives.

In reviewing the **demographics** of South Sydney, the report concluded that:

- the population is projected to double from 54,707 in 2001 to over 112,000 in 2021
- over 60 percent of the population is presently aged 20-49 years, the group most involved in active recreation pursuits
- the area has a relatively high socio-economic status which will further increase the demand for and willingness to pay for active recreation pursuits. That said, pockets of lower socio-economic status exist and the needs of these residents will need to be addressed through provision of a mix of cheaper alternatives
- recreation facilities and services will need to accommodate a range of cultural backgrounds including the indigenous community, and
- the South Sydney workforce is larger than the resident population and is predominantly young. This can be expected to generate a demand for passive and active recreation opportunities.

Highlights from the review of a number of **past reports** which are directly pertinent to the present study are:

Beach and pool swimming and aquarobics were the second most popular set of activities amongst the community after jogging/walking/running (2001 New Residents Survey)

half of the Council households said they had no or inadequate indoor recreation venues (2001 New Residents Survey and Draft Sport and Recreation Strategy, 2003)

jogging, walking, cycling, swimming and going to the gym were the most popular pursuits (Draft Sport and Recreation Strategy, 2003)

there was a need for multipurpose indoor recreation facilities (Draft Sport and Recreation Strategy, 2003 and Community Facilities Plan, 2003)

there is a need for youth-specific spaces (Draft Sport and Recreation Strategy, 2003), and

there is no asset management framework for community facilities (Community Facilities Plan, 2003).

The review of national and New South Wales **recreation participation data** showed that at 17 percent in 2002, swimming was second highest in popularity as a recreation activity to walking at 29 percent. Aerobics and fitness activities were third highest in popularity at 14.3 percent.

The 2003 *Recreation and Open Space Needs Study* included a wide-ranging program of community consultations. This covered a random community survey, street/shopping centre and park user surveys, two community forums, targeted discussion groups with different age and need categories and meetings with peak sports and Council officers. Details of these consultations are provided in the report. Some of the key consultations findings pertinent to the present study were:

close to 80 percent of residents saw swimming facilities as being either very important or important recreation opportunities

improvements of swimming facilities were found to be the fourth highest priority for action in the random community survey (with 11%) after bike and walking trails (16%), regional parks (13%) and libraries (12%)

provision of a new public pool was identified as a need at one of the community forums

Green Square residents saw a need for a new 50 metre Olympic pool and an indoor gym with health and fitness facilities, pool, squash, and

39 percent of those consulted through the young people's forum called for an indoor pool, this being only second to a cinema complex (41%). An indoor sports centre was supported by 27 percent of those surveyed, a fitness gym by 25 percent and an outdoor pool by 20 percent.

Despite the scope of the material collected, the 2003 *Recreation and Open Space Needs Study* did not make any specific or prioritised recommendations for action by the former South Sydney Council.

3.4 CITY OF SYDNEY AQUATIC STUDIES

South Sydney City Council – Research: Best Practice Trends in the Development of Aquatic and Leisure Facilities, 2004

This report is a reissuing of the former South Sydney Council Draft Community Facilities Plan. It repeats the array of best practice trends in general recreation and aquatic facility development which were cited at length in the 2002 *Green Square Leisure Centre Options Paper* reviewed in section 4.3.2 above. Details are provided on a range of case studies to illustrate the concepts being put forward.

Aquatic Development Strategy. Preliminary Directions, 2004

This report was prepared by the Infrastructure Strategy Section of the City of Sydney City development Department. The purpose of the report was to review earlier work and research into aquatic needs in the City and to provide preliminary directions for the coming 5-10 years. In a sense, the report is the direct precursor of the present report.

The *Aquatic Development Strategy. Preliminary Directions* report has drawn material from a variety of sources including the past reports reviewed in this chapter, and addresses the

following topics:

- the existing and proposed City of Sydney pools and their condition, unique attributes and potential markets
- the changing demographics of the City, key areas of growth and the implications
- sport and leisure participation trends
- aquatic facility design trends
- competitor pools within and adjacent to the City of Sydney
- a strategy for future pools development in the City.

The strategy for future pools development in the City of Sydney, (section 8 of the report), warrants further review. This correctly notes that “it is assumed that it will not be sustainable for Council to operate centres where each centre is expected to be ‘everything to everyone’. Instead it is proposed to develop a strategy that advocates the provision of a suite of aquatic facilities where a range of aquatic, health and fitness and recreational activities may be experienced” (p. 14). This strategy also entails:

- identifying niche market opportunities for each centre to minimise competition between centres
- provide fair and reasonable access to the community to a broad range of aquatic leisure services

develop facilities which meet local needs as well as potential use from outside the Council area.

Table 4.1 following is drawn from Table 4 of the report. It summarises the above strategies as they apply to the existing pools.

Venue	Hierarchical Position	Sector of City Served	Strengths/Shortcomings	Market Sectors
Cook and Phillip Park Aquatic Centre	District	North-east	On-site carparking Good rail, bus access Indoor facility	CBD residents, CBD corporate fitness, CBD tourists, East Sydney residents
Andrew "Boy" Charlton Pool	Local	North-east	Limited car parking Seasonal opening Bus and pedestrian access Scenic location Quality outdoor pool	CBD residents, CBD corporate fitness, CBD tourists, East Sydney residents
Proposed Ultimo Pool	District	West	Light rail, bus, pedestrian access On site parking Indoor facility Competition from apartment pools	Local residents Residents accessible by light rail CBD fringe workforce University of Technology, Sydney TAFE
Victoria Park	Local	West	Park setting Outdoor heated pool All year availability Extensive upgrading Limited non-aquatic facilities Restricted parking	Local residents from Erskineville, RPA Hospital, Chippendale, Glebe, Sydney University New Broadway and CUB residential developments Through traffic of lap swimmers travelling to CBD
Prince Alfred Park Pool	Local	Central	Park setting Good pedestrian access Close to Central Station & Devonshire St ped. Tunnel Nearby backpackers Cheap Potential regional markets by rail Seasonal opening Requires significant upgrading	Redfern, Surry Hills residents Schools Potential youth focus Backpackers UTS, Sydney TAFE

Table 4.1: Market opportunities for existing and proposed City of Sydney pools, as proposed in *Aquatic Development Strategy. Preliminary Directions, 2004*

The strategic proposals in the *Aquatic Development Strategy. Preliminary Directions* report, as summarised above, have considerable strength. It is probable that they will warrant further refinement and development in the light of the present study and other recent work in adjoining municipalities. This research suggests for instance, that the Victoria Park Pool may already be serving a more significant regional role for lap swimmers, especially those who work locally while living some distance away.

This is likely to be strengthened by the continuing growth of lessons and related programs at Leichhardt which is deterring lap swimmers from visiting there.

Similarly, the Prince Alfred Park Pool has been reported as being popular for school programs and carnivals. If well marketed for these purposes, this pool and/or Victoria Park Pool could possibly develop a strong, regional clientele for schools, clubs, squads and competition programs.

Given its ageing condition, the report presented four optional scenarios for the future of the Prince Alfred Park Pool. These are set out in Table 4.2 below, together with the strengths and weaknesses of each option:

Future Prince Alfred Park Pool Option	Strengths/Weaknesses of Options
Retain the pool but do not upgrade it and undertake maintenance works only	<p><u>Strengths:</u> Limited Council expenditure</p> <p><u>Weaknesses:</u> Reduced scope to provide new programs and activities Continuing poor visual appearance Contrast with high quality facilities elsewhere May lead to permanent closure</p>
Retain the pool and undertake extensive refurbishment	<p><u>Strengths:</u> <i>Would allow wider, targeted markets to be served</i> <i>Would gain community support</i></p> <p><u>Weaknesses:</u> Capital investment required which may not be cost effective <i>Could create a direct competitor for Victoria Park Pool</i></p>
Construct a new aquatic leisure and tennis centre elsewhere in the Park	<p><u>Strengths:</u> <i>Would allow market-specific facilities and programs to be provided</i> <i>Would avoid costly refurbishment</i></p> <p><u>Weaknesses:</u> Capital cost <i>Could create undue competition for recently-renovated Victoria Park Pool</i> <i>Could require larger footprint on the Park</i></p>
Close and remove the pool	<p><u>Strengths:</u> <i>Would save capital costs of refurbishment or replacement</i> <i>Would free up Park</i> <i>Would allow further and broader redevelopment of Victoria Park Pool</i></p> <p><u>Weaknesses:</u> <i>Would be unpopular decision</i></p>

Table 4.2: Optional futures for Prince Alfred Park Pool proposed in *Aquatic Development Strategy. Preliminary Directions* (Note: Items in italics have been added by the authors of this report)

It is evident from Table 4.2 that there are both strengths and weaknesses associated with each of the options. However, the *Aquatic Development Strategy. Preliminary Directions* report does not indicate a preference: that determined by the present study is detailed in Chapter 6.

Following the analysis of the Prince Alfred Park Pool development options, the *Aquatic Development Strategy. Preliminary Directions* report reviewed the findings of several of the reports relating to venue siting which have been reviewed previously

in this Chapter. As such, that material will not be repeated here. However, the report highlighted the point that since the completion of the earlier location assessments (which recommended the Joynton Avenue site for an aquatic leisure venue in Green Square), the South Sydney hospital site has been purchased and that site has an operational hydrotherapy pool. Whether it is possible or worth the effort to retain that facility and literally build a new centre around it would need careful assessment.

The *Aquatic Development Strategy. Preliminary Directions* report concluded by noting the following key points:

the City of Sydney is experiencing considerable population growth and this will continue for at least 10-15 years. This growth means that additional recreational infrastructure will be needed in future

a large workforce in the City can be expected to demand passive and active recreation opportunities

changing recreation participation patterns and opportunity provision trends indicate that a more diverse, flexible, leisure-oriented mix of opportunities ought to be provided in any redeveloped or new aquatic leisure venues in the City

aquatic leisure provision by the City should seek to achieve a suite of different venues offering differing mixes of opportunities which serve different “communities of interest”

there is a potential to develop an area-based approach to provision across the City

the northern half of the City is well-provided for from an aquatics perspective although the Ultimo pool is yet to be built and the Prince Alfred Park Pool is potentially near the end of its useful life

the southern part of the City faces dramatic population growth over the coming years and is deficient in aquatic and indoor recreation opportunities. Research has shown that opportunities exist to develop a new venue to cater for these needs in the Green Square area, and

a more detailed study is needed to assess the issues and opportunities with regard to the Prince Alfred Park Pool and the Green Square area.

CONCLUSIONS

This Chapter has provided a review of a number of recent reports relating to City of Sydney policies which are likely to impact on the nature of future aquatic leisure provision and reports which deal directly with recreation and aquatic leisure needs and development opportunities in the City.

The review of recent recreation planning studies found that:

a strong case has been built for the development of a comprehensive array of leisure facilities in Green Square with one major component of this being and

integrated recreation, aquatics, youth, families and children's venue in or near the Green Square city centre. Such a centre will serve City needs but particularly, those of the projected 28,000 youthful residents who will live in the area by 2016 and the even larger workforce which has been projected

any new community recreation facility in Green Square must offer transport and physical accessibility, the opportunity for integrated development with retail, commercial and residential uses, immediate links to open space, opportunities for integration with other civic facilities, and a capacity for flexible development with the ability to adapt and respond to changing community needs

consideration should be given to also providing a hydrotherapy or warm water program pool, a frail aged day care centre and a general medical centre in Green Square to serve the local community

any community facilities developed in Green Square must conform with both the four design criteria detailed in the Green Square Masterplan and follow best practice design principles as well as meeting a set of best practice location principles as detailed in the former City of South Sydney Draft Community Facilities Plan

several optional sites exist for a new community aquatic leisure centre in Green Square with the Joynton Avenue and former hospital sites in Zetland being the preferred locations

there is strong participation in aquatics activities amongst the population of the former City of South Sydney (which by extension could be assumed for the new City of Sydney community) with aquatics being one of the most popular pursuits

residents considered there to be a shortage of indoor recreation facilities including pools

there is strong support for a multipurpose indoor recreation facility in the southern part of the City, and

a strong case can be put for the development of the existing and any proposed new aquatic leisure venues in such a way that they cater for niche markets within the community while still providing fair and reasonable access to a broad range of aquatic leisure services although the future of the Prince Alfred Park Pool will need careful consideration given its aged condition, high projected maintenance costs and higher replacement costs.

These issues have been given detailed consideration in the preparation of design options for enhancing the Cook and Phillip Park Pool, for redeveloping the Prince Alfred Park Pool and for a new aquatic leisure complex in Green Square. The details of the proposals are reported in the following chapter.

4.0 APPENDICES

APPENDIX A

APPENDIX 1: SOUTHERN LOCAL GOVERNMENT AREA HYDROTHERAPY POOL: INITIAL GUIDELINES

The following guidelines have been prepared following a review of current industry standards and visits to the WAVES (“Water Activities for Vitality in the Eastern Suburbs Inc”) hydrotherapy pool at the Royal South Sydney Community Health Complex and the Prince of Wales (POW) Hospital hydrotherapy pool at Randwick. We wish to thank Pat Walsh, the WAVES Program Coordinator, and Julia Batty of SEA Health, manager of the Prince of Wales Hospital facility, and Ms Tara Day of Sydney City Council for their assistance, time and advice.

As noted in the body of this report, there is a requirement that the hydrotherapy pool and Community Health Complex at the former at the Royal South Sydney Hospital are replaced in any future development of the site. It is proposed that the pool (and possibly, the Health Centre) are incorporated into a new Green Square aquatic leisure complex. Any hydro pool in such a complex must be designed to support both medical and wider community use. The following proposals are made for the facilities to be provided.

Pool Size:

- 25 metres long by a minimum of 4 lanes
- Provided with in-water rails set out from wall (not recessed)
- Provided with access ramp, hoist and steps
- Operated at 32 – 34°C

Pool Hall:

- Concourses of 3 – 4 metres minimum around pool
- Attenuation of any noise echoing
- Rubberised, non-stick flooring to ensure a slip-proof surface
- Use of colouring on floor and in pool to indicate changes of condition, depth etc
- Square corners to assist sight disabled

Services:

- Vehicular access to close to the pool is essential; parking must be easy and be of low or no cost
- A drinking fountain is needed on the pool deck for users
- 3 – 4 office spaces of around 20m² are needed to accommodate up to 6 staff
- Social area of 35-40m²

Client/group assessment room

Store room is needed

Staff kitchen

Hot and cold water taps need easy-use components

Entries to change facilities should be near reception so that aged/disabled etc do not have to manoeuvre through corridors etc

Entries to change facilities must be wide and not have narrow dog-legs as is found with most public change/toilets

Three change areas would be desirable with all being unisex spaces with interlinkage capacity so as to better cater for large groups of either sex

Change and entry areas should allow one group to be leaving the pool and changing while the next is preparing to enter the pool from another change area

The pool needs power and air con links/systems which are separate from wider hospital services to ensure clients can be lifted out of the pool and evacuated in times of emergency

Management:

A staff member must always be on the pool deck when the pool is in use

Staff viewing over the pool is essential

An appropriately qualified and experienced staff member must always be on duty.

APPENDIX 2: SOUTHERN LOCAL GOVERNMENT AREA AQUATIC LEISURE CENTRE: GENERAL DESIGN PRINCIPLES

Design Approach -

The team architects, Prior+Cheney Architects have developed a number of specific design principles which are applied to each project and are customised to meet the individual needs and objectives of each particular client.

These principles include the following, each of which will need further development and refinement as design development occurs on the Southern Local Government Area facility:

1. The overall centre should provide significant social opportunities for all sections of the community to experience what is on offer. Users should feel comfortable to use that facility on a social basis as well as an active recreation basis.
2. Provide a clear and articulated entry point to the facility. The entry should not rely upon signage, but should clearly identify itself from both a marketing and image perspective.
3. The relationship of 'front door' of the facility to the car parking areas is of prime importance for the safety of users during 'out of hours' usage.
4. The building should provide equity of access for all groups with the provision of disability access to all areas, not just specific facilities designed for such use. Disability discrimination should be eliminated completely.
5. Orientation of the building out on an east-west axis to maximize exposure to the sun's tracking through the sky.
6. Principle outdoor areas would be oriented to the north with access from the indoor and outdoor aquatic facilities.
7. Large facilities such as the dry rec facilities should be located to ensure no overshadowing of important outdoor spaces or entrance areas takes place.
8. Access for delivery vehicles to plant rooms, commercial kitchens and first aid area should be clear and logical and away from public access.
9. The building should be planned in a clear and logical progression to ensure that expansion of all principal area is possible over the life of the facility.
10. The building architecturally should be as transparent as possible, both to ensure a 'cross selling' of the activities within the centre is

communicated together with ensuring the public are aware of what is on offer, but also to allow natural light to enter the facility.

11. Toilet change areas should provide both wet and dry access and be fully accessible for all users. Unisex family facilities should also be provided which again are fully accessible. Dry change rooms should be located adjacent to dry program areas such as gymnasium, program rooms and/or sports facilities.
12. Creche facilities would be accessed from the main foyer, adjacent to café areas.
13. Outdoor play spaces associated with the crèche and future long term child care should be located in sunny areas but away from principle circulation paths.
14. The aquatic areas would open out from the foyer areas with direct access to change facilities. Large glass door would lead to the outdoor areas to the north. The pools should be laid out in a clear and logical manner to ensure minimisation of life guards and to ensure the pool hall is zoned for all key user groups. Large concourse areas should be provided to leisure water areas to allow casual seating in groups, especially adjacent to the café facilities. Concourse areas to the more formal pools should also allow for temporary tiered seating if required for competition use.
15. The entry to any facility should be open and inviting providing ease of access for all users. Foyer areas should allow orientation and assembly of groups prior to the arrival at reception points.
16. Reception points should allow separation of users if required, especially if carnivals are to be held in the facility. The design of specific reception areas should provide a welcoming and friendly control over all users of the facility. A 'face on' reception desk should be reviewed and integrated with the specific management style adopted within the centre.
17. The internal circulation spaces should be economical and should not rely on a series of internal corridor's. They should be configured to create opportunities for social interaction either before or after use.
18. Central café facilities should encourage users to 'stay on' within the facility. The café, if possible, should be accessible both from within the facility but also outside the facility (without going through reception) to allow all sections of the community to use the café as a central meeting point. This is especially important for users within a total recreation precinct. The café should be able to work as a destination in its own right and be linked with walking and/or cycle tracks.
19. Toilet areas should open from principle circulation areas to provide safety for all users.

20. Operation costs should be fully examined and understood through the design process. Reference should be made to the management groups to fully explore cost reduction policies and staffing levels.
21. Expansion over the life of the facility should be examined to provide clear logical expansion of all areas. Expansion should be based upon the principles of a 'Customer Interest Lifecycle'.
22. The construction techniques and material usage must reflect the severe atmosphere inherent in these facilities and should acknowledge the 'Structural Lifecycle' of construction and maintenance costs.
23. An environmental matrix should be prepared to explore all areas of environmental design possibilities. These possibilities should be measured and examined to fully understand capital and operational cost implications. Only then can true decisions be made in line with Council Environmental Policies.
24. Mechanical services should be designed on an understanding of the internal environments they are controlling and make allowance for ecologically sustainable opportunities ie shut down during ideal external ambient conditions.
25. Lighting should be zoned to allow efficient running of the facility. Daylighting should be maximised without glare across water. Light types should be selected for the environment they will operate in but should also provide a clear 'colour balance' for user comfort. They should not be located over pool areas.

APPENDIX 3: PRINCIPLES FOR ENVIRONMENTALLY SUSTAINABLE DESIGN

Good passive design will be employed in all buildings to optimise the use of solar energy and natural cooling. However, concrete action should have to be taken to apply Environmentally Sustainable Design (ESD) principles to achieve further reductions in energy consumption and costs and *this requires setting project budgets for capital expenditure on these initiatives*. To illustrate, Fairfield Council established a 6 percent project budget for initiatives at the Cabramatta Leisure Centre (presently under construction) *in addition to* items already included in capital budget. It is suggested that 7.5 percent be the minimum allowance provided for within a project budget.

Funding to assist with ESD initiatives may be available through government grant schemes such as the Sustainable Energy Development Authority (SEDA) Energy Smart Government Program.

Some of the key areas for action are as follows:

Pool air and water heating:

- use of sensible heat recovery on exhaust air path, air source heat pump (with gas boiler backup and solar array)
- use of centrifugal pumps
- insulated pool blanket
- thermal labyrinth space cooling
- openable windows
- daylighting
- increased shading coefficients to glazing, double glazing
- Building Management System, and
- Solar hot water.

Water Saving:

- rainwater collection from roofs for toilet flushing and irrigation
- water saving fittings to shower, toilets and basins
- efficient backwash/bleed systems (DE, solids removal treatment systems), and
- storm water retention and detention.

Other Strategies:

- waste recycling

materials selection – low embodied energy, durable and low maintenance materials from sustainable resources

indoor environment quality - low emission products, dust and allergen free, non-slip surfaces

landscaping for sun and wind protection, water sensitive species, and provision of facilities for bike and public transport.

APPENDIX D

STUDY METHODOLOGY

PHASE & WORK	DETAILS
1 Project Start-Up	<p>This introductory Phase of work:</p> <p>1.1 Reviewed the details of this program with Council officers and confirmed the work to be completed, when by and to what level of detail</p> <p>1.2 Collected all relevant reports and data from Council and identified all key stakeholders to be involved</p> <p>1.3 Visited the existing Council venues and possible sites known to Council plus others (eg: schools, institutions, redevelopment areas) with key Council officers and other stakeholders to assess the physical capacities for initial component ideas cited in the Brief</p>
2 Strategic Reports Review	<p>The purpose of this Phase of the work was to:</p> <p>2.1 Review and assess the Preliminary Directions Study and other documents</p> <p>2.2 Report to Council on the implications and determine the most appropriate development response to them</p>
3 Demographic Trends Analysis	<p>This Phase of the work:</p> <p>3.1 Reviewed and evaluated the sequential 1990s and 2001 Census demographic characteristics of (a) Sydney City Council, (b) the surrounding municipalities, and (c) the potential competitor market catchments identified in 3.2 in order to compare the size, age and socio-economic characteristics of the community with the pool catchments and market sectors identified in Phase 2</p> <p>3.2 Assessed the implications of the outcomes of 4.1 to present and future leisure and aquatic needs.</p>
4 Leisure Trends Analysis	<p>This Phase of the work:</p> <p>4.1 Assessed State, regional and <i>local</i> Sydney leisure & aquatic activity patterns, trends, cycles and seasons using consultations findings, State government and Bureau of Statistics data to determine the present and future leisure and aquatic markets and provision implications of these trends</p>
5 Site Assessment	<p>This Phase of the project entailed a program of research designed to identify the engineering opportunities and constraints of all four Sydney City Council sites and the existing condition and suitability for change / expansion of the buildings and services infrastructure as per the Brief.</p>
6 Development Options	<p>This Phase of the study used the findings of the previous Phases to prepare:</p> <p>6.1 Recommended design options for the redevelopment of the Prince Alfred Park venue and for a new venue at Green Square. These designs have been costed and reported on by quantity surveyors, and as required the engineering disciplines of our team</p> <p>6.2 An analysis and confirmation of the potential range and scale of markets for a redeveloped and/or new facility.</p> <p>6.3 A design parameters statement to ensure compliance with all statutory and Disability Discrimination Act requirements</p> <p>6.4 A set of Environmentally Sustainable Design principles to guide any future development and triple bottom line sensitivity, and</p> <p>6.5 A review of current parking and traffic issues.</p>
7 Report Preparation and Reporting	<p>This Phase of the work entailed:</p> <p>7.1 Preparation of progress reports as required by the Brief</p> <p>7.2 Preparation of the draft report covering details of each of the previous Phases</p> <p>7.3 Preparation of final report and presentation to Council.</p>